



Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022



Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

Contents

Summary	2
Site Recording Sources	3
2022 Project Highlights	3
Archaeological Investigations on Duncan Island, at the Confluence of the Susquehanna and Juniata Rivers, Dauphin County, Pennsylvania.....	4
Archaeology at the Corner Store Site (36BV0415), Beaver County, North Sewickley Township	9
Documenting Constructed Stone Landscapes in Eastern Pennsylvania	14
Discovering What Was Once There	20
SHPO Survey Activities	26
Surveyor	26
Baseline Survey	28
Survey of PHMC Properties.....	30
Looking to 2023.....	30
Data Summary and Maps	31

Summary

In 2022, 365 new archaeological sites were added to the Pennsylvania Archaeological Site Survey (PASS) files, bringing the statewide total to 26,701 recorded sites. This represents a 15% increase in site recording from 2021. The majority of new sites were recorded through cultural resources management (CRM) projects, however, there was an increase in site recording from various other sources such as SHPO managed surveys and Society of Pennsylvania Archaeology (SPA) members. In addition, we continued to see contributions from independent research projects, long-time avocational archaeologists, and members of the public.

The PASS program ramped up pro-active survey efforts with the use of Surveyor, a survey tool that works alongside PA-SHARE to record resources quickly and efficiently. Additionally, an archaeological component was included in the baseline survey initiative allowing for the recordation of areas of surficial archaeological evidence and an effort to survey Pennsylvania Historical and Museum Commission (PHMC) properties commenced. More information pertaining to these survey activities can be found in the below sections.

Pennsylvania Archaeological Site Survey

Annual Site Reporting Activity in 2022

Site Recording Sources

As was true in preceding years, the most significant source of new sites in 2022 were CRM projects, accounting for 76% of all newly 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 31 sites were recorded in Dauphin, Lancaster, Luzerne, Northumberland, Perry, and Snyder counties as part of an ongoing fish weir research project. In 2022, we introduced a new recording source: SHPO Managed Survey. This was as a result of incorporating an archaeological survey component into our baseline survey program which focuses on identifying and recording underrepresented historic resources across Pennsylvania. Baseline survey efforts added 24 new archaeological sites to the PASS files. Together, CRM projects, PHMC research projects, and SHPO managed surveys accounted for approximately 91% of all newly recorded sites in 2022.

Source	Sites Recorded	%
CRM	278	76.16%
PHMC Research	31	8.49%
SHPO Managed Survey	24	6.58%
SPA	15	4.11%
Individuals	10	2.74%
Other	7	1.92%

SPA members from Chapters 22 (Ohio Valley), 23 (Westmoreland), 29 (North Fork), and 31 (Hawk Mountain) recorded 15 new sites in Armstrong, Fayette, Schuylkill, and Westmoreland counties. These included Pre-Contact period habitation sites, lithic scatters, and a historic military-related site. Overall, this represents a 200% increase in site recording from SPA members from 2021 when only 5 sites were recorded. In addition, SPA members from Chapters 22 (Ohio Valley), 23 (Westmoreland), 24 (Bald Eagle), and 31 (Hawk Mountain) updated 8 previously recorded sites with new information.

The PASS files also saw contributions from various individuals and projects including two stone landscapes sites in Northampton County, a historic cemetery in Philadelphia County, and a historic amusement park in Allegheny County.

2022 Project Highlights

Various projects that contributed to the PASS files in 2022 are highlight below. These articles were provided by guest authors and represent both work that was completed over several years and ongoing efforts.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

Archaeological Investigations on Duncan Island, at the Confluence of the Susquehanna and Juniata Rivers, Dauphin County, Pennsylvania

Gary Coppock, Skelly & Loy, Inc., A Terracon Company

A Phase I archaeological survey for the proposed SR 0022/0322 improvement project indicates that cultural deposits on Duncan Island have the potential to provide insights into its long history of human occupation. Situated at the confluence of the Juniata and Susquehanna rivers, Duncan Island has been an important route of passage for millennia. Today, as in the past, crossroads, whether roads or rivers, tend to attract settlement and commerce. Prior to the arrival of Euro-Americans, two Native American trails, the Susquehanna Path and a branch of the Juniata Path, utilized Duncan Island as a steppingstone to cross the Susquehanna River at the confluence. Through time, Euro-Americans replaced the river ford used by Native Americans with a ferry and then a bridge and replaced the former foot trail with an earthen road and then a turnpike for wheeled vehicles. Prior to the arrival of nineteenth century industrialization the island was a prime location for catching vast quantities of American shad, an anadromous species that was abundant during late spring spawning runs. The archaeological remains of submerged fishing weirs in nearby waters are reminders of the once bountiful harvests.

Prior archaeological investigations and historical documentation reveal that groups of Native Americans have been visiting the island since at least 8,000 BC. Stratified deposits at 36DA0126, now located under the southbound approach of Clarks Ferry Bridge, span from the Early Archaic to Late Woodland times, and a historically documented burial mound, presumably affiliated with the island's Clemson Island-era (ca. AD 800-1,200) occupation, formerly stood near that same location. By the eighteenth century, when the region was controlled by the Iroquois, Duncan Island was home to an enclave of Conoy (Piscataway) and Nanticoke refugees. In 1745 David Brainerd, a Presbyterian missionary, visited the settlement on Duncan Island and in his diary recorded observations of their behavior and culture.

The island's first known Euro-American occupant was John Harris (of Harrisburg fame). Having arrived in 1733, while the island was temporarily vacant, Harris quickly built a structure and cleared a field for planting. Upon the insistence of Shikellamy, the Iroquois overseer of the region, the colonial government demanded that Harris promptly vacate the island, which he did. Later that same year he settled at a new location approximately 21 km (13 mi) down river that is now known as Harrisburg, so named in his honor.

Due to escalating Native/Euro-American tensions, Native Americans abandoned Duncan Island by 1750, with most of its former occupants resettling at Nanticoke in Luzerne County. The newly vacated island was claimed by the William Baskin family at a time when the colonial government purchased the island and most of southcentral Pennsylvania from the Iroquois via the Albany Treaty. The purchase inflamed long simmering refugee resentment and incited Native Americans to attack colonial settlements, culminating in the French and Indian War. It was during one such raid on July 29, 1756, that the Baskin family was accosted while tending their field on Duncan Island. William was killed and

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

scalped, and his wife, daughter, and son were abducted. Fortunately, all three survived. Mrs. Baskin was released near Pittsburgh in 1759, and in 1764 the daughter was delivered to British authorities at Coshocton, Ohio. The Baskin's three-year-old son became the charge of Sir William Johnston, Superintendent of Indian Affairs, and eventually became a wealth landowner in southern Ontario.

By 1760 Marcus Huling, a Swedish immigrant who had settled on the point above the river confluence nearly three decades prior, established a ferry that connected the west shore of the Susquehanna River to the southern tip of Duncan Island. It was also that year that Duncan Island was surveyed and warranted to Pennsylvania's proprietors, Richard, John, and Thomas Penn. In 1805, more than two decades after the Revolutionary War, John and Richard Penn sold the island to John Reed Jr., who, the following year, sold it to Thomas Duncan, a future Pennsylvania Supreme Court Justice. Soon, Thomas' eldest son, R.C. Duncan, moved to the island where, in 1811, he married Rebecca Huling, a granddaughter of ferryman Marcus Huling. Following the death of R.C. Duncan six years later, at the age of 31, his widow and three young children continued to occupy the island mansion. Following Judge Duncan's death in 1828 Rebecca and her two sons inherited the island as R.C.'s heirs.

In 1823 Huling's ferry at the tip of Duncan Island was acquired by Robert Clark and renamed Clark's Upper Ferry and in 1825 the roadway on Duncan Island was improved as part of the Harrisburg and Millerstown Turnpike. By 1828 construction of the Pennsylvania Canal had begun. Initial work adjacent to the island included the construction of a Pennsylvania Canal Dam from the west bank of the Susquehanna to the southern tip of Duncan Island, the construction of the first Clark's Ferry bridge, a covered, two-story structure built just upstream from the dam, and the construction of a frame-roofed stone aqueduct across the Juniata River at the northern end of the island.

Historical records reveal that fill for constructing of the dam's eastern abutment was "borrowed" from the nearby burial mound. About this an observer wrote:

At the angle of the canal, near the great bridge, I saw the mound covered with trees, from which were taken hundreds of cartloads of human bones, which were used with the intermixed earth as filling materials for one of the shoulders or bastions of the dam. What sacrilege! There were also among them beads, trinkets, etc. (Watson, J.F., 1856, *Annals of Philadelphia and Pennsylvania in the Olden Time* 2:191, E.S. Stuart, Philadelphia).

The Clark's Ferry Bridge, then the world's longest covered bridge, was opened in 1829 (Figure 1). Due to floods, fires and changing traffic needs, the original bridge has been replaced six times to date. The 183-m (600-ft) long Juniata River aqueduct at the northeastern end of the island was considered an engineering marvel. It remained operational until dismantled in 1899.

