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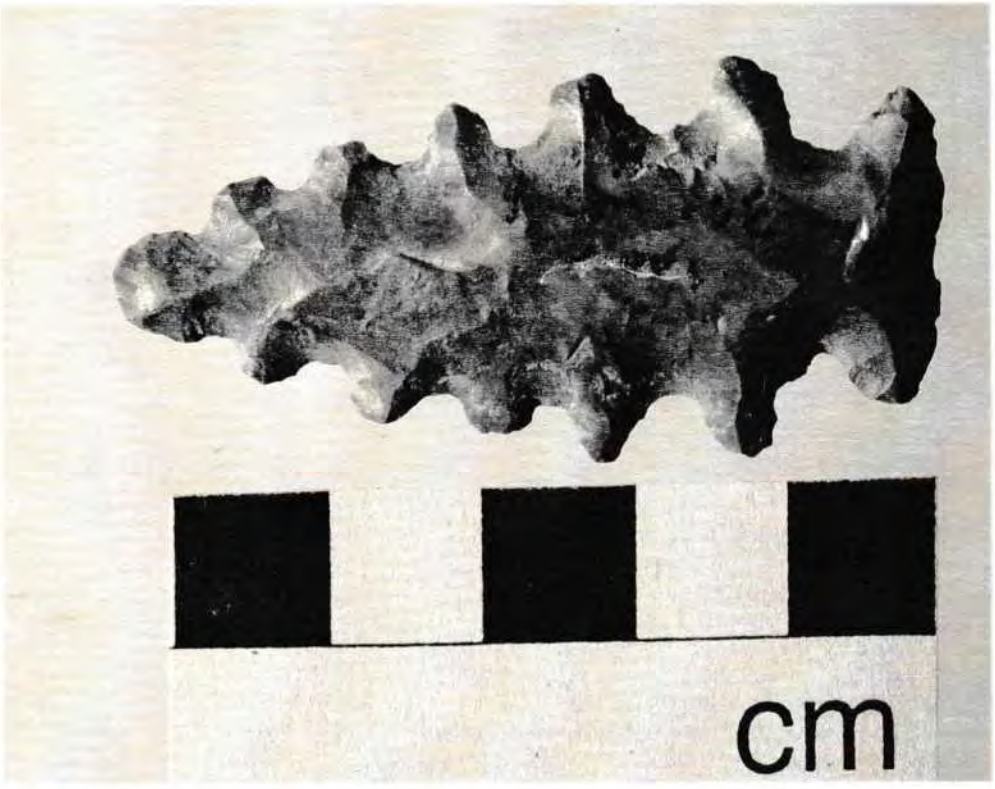

An unusual point, dubbed a "Christmas tree point" from the Macauley 9 Site (Mac 9).

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Contents

Annotated Bibliography of Books, Reports, and Articles Relating to Archeology At Schoharie Crossing State Historic Site, Towns of Glen and Florida, Montgomery County, New York

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Introduction

The New York State Historic Sites historical archeology program was established in 1969 with the purpose of managing and interpreting archeological resources at the State Historic Sites. Established by the New York State Historic Trust, the predecessor of the Division for Historic Preservation within the present New York State Office of Parks, Recreation and Historic Preservation, this historical archeology program was the first of its kind within New York State government. Significant archeological research at the State Historic Sites has been conducted, resulting in contributions that have received wide recognition, while many archeological resources at these sites which would otherwise have been lost and destroyed through necessary development have been located, protected, managed, and studied. Moreover, it has been possible to integrate the data from individual sites within a broad, statewide program of comparative research.

This bibliography lists both published and unpublished books, reports, and articles from 1830 through 2013 that contain references to or information about archeological remains or excavations at Schoharie Crossing State Historic Site, located on the south side of the Mohawk River at the mouth of Schoharie Creek (Figure 1). Newspaper articles are not included. There are 58 items in this bibliography, of which 11 are archeological excavation reports. Of these, 8 were written by the staff of the archeology unit of the Bureau of Historic Sites and represent fieldwork conducted by the unit. The relevant contents of each item are summarized in an abstract annotation and reflect only the content with no effort to alter, correct, or explain what was written. While many items in this bibliography are published, the unpublished items are on file with the Division for Historic Preservation offices at Peebles Island State Park in Waterford, New York.