The canal section on Duncan's Island, administered as was part of the Susquehanna Division, was a vital connector between Eastern and Juniata divisions of the Pennsylvania Main Line Canal (Figure 2). In 1830 the Susquehanna Division was opened from the Pennsylvania Canal Dam at Duncan Island to Northumberland, and in 1834 the Pennsylvania Main Line Canal was opened from Philadelphia to

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

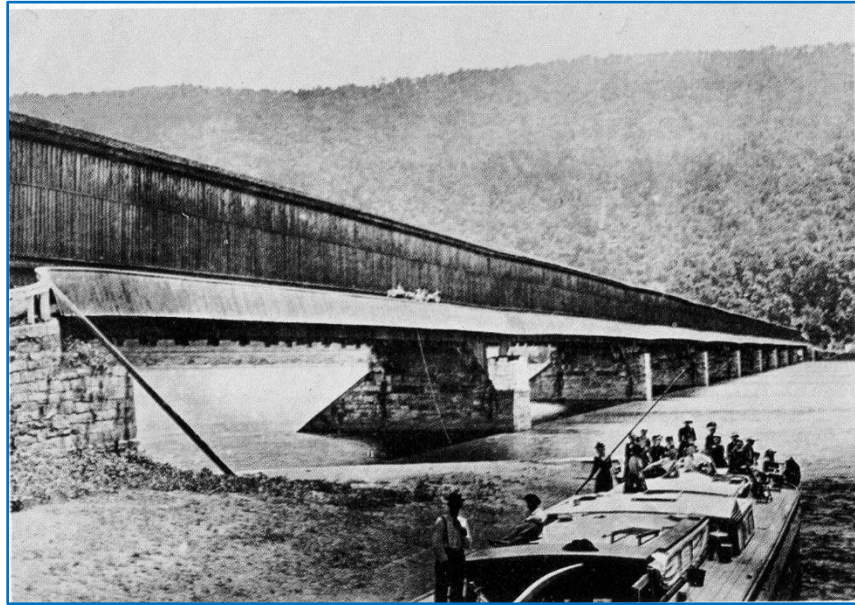


Figure 1: Photo of the Clark's Ferry Bridge

Pittsburgh. Canal features that once existed on the island include four locks and lock houses, a large basin near the present-day intersection of SR 22/322 and SR 849, and approximately 2.9 km (1.8 mi) of canal prism. To accommodate upscale turnpike and canal travelers Rebecca Duncan used her mansion as a nineteenth century bed and breakfast. One lodger of note was women's rights activist and abolitionist Lucretia Mott, who stopped there while traveling to Clearfield.

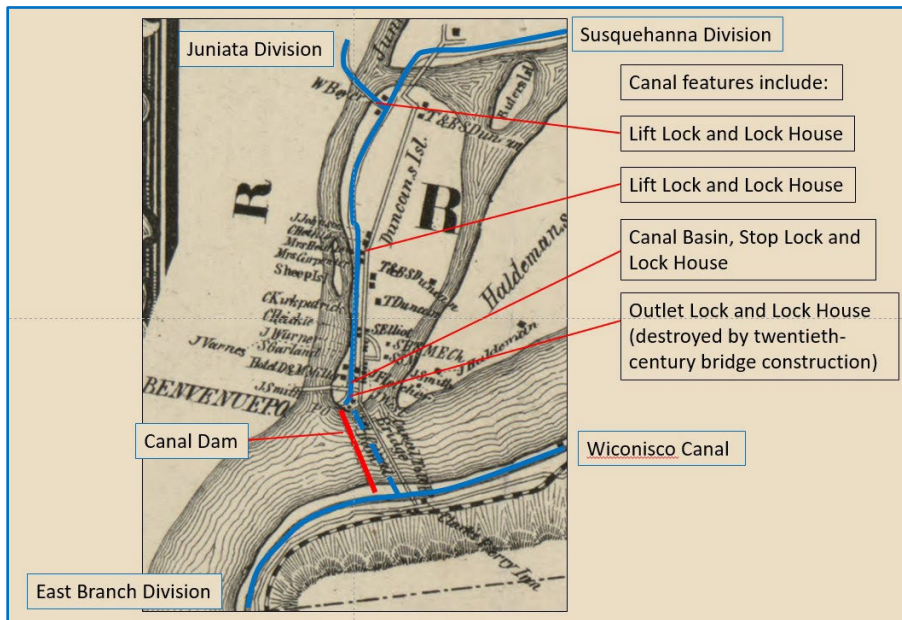


Figure 2: Pennsylvania Main Line Canal connector section through Duncan's Island

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

By mid-century Rebecca and her sons had begun selling building lots along the turnpike and canal, eventually giving rise to the extant village of Benvenue. The Duncan mansion, occupied by Rebecca and her sons from 1817 to 1882, and by the wealthy stock-breeder William Richter from 1882-1954, was demolished in 1990 to make way for an Arby's fast-food restaurant, which, in turn, was replaced by the extant Sheetz convenience store in 2011.

In addition to the research summarized above, the Phase I investigation entailed the excavation of 58 shovel test pits, nine Geoprobe soil borings, and five 1.0 x 1.0 m (3.3 x 3.3 ft) test units. Prior to test unit excavation, approximately 1.2 m (4.0 ft) of twentieth century fill was mechanically removed and shoring boxes placed within the excavated cavity. Hand excavation within the shoring box extended from the base of the fill to a depth of 1.5 m (5.0 ft), or approximately 2.7 m (9.0 ft) below ground surface (bgs). Quemahoning LLC's Paleo-Digger was utilized to sample soils at depths greater than 2.7 m (9.0 ft) bgs (Figure 4). The machine excavated in 10.0 cm (3.9 in) levels within a vertical, 60.0-cm (24.0-in) diameter plastic drainage pipe that was placed in the base of the test unit. To facilitate artifact recovery, all excavated soil was screened through 0.64-cm (0.25-in) mesh. Use of the Paleo-



Figure 3: Excavations conducted during the Phase I survey utilizing Quemahoning LLC's Paleo-Digger.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

Digger allowed us to quickly and safely sample the island's sandy soils down to the water table, which occurred at ca. 4.0 m (13.0 ft) bgs.

The Phase I fieldwork identified one nineteenth-century domestic site (36DA306) and two sites with stratified pre-contact period components (36DA307 and 36DA308) that extend to a depth of more than 2.7 m (9.0 ft) bgs. A sample of the artifacts recovered from 36DA307 are displayed in Figure 4. To date, no seventeenth- or eighteenth-century artifacts have been found, and although portions of the Pennsylvania Canal are known to exist beneath twentieth-century fill, no buried canal features were identified during the Phase I fieldwork.

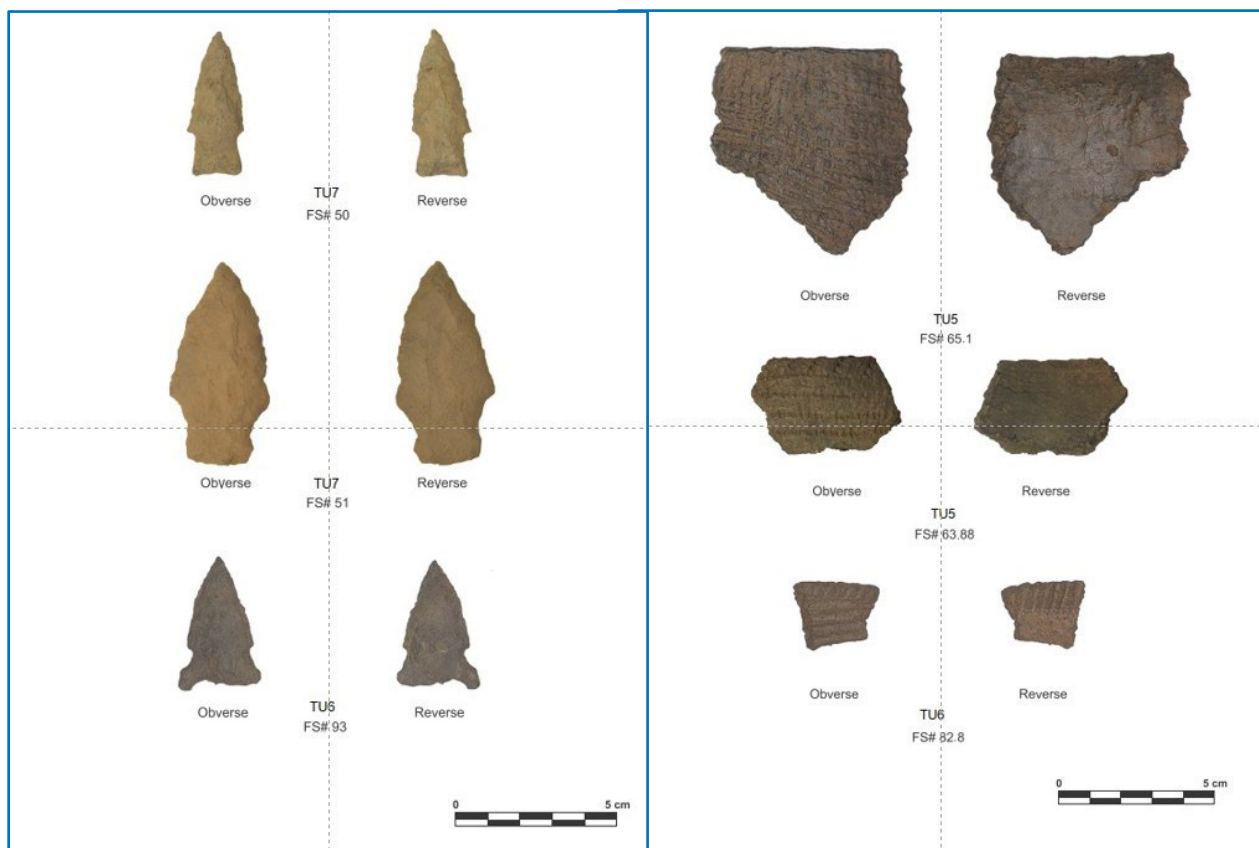


Figure 4: Sample of artifacts recovered from 36DA307.

Currently, a Phase II workplan is being developed that will entail remote sensing, additional Geoprobe exploration, the excavation of additional deep test units, and production of a report describing the methods and results of the Phase I/II investigations, including complete references for historical narrative presented above (which have been omitted from writeup for the sake of brevity). As during the Phase I, it is anticipated that Phase II excavation below a depth of 2.7 m (9.0 ft) bgs will be achieved through the use of the Paleo-Digger. Based on the Phase I findings summarized above, we

Pennsylvania Archaeological Site Survey

Annual Site Reporting Activity in 2022

anticipate that Phase II survey and (likely) data recovery investigation will provide new insights into the pre-contact and historic period occupations of Duncan Island and vicinity.

Archaeology at the Corner Store Site (36BV0415), Beaver County, North Sewickley Township

T. Arron Kotlensky, PennDOT District 11-0 CRP Archaeologist

Overview

With support from the Federal Highway Administration (FHWA), PennDOT District 11-0 is undertaking the replacement of a two-lane beam girder bridge that carries State Route (SR) 65 (locally known as Mercer Road) over the Connoquenessing Creek in Beaver County, roughly one mile south of Ellwood City. The bridge replacement project includes improvements to the approaches to the bridge and adjoining side-road intersections. In fulfilling its commitment to Section 106 of the National Historic Preservation Act, PennDOT coordinated geomorphological and archaeological investigations of sensitive areas of the project. The southeastern quadrant of the project at the intersection of SR 65 and Country Club Road was of particular interest because it was relatively undisturbed and possessed a high potential for the presence of unrecorded Native American and post-1750 historic period archaeological sites. In support of District 11-0, staff archaeologists from McCormick Taylor completed Phase I investigations in this area of the project and identified two sites dating to the nineteenth and early twentieth century—one of which, dubbed the *Corner Store Site* (36BV0415) showed potential as a standout historic period site. Based on the results of a Phase II investigation also undertaken by McCormick Taylor, the District 11-0 archaeologist determined that the Corner Store Site is eligible for listing in the National Register according to Criterion D. A combination of background research and abundant domestic artifacts demonstrated that this site offers a window into a poorly understood aspect of rural, nineteenth century life in Western Pennsylvania—the country store.

Dotting Pennsylvania county atlas maps of the nineteenth century, country stores that sold dry goods, “fancy goods,” and groceries served a key role in the life of the Commonwealth’s rural communities into the twentieth century before the advent of the automobile and improved roadways (Figure 1). Yet as an archaeological resource, they remain uncommon in PASS files and in SHPO site inventories elsewhere in the nation. Given their rarity as a historic period archaeological site, the surprising results of the archaeology of the Corner Store Site have proven worth the effort of closer study. But before exploring the unique archaeology of the Corner Store Site, tracing the history of this site reveals a complex story.

JOHN IVORY. ED. SHOEMAKER.
NEW AND CHEAP GOODS.
John Ivory & Co.
HAS JUST RECEIVED A LARGE AND
GENERAL ASSORTMENT OF
SPRING & SUMMER GOODS.
Comprising in part fine Cloths and Cassimeres,
with an assortment of the most desirable
and fashionable Ladies' Dress Goods,
such as Lawns, Lustres, De Lainea
Alpacas, Mulls, Gingham,
Calicoes, &c., in great
varieties—Together
with every descrip-
tion of Men &
Children's
Wear; Domes-
tic Goods, Hosiery,
Trimmings &c., &c.
GROCERIES.
We have a large and gener-
al assortment which will be sold
lower than any that have ever been
offered in this vicinity, together with a
general assortment of
HARDWARE,
Queensware, Drugs, Medicines, Oils, Glass and
Putty; Boots and Shoes;
☞ *Fine Beaver and Moleskin Hats;*
fine Cloth Caps: fine Gimp, Braid,
Pearl and straw Bonnets; Books, Sta-
tionary, &c.
With every description of Goods, Notions,
&c., that are usually kept in a country store,
all of which will be sold on such terms as will
defy all competition and insure general satis-
faction.
☞ All kinds of Country Produce wanted, for
which the highest market Price will be given. ☞
Summit A. P. R. Road, }
July 5, 1849.—39. }

Figure 1: An advertisement from January 3, 1850 in *The Mountain Sentinel* of Ebensburg, PA, highlighting goods on sale by John Ivory & Co., an established country store of the mid-nineteenth century in Pennsylvania.

Background: More Than Just a Store

The recorded history of the Corner Store Site begins around 1830 when John Merrick built a frame farmhouse on the site of recent archaeological investigations. In the 1830s, Jonathan Leet took possession of the property and dwelling and in 1848, began serving as postmaster for North Sewickley Township. Leet likely built an addition onto the northern side of the farmhouse that provided separate space for a post office as well as a country store, giving him entry into the local dry goods trade. In

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

this regard, Leet replicated a similar arrangement common elsewhere in rural Pennsylvania communities at this time: a collocated store and post office where nearby residents could attend to their postal needs and buy, sell, and barter in a variety of goods (Figure 2).



Figure 2: Detail from “North Sewickley Township,” in Caldwell’s 1876 *Illustrated Historical Centennial Atlas of Beaver County, Pennsylvania*. J.A. Caldwell, Publisher, Condit, Ohio.

Over the next several decades, at least eleven local residents operated the joint country store and post office, sometimes leasing the property from Leet and its subsequent owners. Prominent among these later owners were two physicians, Dr. Robert Cunningham, who bought the property in 1853, followed by Dr. John Withrow’s purchase in 1864. During their tenure of the building, the physicians and their families occupied the earlier-built southern half of the building that served as both residence and physician’s office until 1871, when Dr. Withrow died. The newer, northern half of the building, facing the roadway crossing of Connoquenessing Creek, continued to host a store and post office until 1906. With the relocation of postal services elsewhere in that year, the building likely ceased use as a store as well. The southern half of the building continued to be occupied as a residence until the entire building was razed sometime in the late 1940s. Fortunately, demolition left much of the surrounding areas intact and the purchase of the property in the 1990s by the nearby Connoquenessing Country Club has aided in the preservation of the site.

Archaeological Results: A Wide Assortment of Goods

Staff archaeologists with McCormick Taylor identified the Corner Store Site in late 2021 based on the results of their Phase I investigations and initial background research. The excavation of three test units yielded a surprising variety and number of nineteenth and early twentieth century artifacts, including a range of consumer goods such as multiple examples of decorated refined whitewares and molded glass wares, as well as demonstrating a high degree of intact soil stratigraphy. The density of

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

artifacts combined with the results of background research showed that the site presented a rare opportunity to explore questions regarding the material culture offered by country stores in Western Pennsylvania.

After reducing the size of the project's Area of Potential Effects (APE) to impact only 32 percent of the Corner Store Site, McCormick Taylor undertook Phase II archaeological investigation of the site within the APE in May 2022 to test its eligibility for listing in the National Register. The Phase II investigation began with the completion of 54 shovel test pits, which yielded approximately 5,500 historic period artifacts (this count does not include redundant bulk artifact types, such as coal, cinder, and brick fragments that were noted but not retained). This exceptional yield, combined with use of historic map research, allowed McCormick Taylor to focus Phase II test unit excavations on areas with high artifact densities situated in sheet middens and explore areas inside and outside of the expected foundation of the former building (Figures 3 and 4).

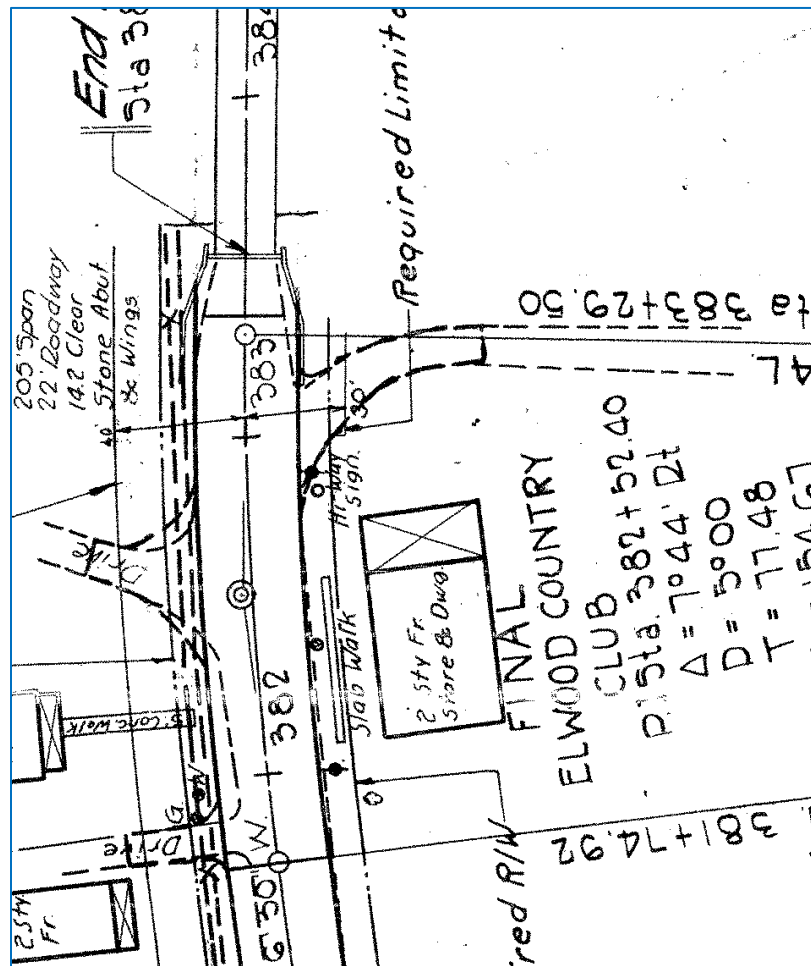


Figure 3: Detail from Pennsylvania Department of Highways as-built drawing of the current project area, dated 1930 and revised 1974. The as-built clearly shows the outline of the former store and describes it as a two-story frame store and dwelling. Oriented north.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

The test units showed an exceptional degree of preservation for a variety of artifact classes and types, including relatively uncorroded nails, pig's teeth, fish bones and scales, and shell buttons. Three test units (TUs 4, 6, and 10) yielded most of the artifact assemblage for the site within the APE, which included bottle glass (with blown mold, paneled, semi-automatic, and machine made represented), mold-formed vessel glass, lamp and lantern glass, whiteware, pearlware, stoneware (Albany and Bristol slip), ironstone, and redware. Specific to whitewares, the assemblage includes examples of transfer printed wares (with floral, rural, nature scenes in blue, black, brown, red/pink, mulberry all represented), stylized and rudimentary forms of blue shell edge (scalloped), flow blue, mocha (cable and annular banded), polychrome (red and green), hand painted floral design (red/pink, green/teal, and blue), clobbered transfer print, reverse transfer print, and Rockingham ware. The most numerous refined tableware forms present in the assemblage appear to be teacups, saucers and shallow bowls, and small plates, with numerous rim styles (plain and scalloped) also present. Bulk storage vessels included both stoneware and redware, with a variety of recovered rim types and glazes. Much of these glass and ceramic artifact sub assemblages are likely store goods lost to breakage in transit or accidental loss incurred over time at the store. Though they represent unfortunate losses for the storekeepers, these artifacts offer a rare look inside a store of this period since historical accounts of goods for sale are uncommon.