Paul R. Huey
Scientist (Archeology), retired

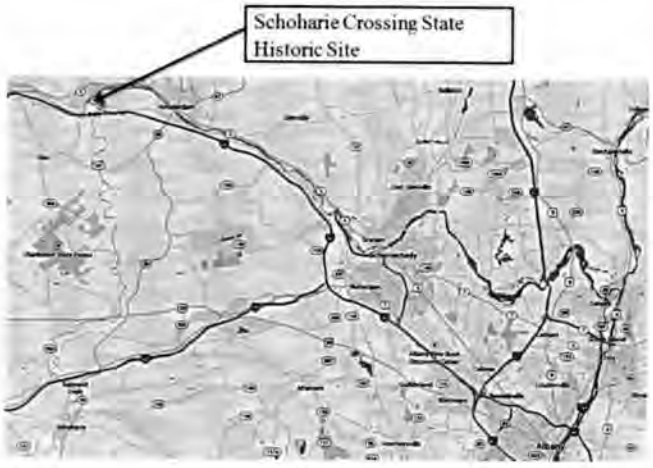

Figure 1. Location of Schoharie Crossing State Historic Site.

Alessio, Scott, and Connie Capozzola

1992 The 1992 Archaeological Excavation of the Caretaker's House at Schoharie Crossing State Historic Site, Montgomery County, New York. Waterford, New York. November. 34pp.

A proposed drainage system for water from the roof of the present house and a line of proposed tree plantings behind the house prompted an archeological survey in 1992. Numerous ceramics and other materials were recovered from five test units. Architectural material indicated sequences of construction, destruction, and occupation. No archeological features were discovered which would be adversely affected by the proposed work. The material that was found is consistent with the interpretation that the Putman house that originally stood there was used not only as a family dwelling but also as a commercial venture on the Erie Canal.

Allen, William, Jr.

1989 The Need for an Archaeological Study at Schoharie Crossing, edited by Janice M. Fontanella. Fort Hunter, New York. May 21pp.

Archeological research at the Enders house may complement the existing documentary evidence and aid in the appropriate restoration of the building. One question to be answered is the actual construction date of the house, presently believed to be in the early 19th century. Another question concerns the actual use of the building historically. Because it is close to the edge of the original Erie Canal near the East Guard Lock, it might have been a tavern before the canal was moved in 1845, although no documentary reference to such a use has been found. In 1845 John Enders wrote that he valued his property as "a place of business." The Enders family did not actually live in the house but rented it to others. In 1846 the house was occupied by Stephen V. Ohlen. Unfortunately, the exact locations of Fort Hunter, constructed in 1712, and of Queen Anne's Chapel, remain unknown. A deed dated 1846 suggests the Chapel was on the bank of Schoharie Creek to the west of the Enders house. According to a newspaper story in 1899, a flood in 1869 exposed some the Fort Hunter palisades in the field near the Enders house. The article suggested that it would be interesting if Rev. Jacob Henry Enders, owner of the house, had dug a trench across his land to expose some of the fort.

Anonymous

1989 Program Notes: Peebles Island. *Maple Leaflet...the Employee Newsletter, NYS Office of Parks, Recreation & Historic Preservation.* Volume 9, Number 2, Summer. 1p.[8].

Major excavations during the archeological field season were focused on areas near the Enders house in preparation for restoration work. A special "Archeology Day" at the site included informational literature and slide presentations for the public.

Cotter, John L.

1975 Current Research: Northeast. *The Society for Historical Archaeology Newsletter*. Volume 8, Number 4, December. 16pp. [621].

At the site of Lock 30 on the Erie Canal the original walls of the lock were uncovered, and the adjacent preconstruction ground levels were identified. The area will become a parking lot.

1978 Current Research: Northeast. *The Society for Historical Archaeology Newsletter*. Volume 11, Number 1, March. 12pp.[2536].

Because of plans to stabilize the Schoharie Aqueduct, built in 1841, the earth fill on top of the aqueduct forming the bed of the towpath will have to be removed. This earth fill is first being excavated carefully to record the stratified evidence of different towpath levels. The coarse gravel towpath was periodically levelled to remove ruts, and new fill was added.

1979 Current Research: Northeast. *The Society for Historical Archaeology Newsletter*. Volume 12, Number 2, June. 8pp.[1017].