Figure 4: Phase II archaeological investigations underway at the Corner Store Site, May 2022. Note the store building field stone foundation exposed in the test unit. Photo credit: T. Arron Kottensky.

The Phase II investigation also recovered personal items of unique character that include a cast copper ball, kaolin and reed-style pipe stems and bowl fragments, a variety of button types (metal, milk glass, and shell), a buckle, and several examples of intact late nineteenth and early twentieth century medicine

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

bottles and personal care bottles. Interestingly, the investigation discovered a low number of artifacts associated with children, which were limited to a few marbles, porcelain doll fragments, and a miniature tea pot likely for a doll's set. The 68 percent of the site that will be avoided by project impacts may add to this artifact assemblage in the future with the discovery of privy or well features or with additional excavations of sheet middens associated with the country store or the attached residence.

The Takeaway: An Open Sign to a Larger Story

The archaeology of the Corner Store Site is nearly too expansive to summarize neatly here. As mentioned earlier, the site is eligible for listing in the National Register and to fulfil mitigation of adverse effects to that portion of the site within the project's APE, PennDOT is supporting the development of a context study of country stores in Western Pennsylvania that will aid future understanding of these sites and highlight the history of commerce in the region. The context study will be shared with the public through the development of a web-based *Byways to the Past* booklet as well as an interactive ArcGIS *StoryMap*, altogether followed with a public presentation in Beaver County.

The discovery and study of the Corner Store Site is an exciting archaeological project as it allows the public and researchers a better way to understand what people bought in local stores in rural communities. Rural economies in the nineteenth century were markedly different from those of the twentieth century since cash was scarce, so bartering and trading were often an accepted means to undertake transactions. The artifact assemblage from the Corner Store Site will also prove valuable for comparison with assemblages from contemporary dwelling sites in the region, expanding the ways in which archaeologists and historical researchers alike can tell the stories of how Western Pennsylvanians lived their lives through the goods they brought into their homes.

PennDOT District 11-0 offers its thanks to McCormick Taylor for their dedication to the archaeology of the Corner Store Site and to the Connoquenessing Country Club and the Beaver County Historical Research and Landmarks Foundation for their support for the project.

Documenting Constructed Stone Landscapes in Eastern Pennsylvania

Jim Wilson, Volunteer, New England Antiquities Research Association, PA Chapter

Like rural landscapes most everywhere across Pennsylvania, those on the Commonwealth's "east coast" are sometimes found peppered with manmade stoneworks. Stone rows, stone walls, piles of stacked stones in woodlands, wetlands and on hillslopes and mountainsides. Some beautifully constructed and others seemingly thrown together. Many if not most of these stoneworks are arguably the handiwork of European settlers, early American farmers and others who cleared the land to build farmsteads, industries and communities. However, not all of these dry laid stone constructions fit that early Euro-American land use paradigm.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

Last September, I had the pleasure of spending a beautiful fall day afield with two PA SHPO archaeologists, a Lehigh University anthropologist, and a Delaware Nation tribal historic preservation officer looking at, puzzling over and documenting some of these enigmatic stonewalls in Northampton and Monroe Counties.

The first site we visited was recorded in 1887 by local avocational archaeologist Alfred Berlin as a “game drive” built by Indians (Berlin 1887). Berlin describes the site as two parallel stone walls “irregularly thrown together, and varying in height from one to three feet” (Berlin 1887). He further describes the walls as being about one mile long, extending from near the summit of Blue Mountain down into the Lehigh Valley below.

Today, only about 1300 linear feet of the uppermost reaches of the walls remain intact on the steep rocky slopes of State Game Lands 168 in Northampton County, where they are protected from development on public land. The lower reaches of the walls in the valley below were destroyed in late 19th and early 20th century land clearing for farms, residential communities and infrastructure. Berlin’s 1887 primary source documentation and his reference to this stonewall site as “an ancient structure” together with its location on extremely steep talus slopes, with no plausible utilitarian land use explanation, supported its addition into the PASS files in 2022 (Figures 1 and 2).



Figure 1: Upslope view of the west wall of the Berlin Walls site (36NM0363).



Figure 2: Downslope view of the east wall of the Berlin Walls site (36NM0363).

In addition to the “Berlin Walls,” we visited another constructed stone site near the summit of Blue Mountain on State Game Lands 168 in Northampton County last fall. Here, about 20 low crudely assembled, flat-topped stone cairns occupy about one acre of steep rocky mountainside. These cairns are all constructed on top of large talus boulders or outcrops of bedrock and appear to be constructed in rows roughly equidistant from each other, both vertically and horizontally on the steep rocky mountainside. Who built them, when and why are unknown.

This one-acre cairn field on steep wooded slopes is also located within 50 feet of Smith Gap Road, an unpaved public roadway which is recorded as having been constructed along the Wechquetank Path, where it climbed up and over Blue Mountain through Smith Gap, between today’s Northampton and Monroe Counties. The Wequetank Path is a recorded Indian trail that led from the Lehigh Valley in Northampton County north to the Wyoming Valley in Luzerne County (Wallace 1965). Situated on a steep rocky mountainside next to a recorded Native American footpath, the Smith Gap Cairns were also added to the PASS files in 2022 (Figure 3).

PA SHPO archaeologists and I visited two other constructed stone landscapes last September, both in Monroe County. One in the Pocono Creek watershed and the other in the McMichael Creek watershed. One site includes dozens of stone cairns located in a sprawling hemlock and rhododendron wetland, and extending up the lower slopes of Camelback Mountain in the headwaters of the McMichael Creek watershed. Here, in addition to stone cairns, are found a number of ambiguous

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

stone rows or walls that appear to serve no practical or utilitarian purpose. Many of the stoneworks at this site are rather large and appear to have been carefully and even artistically constructed.



Figure 3: A vertical row of several cairns at the Smith Gap Cairns site (36NM0362) in Northampton County.

The other Monroe County site we visited last fall occupies about a half-acre of steep hemlock uplands overlooking the Pocono Creek floodplain and PA Route 611. Features here include a number of stone walls, stone cairns, a small stone chamber or niche, and four stone terraces carefully built into the steepest and lowermost slopes of the site. Many more anomalous constructed stone landscapes are found in wetlands and on forested hillslopes in Monroe County, and throughout the Delaware and North Branch Susquehanna River basins in eastern Pennsylvania.

I first became interested in constructed stone landscapes in the late 1990s, after attending a slide-illustrated presentation on the subject by local stoneworks enthusiast Fred Werkheiser from Northampton County. Over the past 25 years, I have read many books and articles on the topic, attended lectures and conferences on the subject, been shown many ambiguous stonework sites by Werkheiser and others, and have even located a few myself, sometimes based on historical source documentation, like sketch maps and recorded site locations. I more recently joined and became active with the North East Antiquities Research Association, aka the New England Antiquities Research Association (NEARA). NEARA's purpose is to promote research into the origins and functions of these enigmatic constructed stone landscapes throughout northeastern North America.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

Three years ago, in March 2020, I led NEARA volunteers and a PA SHPO archaeologist on a site visit to an amazing 11-acre constructed stone landscape in Berks County. This site consists of about 90 stone features, including some of the largest monumental stoneworks found on ambiguous constructed stone landscapes anywhere in the Northeast. NEARA members have been researching this site for over 25 years. The results of luminescence dating of cinder and stone samples taken from constructed stone features here in 2002 and 2018 respectively, predate European settlement by at least 1000 years (Feathers and Muller 2020). In 2021, NEARA sponsored additional luminescence analysis of another stone sample taken from a different constructed stone feature at this site in an effort to corroborate the site's prehistoric age. The results of that lab analysis are expected in 2023.

After visiting the Berks County constructed stone landscape in early 2020, PA SHPO registered the site in its PASS files that summer as Oley Hills (36BK0990, 36BK0991, and 36BK0992) (Figures 4 and 5). SHPO staff wrote an interesting article about the Berks County site, constructed stone landscapes and the agencies emerging partnership with NEARA in the July 22, 2020 edition of the PA SHPO blog, *Pennsylvania Historic Preservation*.



Figure 4: A large flat-topped cairn connected to sinuous stone rows at the Oley Hill site.



Figure 5: Large flat-topped cairn at the Oley Hills site.

Since our 2020 Berks County site visit together, NEARA volunteers and PA SHPO staff have begun to collaborate in an effort to map, describe and record these constructed stone landscapes in the PASS files so that we can begin to understand their presence in Pennsylvania, regardless of their age or who built them. We recently invited the federally recognized Delaware Nation to join us in in these efforts, as many of these stoneworks have been recorded in the past as having been constructed by Native Americans (Donehoo 1928). The Delaware Nation in Anadarko, Oklahoma, on whose ancestral homeland we live in the Delaware River basin today, established a Tribal Historic Preservation Office here in the Lehigh Valley in 2020. We welcome and look forward to establishing working relationships with the eastern office of the Delaware Nation THPO in our research and study of constructed stone landscapes.

A big “Thank You” to PA SHPO Archaeologists Taylor Napoleon and Casey Hanson, Lehigh University Anthropology Professor Allison Mickel, and Delaware Nation Tribal Historic Preservation Officer Katelyn Lucas for spending such a fun and exciting day afield with me last September, exploring, discussing and documenting these enigmatic stoneworks in local woodlands and wetlands

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

in eastern Pennsylvania. I also thank PA SHPO for its willingness to take a fresh look at these ambiguous constructed stone landscapes, and for beginning to record more of them in PASS files as landscape artifacts, worthy of cultural resource management. I look forward to more days afield exploring and documenting these stone landscapes with PA SHPO archaeologists and partners in 2023.

References

Berlin, A.F. (1887). A Game Drive. *The American Antiquarian and Oriental Journal*, (1880-1914); Sep. 1887; 9, 5; American Periodicals, Pg. 311.

Wallace, Paul A.W. (1965). Indian Paths of Pennsylvania. Pennsylvania Historical & Museum Commission.

Feathers, J., & Muller, N. (2020). Optically stimulated luminescence dating of a probable Native American cairn and wall site in Eastern Pennsylvania. *North American Archaeologist*, 41(1), 33–50.

Donahoo, G.P. (1928). Appendix B: Prehistoric Works in Pennsylvania, A History of the Indian Villages and Place Names in Pennsylvania, (pp. 271-277). Second reprint, Wennawoods Publishing, 1999, Lewisburg, PA.

Discovering What Was Once There

Sarah Hoffeditz, M.A., Summer 2022 PA SHPO Intern

Introduction:

In the summer of 2022, I was tasked with the responsibility to survey architectural buildings, outbuildings, and any noticeable historical features of five state historic properties: Brandywine Battlefield, Ephrata Cloister, Landis Valley Village and Farm, Conrad Weiser Homestead, and Cornwall Iron Furnace. The purpose of these surveys was to document all existing buildings that are onsite and update PA-SHARE with the location and description of every building. While the majority of my task was to deal with the historical buildings that still reside on the property, I was able to discover several buildings and features that have long been demolished, which gives them archaeological potential.

Previous Documentation:

Surveying five massive locations where some had 20 or more buildings, required some careful planning and mapping of the resources that already exist for each site. Initially, I would begin with grasping an understanding of what buildings are still in existence and the general history of the properties. Researching through the properties' websites allowed me to understand the general history and the currently active buildings attached to the properties. The Landis Valley Village and Farm, for example, provides a detailed map and description of the village (Figure 1).

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

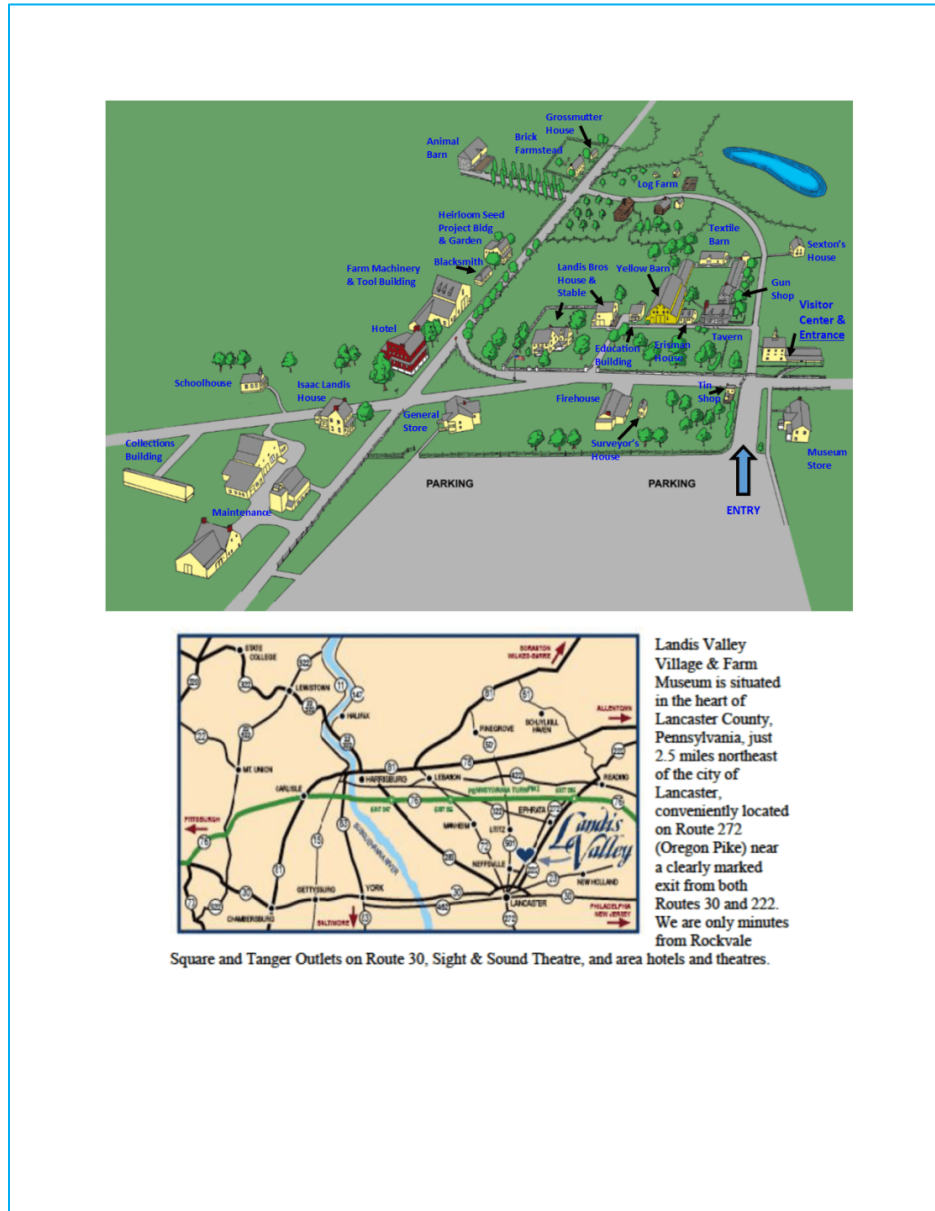


Figure 1: Map of Landis Valley Village (Source: Landisvalleymuseum.org)

What is not often found on maps such as the one on Landis Valley Village’s website, are buildings that are no longer extant or archaeological sites. Fortunately, PA-SHARE is a wonderful tool that provides information such as cultural resource management surveys of many of these properties. Older surveys provided an understanding of what buildings used to be on the property that may no longer be standing today. Often times these documents have historic photographs or property maps that highlight buildings that do not parallel with current maps (Figure 2).

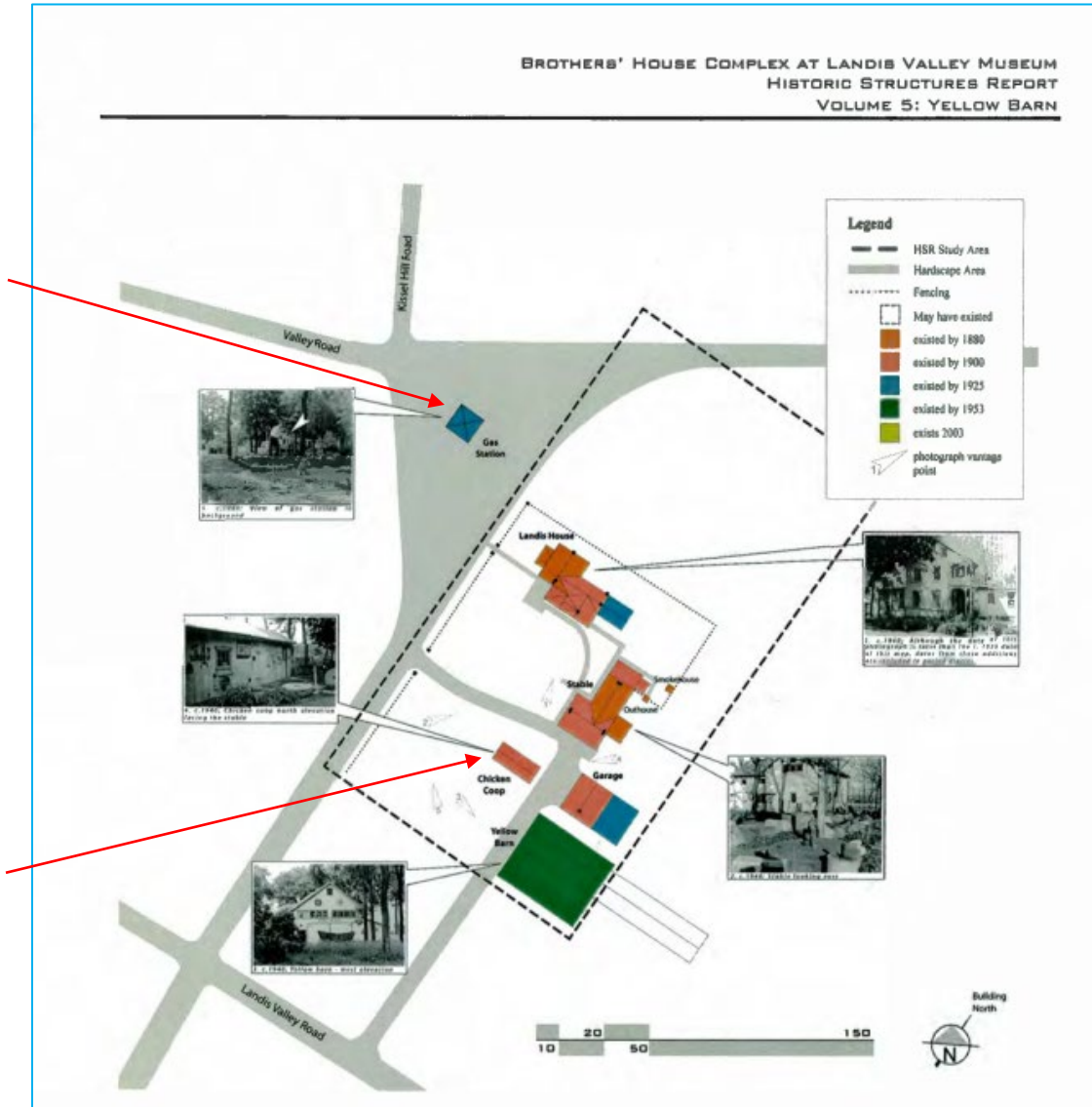


Figure 2: 1953 site plan of Landis Valley Village. Red arrows indicating gas station and chicken coop which are no longer extant. (Source: 2003RP00185)

Some locations were already excavated for potential structures. Ephrata Cloister is a prime example of this. This site has three locations that have been previously excavated: the brother’s house, Mount Zion Buildings, and the site of a possible communal dormitory (Figure 3). By discovering this information, I was able to easily note archaeological potential of the areas. Additionally, by noting that these areas were previously surveyed, I was able find the corresponding report detailing these excavations in PA-SHARE.