The excavations at the Canal Store at Yankee Hill Lock in 1976 were followed in 1978 by excavations at the site of a house built between 1844 and 1847 by Garret V. Putman, who operated the Canal Store nearby. A stone wall and 19th-century artifacts were found. The house burned in the 1940s, and a new house stands on the site.

Cudmore, Bob

2013 *Hidden History of the Mohawk Valley: The Baseball Oracle, the Mohawk Encampment and More*. The History Press, Charleston, South Carolina. 184pp.

The great 2011 flood washed away the Schoharie Crossing State Historic Site parking lot, damaged the visitors' center, and destroyed interpretive signs. The flood uncovered remains of the colonial Fort Hunter under the parking lot, and archeological excavations revealed new information about this British fort, built in 1712. Whereas the historic site interpretation previously had focused on the history of the Erie Canal, the historic site has reopened with new signs and new exhibits also interpreting the archeological evidence of colonial Fort Hunter.

Feister, Lois

1989 Current Research: New York State. *Council for Northeast Historical Archaeology Newsletter*. Number 15, December. 2pp.[1516].

Work at the 19th-century Enders house to replace crumbling foundations was preceded by careful

archeological excavation. Unexpectedly, it was found that a part of the foundation dated from the 18th century. The original structure evidently stood near colonial Fort Hunter, and artifacts from the site include trade items as well as domestic debris from both the 18th and 19th centuries.

1990 Current Research: New York State. *Council for Northeast Historical Archaeology Newsletter*. Number 17. November. 2pp.[67].

Several weeks of archeological work continued the rescue excavation around the 18th-century foundation that is under a 19th-century structure. It was found that stabilization of the old foundation is feasible, and the excavations focused on sampling the 18th-century occupation levels.

1993 Current Research: New York State. *Council for Northeast Historical Archaeology Newsletter*. Number 25. July. 2pp.[56].

Mid 18th-century ground surface levels were identified during excavations.

1994a New York State: Current Research. *Council for Northeast Historical Archaeology Newsletter*. Number 29. October. 1p.[7].

Testing for a new fence line revealed evidence of a mid to late 19th-century canal store on the site.

1994b New York State Bureau of Historic Sites Summer Projects, 1994. New *York Archaeological Council Newsletter*. December. 2pp.[23].

Reprint of Feister 1994a.

1995 Johnson Hall Outbuildings, Landscape History, and Forgotten Features: Documentary and Archeological Research Conducted Between 1945 and 1991, Johnstown, Fulton County, New York. Waterford, New York. April. 486pp.

A brass spigot similar to one excavated at Johnson Hall was found at the Canal Store.

Fisher, Charles L.

1991 Report on the 1977 Archeological Investigations of the Schoharie Creek Aqueduct Towpath, Montgomery County, New York. Waterford, New York. May. 59pp.

Seven test trenches were excavated across the towpath on the Aqueduct. The soil stratigraphy reflects the routine maintenance of this feature. The earliest towpath surfaces were graveled, raked, graded, and frequently repaired. Records indicate, for example, that the towpath was improved by the deposition of gravel on its surface in 1878. The towpath was scraped and graveled in 1885, graveled again in 1886, and again scraped and graveled in 1890. Around 1900 a thick deposit was placed across the entire towpath, which filled the drainage ditch on the north side of the path and increased the width of the towpath by 3 ft. Artifacts found in the towpath include clay pipes, ceramics, a horseshoe, a brass suspender buckle with a patent date of 1855, and a bone knife handle, but a general lack of cultural material makes it difficult to date the various towpath deposits. Stratigraphic evidence indicates that the towpath continued to be used for other than towpath purposes after the Barge Canal was completed in 1918 (Figures 2 and 3).

1992 Catlinite and Red Slate Ornaments from the Enders House Site, Schoharie Crossing State Historic Site, Montgomery County, New York. Waterford, New York. March. 21pp., map, photo. Published in *The Bulletin: Journal of the New York State Archaeological Association*. Number 106, Fall 1993. 7pp.[17-23].

Foundations dating from the 18th-century were found under the Enders house and are from an earlier structure associated with the Mohawk occupa-

Figure 2. Excavations on the Schoharie Crossing Aqueduct towpath, 1977.