Figure 3: Map of Ephrata Cloister with areas of previous excavations circled in red (Source: ephratacloister.org)

Aerial Evidence:

Historic aerial photographs provide a bird-eyes view of properties and provide details of buildings that once stood on properties. There are a couple things that can be seen by looking at aerial photographs like massive land features or previously existing buildings. At Brandywine Battlefield, behind the Gideon Gilpin house there used to be a shed or small barn. Going through the park today, there is no major evidence that this building existed. However, historically there once was a building directly north of the Gilpin house. There is no exact explanation of what this shed or barn was used for, or as to why it was demolished. However, using the aerial map I was able to discover a former building, which allows me to take a closer look at the area when doing field work (Figure 4).

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022



Figure 4: Comparison of aerial imagery of the Gideon Gilpin house at Brandywine Battlefield (Source: 1982 Pennsylvania Imagery Navigator and 2023 Google Maps)

Aerial photographs create an understanding of what buildings used to exist there, but also what major features may be covered up. Cornwall Iron Furnace in Cornwall, PA, used to be the leading producer of iron from 1742 to 1883. One of their mines was conveniently located directly south of their furnace. The open mine pit soon began to flood in 1972, which leads to the pit being a large lake today. Without observing aerial photographs and not knowing anything about the site, one would believe it was a



Cornwall Iron
Furnace

Figure 5: Historic aerial imagery showing mining operations near Cornwall Iron Furnace (Source: 1940 Aerial-Pennsylvania Imagery Navigator)

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

natural lake. By looking at aerial photographs I was able to see the span of the mine and its proximity to the furnace (Figure 5). I also was able to see the historical land features around the furnace that are almost nonexistent today, such as the greenhouse-like gardens they used to have on the eastern part of the property. The gardens were used to produce food for the miners in all parts of the year.

Noticeable Land Features:

The purpose of looking through historical documents and aerial photographs is so when I enter the field, I should know what I am looking at or what I am looking for. However, there are features that have to be seen by the human eye. While attending a site visit, I would also be looking at features in the landscape that I could not research or discover via aerial photographs. Areas of land that seems to be disturbed, difference between color of grass or level of grass, or sometimes agricultural tools. Walking through Landis Valley Village, there are several historic grinding stones that are now embedded into the ground. These can be considered as archaeological finds. Going back to the historic gas station in Landis Valley, when you view the area of where it should have stood, you will notice a depression in the earth. Which could help further indicate that there is or was something in that location.

My project managing method allowed me to optimize my time in the field surveying locations. By learning the history and the archaeological significance of these areas, I was able to record more above ground and archaeological potential sites. Being allowed to have this opportunity to work on this M.A.R.S project and for the SHPO was a great honor and an experience I will always cherish. It was fulfilling to watch my project develop successfully. It was a privilege to work for the SHPO and a greater privilege to help assist preserving Pennsylvania's history.

SHPO Survey Activities

In 2022, the PASS program embarked on several new survey opportunities, all with the goal of improving archaeological stewardship in the Commonwealth. Below is a recap of the activities that took place in 2022 and a look at what's currently planned for 2023.

Surveyor

Surveyor first launched in August 2021 as a set of survey tools, integrated with PA-SHARE, to facilitate the collection of above ground and archaeological resources. Since its launch, Surveyor has been used in the PASS and Pennsylvania Above Ground Survey (PAGS) program by multiple cultural resource management consultants to successfully complete projects. In Surveyor, resource information is captured using standardized forms for above ground, archaeological, and district resources. The information fields present on the forms are the same as those in PA-SHARE, providing consistency across both platforms.

PA-SHARE Surveyor is a set of desktop and mobile survey tools designed to add convenience, enable teamwork, and expedite resource information submission into PA-SHARE. The “tools” are made up of three interacting interfaces that are accessible through either a web browser or via an app on a handheld mobile device, like a smart phone or tablet. These three interfaces are as follows:

- 1) Surveyor Manager, which is intended for use through a web browser
- 2) Surveyor Mobile which is optimized for use on a mobile internet browser on a mobile device
- 3) The Surveyor field app for handheld devices

All users intending to use Surveyor for data capture must be registered in PA-SHARE with a Pro or Business subscription and submit a survey proposal. Once that survey proposal is approved by the appropriate PA SHPO staff, the user will be granted access to all three of the above-mentioned tools to conduct survey work.

Surveyor Manager makes it possible for users to manage their survey projects in a platform and format that is seamlessly integrated with PA-SHARE (Figure 1). In this desktop interface, users can add members to their survey team, pre-populate resource records, interact with pre-existing resource records in PA-SHARE, update, edit, and submit resource information to the PA SHPO for review and inclusion into the PA-SHARE database. The benefit of Surveyor Manager is survey teams can establish a workflow that works best for their needs and work together to complete and review resource records before they are submitted to the PA SHPO.

Surveyor Mobile is optimized for use on a mobile internet browser on a handheld device. It is a map interface that shows all of the mapped information that is available in PA-SHARE in addition to the mapped information and boundaries that are specific to a particular survey project (Figure 2). In Surveyor Mobile, users can view and add existing resources to survey projects so that information can be updated from the field app and/or as part of the survey project.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

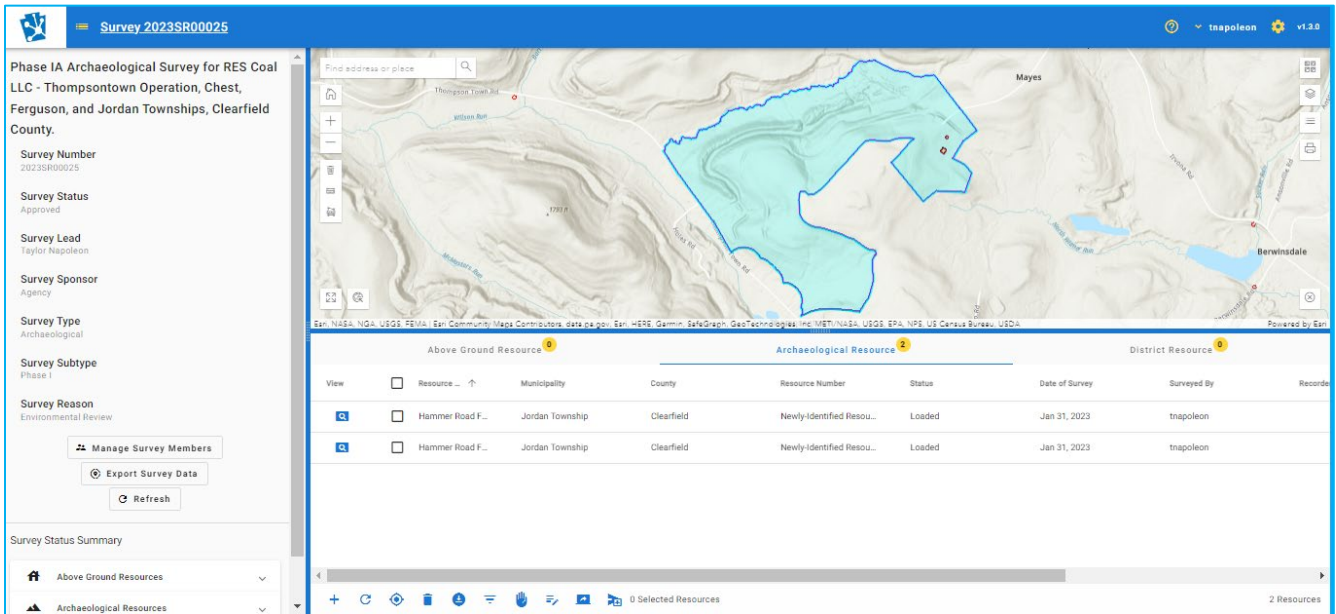


Figure 1: Overview of the Surveyor Manager interface

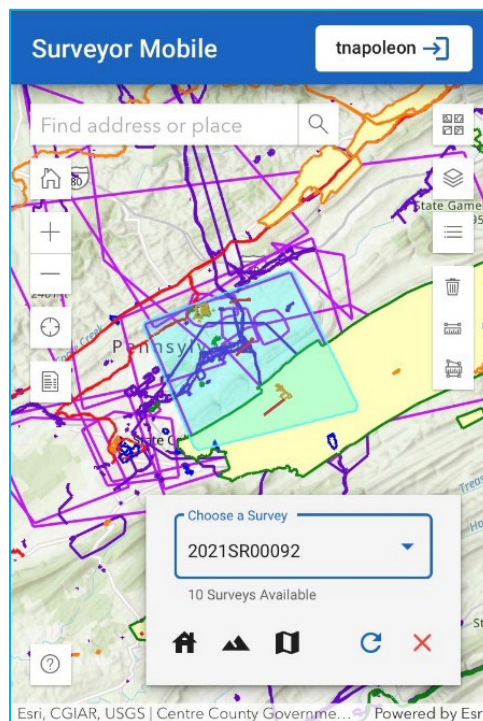
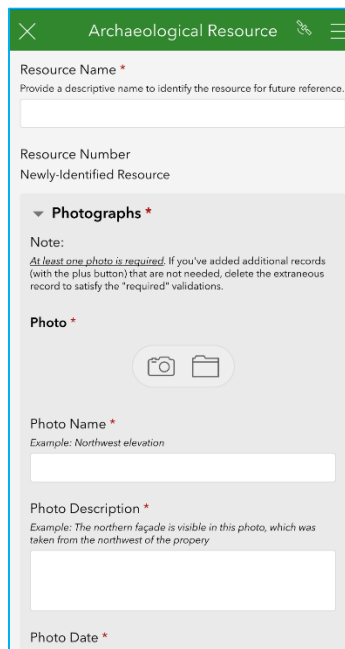


Figure 2: Overview of Surveyor Mobile map.

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

The Surveyor field app is a form-centric app that is used on a mobile device, such as a smartphone, to collection resource information directly in the field. To collect or update information as part of a survey project, users download the free Survey123 app by ESRI. After signing in, users can begin surveying with customized PA-SHARE forms for collecting the standardized information required for above ground, archaeological, or district resources. The forms in the app are designed to collect a minimum amount of information to enable quick collection in the field (Figure 3). Resource forms can then be completed and edited in Surveyor Manager once back indoors.



The screenshot shows a mobile application interface for an 'Archaeological Resource' form. At the top, there is a green header with a close button, the title 'Archaeological Resource', and a menu icon. Below the header, the form contains several sections: 'Resource Name *' with a subtext 'Provide a descriptive name to identify the resource for future reference.' and an input field; 'Resource Number' with a subtext 'Newly-Identified Resource' and an input field; a 'Photographs *' section with a dropdown arrow, a 'Note' stating 'At least one photo is required. If you've added additional records (with the plus button) that are not needed, delete the extraneous record to satisfy the "required" validations.', and a 'Photo *' field with camera and gallery icons; 'Photo Name *' with a subtext 'Example: Northwest elevation' and an input field; 'Photo Description *' with a subtext 'Example: The northern façade is visible in this photo, which was taken from the northwest of the property' and a larger input field; and 'Photo Date *' at the bottom with an input field.

Figure 3: View of archaeological resource form in Surveyor field app.

To date, Surveyor has been used to capture archaeological resources associated with CRM surveys, SHPO staff surveys and SHPO managed surveys including our baseline survey effort. More information pertaining to baseline survey can be found in the below section.

Baseline Survey

The baseline survey is a multi-year survey initiative that aims to document a significant number of historic resources across a vast geographic area of Pennsylvania quickly and efficiently. Baseline survey efforts focus on identifying and recording underrepresented historic resources in the PA SHPO's inventory and those identified by stakeholders. Some of the priority resource types for baseline efforts include African American church and cemeteries, resources associated with racial and ethnic communities, recreational properties, 20th century resources and industrial resources.

The initiative was initially created to focus on adding resources to the Pennsylvania Above Ground Survey (PAGS) files, the above ground counterpart to the PASS survey program. However, during Year 1 survey teams found that properties that had been identified during background research were

Pennsylvania Archaeological Site Survey Annual Site Reporting Activity in 2022

found to be demolished during field survey. In some cases, these demolished properties had remnants of foundations or other indicators that a building was once there, but not enough left to survey the property as a building. Due to these factors, in Year 2 the concept of surficial archaeological evidence was developed to help account for the remnants of these properties.

In the context of baseline survey, surficial archaeological evidence is the indication of one or more former structures or activity areas that are visible on the surface, such as foundations, middens, other features or altered terrain, that are 50 years old or older. While the focus of this project is on visible evidence, the lack of such evidence does not mean that a potential archaeological site does not exist, particularly if suggested by background research. Under the supervision of qualified archaeologists, survey teams were asked to document examples of surficial archaeological evidence using PA-SHARE's Surveyor archaeological resource form. Baseline survey methodology did not include any excavation and required that survey teams stay within the public right of way during field survey. Therefore, it is important to note that not all areas documented during baseline survey activities received an official PASS number. A majority of areas documented require additional investigations to assess if an archaeological site is present.



Figure 4: Croop's Glen Amusement Park (36LU0373) in Luzerne



Figure 5: Kelly Station Coke Ovens (36AR0601) in Armstrong County.

Despite the limitations of baseline survey, 306 potential archaeological sites were captured throughout 16 counties during Year 2. Of these potential areas, 24 were determined to include adequate information to receive an official PASS number in 2022 (Figures 4-5). Areas that did not receive PASS numbers serve as opportunities for future archaeological research and investigations.

To learn more about the PA SHPO's baseline survey initiative, please visit: <https://www.phmc.pa.gov/Preservation/survey/Pages/Baseline-Survey-Effort-2020-2024.aspx>.

Pennsylvania Archaeological Site Survey

Annual Site Reporting Activity in 2022

Survey of PHMC Properties

The Pennsylvania and Historical Museum Commission (PHMC) owns over 20 properties throughout the Commonwealth that showcase and educate the public on Pennsylvania's unique history. Over the years, several properties have been subjected to cultural resource management surveys, although the level and intensity of the survey efforts have varied. The lack of consistency in survey across the properties makes it challenging for PA SHPO staff to make quick and informed decisions during the project consultation process. With the launch of Surveyor, we saw an opportunity to alleviate some of this burden by having the ability to survey properties efficiently and consistently.

In the spring of 2022, with the help of staff at Historic Sites and Museums, PA SHPO initiated survey of five PHMC properties. This first round of surveys was completed by a Keystone Intern for the Mapping, Assistance, Resources, and Surveys (MARS) section within the PA SHPO. The focus of the survey was on capturing information for each individual building on the property. At a minimum, this included documenting the location of the building and providing updated photos. A secondary element of the survey was capturing areas that may have archaeological potential based on the absence of once extant historic structures or other visible features. These areas were found through analyzing previous survey reports and comparing historic and aerial imagery to present day conditions during field work. More about this survey effort can be found in the above section "*Discovering What Was Once There*" written by our intern.

Through this process, several areas were identified as having archaeological potential. However, since the initial approach to identifying these areas was building focused, we were missing a crucial piece of the puzzle- identifying areas of Pre-Contact period archaeological potential. To amend this, we have reconfigured the archaeological aspect of the PHMC properties survey effort to include a constraints analysis. The constraints analysis will gather available information on previously recorded archaeological surveys and sites on the property and assess the potential for the presence of both historic and Pre-Contact period archaeological resources. The analysis will include an archaeological probability assessment for the property and appropriate recommendations for future survey.

Looking to 2023

Many of the survey efforts outlined above will continue into 2023. Baseline survey is entering its third and final year and will continue to include the identification of areas of surficial archaeological potential. In addition, the PASS program will continue to survey PHMC properties, taking into account the lessons learned from the 2022 surveys and modifying the archaeological aspect to include a constraints analysis.

In 2023, the PASS program will continue to develop a long-term survey plan. The plan will focus on outreach efforts, identifying survey needs, and continuing survey initiatives. The PASS program would like to thank all those that contributed to and supported our efforts this year! We look forward to continuing a collaborative, cooperative, and informative PASS program in 2023. 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 2022

Data Summary and Maps

County	1/1/2023	1/1/2022	New	Deletions**	Density*
Adams	593	592	1	-	1.13 sites / sq. mile
Allegheny	777	772	5	-	1.07 sites / sq. mile
Armstrong	600	591	9	-	0.92 sites / sq. mile
Beaver	416	414	2	-	0.95 sites / sq. mile
Bedford	348	348	-	-	0.34 sites / sq. mile
Berks	1,001	998	3	-	1.16 sites / sq. mile
Blair	130	130	-	-	0.25 sites / sq. mile
Bradford	363	360	3	-	0.32 sites / sq. mile
Bucks	497	490	7	-	0.81 sites / sq. mile
Butler	548	544	4	-	0.69 sites / sq. mile
Cambria	223	219	4	-	0.32 sites / sq. mile
Cameron	72	72	-	-	0.18 sites / sq. mile
Carbon	178	177	1	-	0.44 sites / sq. mile
Centre	572	571	1	-	0.51 sites / sq. mile
Chester	1,083	1082	1	-	1.42 sites / sq. mile
Clarion	213	212	1	-	0.36 sites / sq. mile
Clearfield	116	118	-	2	0.10 sites / sq. mile
Clinton	230	230	-	-	0.26 sites / sq. mile
Columbia	61	59	2	-	0.13 sites / sq. mile
Crawford	504	502	2	-	0.50 sites / sq. mile
Cumberland	238	236	2	-	0.43 sites / sq. mile
Dauphin	321	296	25	-	0.62 sites / sq. mile
Delaware	191	188	3	-	1.04 sites / sq. mile
Elk	448	440	8	-	0.56 sites / sq. mile
Erie	360	358	2	-	0.44 sites / sq. mile
Fayette	597	594	3	-	0.74 sites / sq. mile
Forest	569	457	112	-	1.36 sites / sq. mile
Franklin	459	455	4	-	0.61 sites / sq. mile
Fulton	80	80	-	-	0.18 sites / sq. mile
Greene	502	502	-	-	0.87 sites / sq. mile
Huntingdon	235	235	-	-	0.26 sites / sq. mile
Indiana	493	493	-	-	0.60 sites / sq. mile
Jefferson	204	202	2	-	0.31 sites / sq. mile
Juniata	135	132	3	-	0.35 sites / sq. mile
Lackawanna	86	86	-	-	0.19 sites / sq. mile

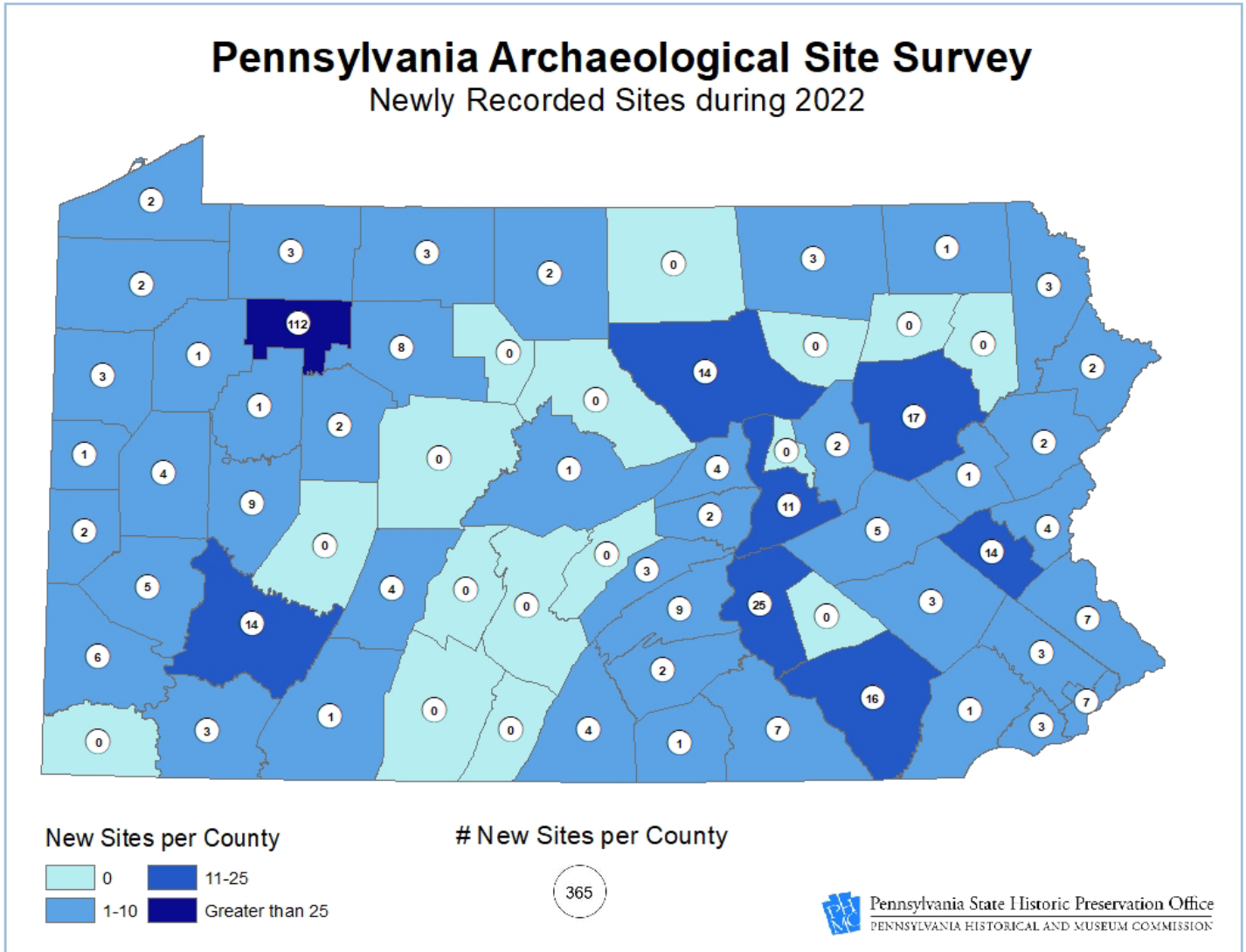
Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

County	1/1/2023	1/1/2022	New	Deletions**	Density*
Lancaster	1,653	1637	16	-	1.75 sites / sq. mile
Lawrence	363	362	1	-	0.99 sites / sq. mile
Lebanon	567	567	-	-	1.56 sites / sq. mile
Lehigh	395	381	14	-	1.14 sites / sq. mile
Luzerne	379	362	17	-	0.43 sites / sq. mile
Lycoming	368	354	14	-	0.30 sites / sq. mile
McKean	349	346	3	-	0.35 sites / sq. mile
Mercer	296	293	3	-	0.44 sites / sq. mile
Mifflin	121	121	-	-	0.28 sites / sq. mile
Monroe	299	297	2	-	0.49 sites / sq. mile
Montgomery	514	511	3	-	1.04 sites / sq. mile
Montour	116	116	-	-	0.89 sites / sq. mile
Northampton	363	359	4	-	0.97 sites / sq. mile
Northumberland	211	200	11	-	0.47 sites / sq. mile
Perry	99	90	9	-	0.18 sites / sq. mile
Philadelphia	262	255	7	-	2.03 sites / sq. mile
Pike	274	272	2	-	0.51 sites / sq. mile
Potter	55	53	2	-	0.05 sites / sq. mile
Schuylkill	108	103	5	-	0.14 sites / sq. mile
Snyder	301	299	2	-	0.92 sites / sq. mile
Somerset	502	501	1	-	0.47 sites / sq. mile
Sullivan	33	33	-	-	0.07 sites / sq. mile
Susquehanna	230	229	1	-	0.28 sites / sq. mile
Tioga	186	186	-	-	0.16 sites / sq. mile
Union	155	151	4	-	0.49 sites / sq. mile
Venango	332	331	1	-	0.49 sites / sq. mile
Warren	701	698	3	-	0.77 sites / sq. mile
Washington	1,844	1838	6	-	2.15 sites / sq. mile
Wayne	317	314	3	-	0.43 sites / sq. mile
Westmoreland	1,248	1234	14	-	1.22 sites / sq. mile
Wyoming	132	132	-	-	0.33 sites /sq. mile
York	485	478	7	-	0.53 sites / sq. mile
TOTALS	26,701	26,338	365	2	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.

**Two sites in Clearfield County were deleted as a result of a site numbering error in 2021. These two sites should have received Cambria County site numbers, not Clearfield County site numbers. The error was found and corrected in 2022.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022



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

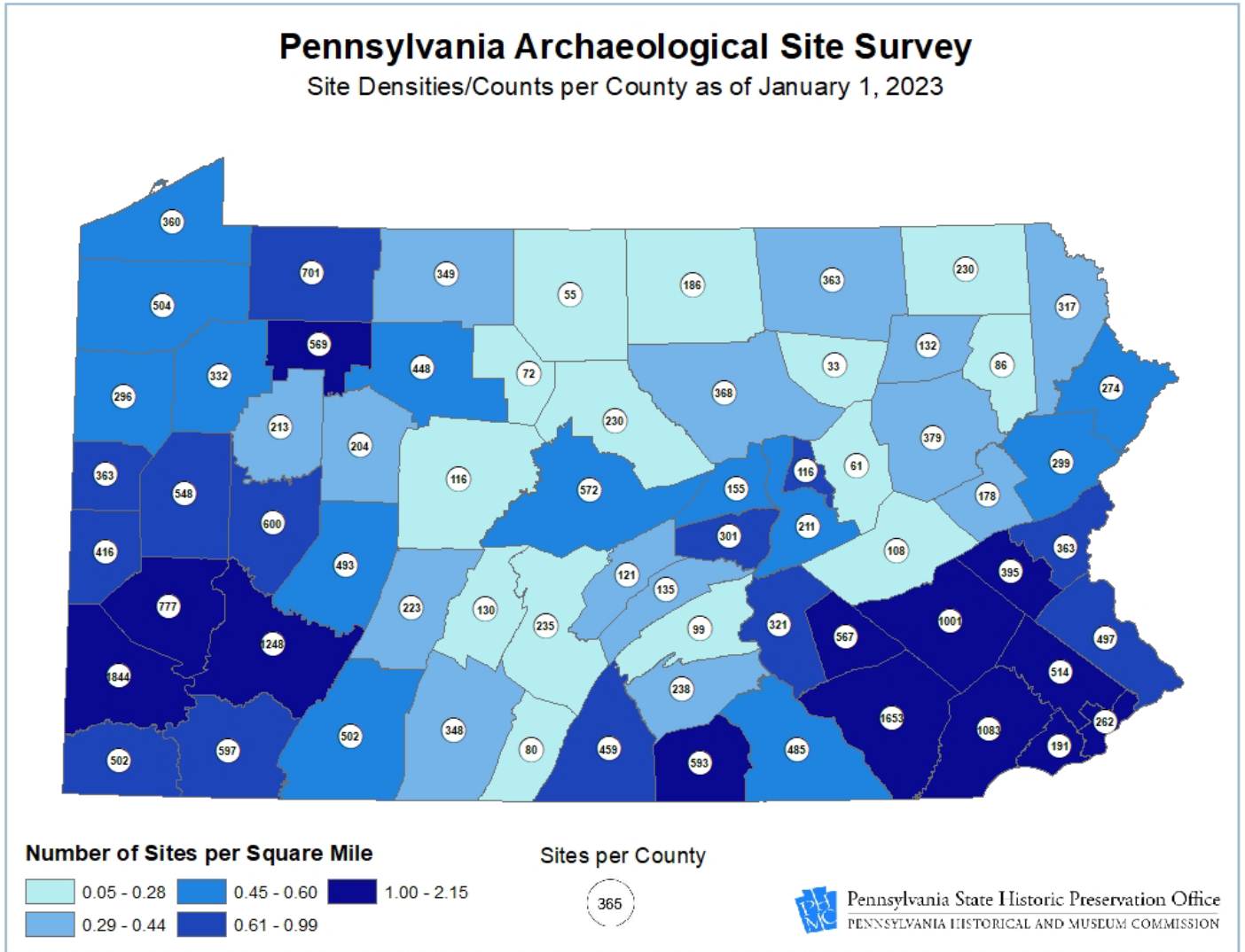
Ten Counties with the Greatest Increase in Sites during 2022

County	Number Recorded	% of Total Increase
Forest	112	30.68%
Dauphin	25	6.85%
Luzerne	17	4.66%
Lancaster	16	4.38%
Westmoreland	14	3.84%
Lehigh	14	3.84%
Lycoming	14	3.84%
Northumberland	11	3.01%
Armstrong	9	2.47%
Perry	9	2.47%
TOTAL:	241	66.04%

Ten Counties with the Greatest Density of Recorded Sites

County	Sites / Sq. Mile
Washington	2.15
Philadelphia	2.03
Lancaster	1.75
Lebanon	1.56
Chester	1.42
Forest	1.36
Westmoreland	1.22
Berks	1.16
Lehigh	1.14
Adams	1.13

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022



Map displaying site densities and total counts per county.

Pennsylvania Archaeological Site Survey
Annual Site Reporting Activity in 2022

Ten Counties with the Highest Numbers of Recorded Sites

County	Number	% of Total Sites
Washington	1,844	6.91%
Lancaster	1,653	6.19%
Westmoreland	1,248	4.67%
Chester	1,083	4.06%
Berks	1,001	3.75%
Allegheny	777	2.91%
Warren	701	2.63%
Armstrong	600	2.25%
Fayette	597	2.24%
Adams	593	2.22%
TOTAL	10,097	37.83%

Ten Counties with the Lowest Numbers of Recorded Sites

County	Number	% of Total Sites	Observations
Sullivan	33	0.12%	<i>No change from 2018</i>
Potter	55	0.21%	
Columbia	61	0.23%	
Cameron	72	0.27%	<i>No change from 2016</i>
Fulton	80	0.3%	<i>No change from 2018</i>
Lackawanna	86	0.32%	<i>No change from 2019</i>
Perry	99	0.37%	
Schuylkill	108	0.40%	
Clearfield	116	0.43%	<i>No change from 2020</i>
Montour	116	0.43%	<i>No change from 2018</i>
TOTAL	826	3.08%	