Figure 3. Horse shoe recovered during Schoharie Crossing Aqueduct towpath excavations in 1977.

tion. Evidence of red slate and catlinite ornaments was found, together with evidence of their manufacture at this site. The use of catlinite and red slate for ornaments by the Mohawk Indians, as symbolic of native meanings and cultural identity and a "backsliding" from Christian teachings, may have been necessary in the context of this site, in place of catlinite pipes which were clearly symbolic of a native ritual ceremony.

1994a Ceramics and Social Relations at an 18th-Century Mohawk Iroquois Site, Schoharie Crossing State Historic Site. Waterford, New York. March. 45pp.

The ceramics at an 18th-century house site at Fort Hunter were of European manufacture, but their use reflects the cultural ideas of Mohawk Iroquois occupants. The large proportion of hollow wares indicates the importance of ceramics for holding beverages and liquid-based foods. The small number of plates, the lack of matched sets of ceramics, the variety of handled vessels, and the presence of trenchers indicate that status differentiation was not a major function of ceramics at this site. Another indicator of decreased or less complex status ranking at this site is the low proportion of white-toned ceramics in contrast to earth-toned ceramics, as compared to other sites. The ceramics are also distinguished by a large proportion of porcelain that, however, represents the acquisition of individual pieces rather than sets.

1994b Conflict and Accommodation on the Colonial Frontier. December. 9pp. [Paper presented at the Annual Meetings of the Society for Historical Archaeology, Washington, D.C., January 7, 1995.]

Archeological excavations at the site of a Mohawk house at Fort Hunter produced evidence of resistance and negotiation by the Mohawks who lived there. While the ceramics found at the site are similar to types found at non-Indian sites, the larger proportion of hollow wares indicates that these ceramic vessels were incorporated into traditional foodways, in particular for holding beverages and liquid-based foods. Status differentiation was not a major function of ceramics at this site.

Fisher, Charles L.

1999 Book Review of *The Great Warpath* by David Starbuck. *Northeast Historical Archaeology*. Volume 27. 7pp.[137-143].

The critical role of Indians is not well represented in the archeological evidence, intensive study of which might identify Indian occupation even though many participated in the 18th-century consumer revolution. Many Indians who fought in the Revolution wore European clothes, but yet maintained other native customs and modified European goods into traditional items. A Mohawk Indian house site excavated at Fort Hunter was identified through documentary research, evidence of catlinite bead production, and the absence of flatware among the European ceramics.

2003 An Archeological Report on the 18th-Century Mohawk Iroquois Occupation of the Enders House Site at Schoharie Crossing State Historic Site, Montgomery County, New York. Waterford, New York. January. 139pp.

Excavations at the early 19th-century Enders house, located near the site of Fort Hunter that was built in 1711, revealed that this structure stood on the foundations of a much older structure built in the mid 18th century. Analysis of the artifacts, such as the catlinite ornaments, trade goods, and patterns of ceramic use, indicates that the early site occupants were Mohawk Iroquois. The Mohawk occupants of the Enders house site redefined themselves in the process of acquiring and using European material objects, some of which were employed in maintaining traditional beliefs and behaviors while other objects altered aspects of Iroquois society.

Fisher, Charles L., and Paul R. Huey

1994 Current Research and Future Directions in Archeology at the Bureau of Historic Sites. Waterford, New York. April. 24pp.

Sometimes the discovery of evidence of Native American occupation at an historic site comes as a surprise. Excavations prior to restoration of the Enders house revealed an 18th-century cellar and evidence of Mohawk Iroquois occupation, suggesting the use of European goods by the Indians in a non-European fashion.

1996 *Current Research and Future Directions in Archaeology at the Bureau of Historic Sites. A Northeastern Millennium: History and Archaeology for Robert E. Funk*, edited by Christopher Lindner and Edward V. Curtin. *Journal of Middle Atlantic Archaeology*, Volume 12. 15pp.[163177]. Publication of Fisher and Huey 1994.

Florance, Charles A.

1994 Archaeological Testing for the Maintenance Building Fence Project, Schoharie Crossing State Historic Site. Waterford, New York. June. 16pp.

Three test units produced evidence of the 19th-century canal store that once stood in the area until a fire in 1916. The deepest stratum consists of spoil deposit from the "Enlarged Erie Canal" excavation in 1841. Bones, clay pipes, ceramics, and other artifacts from the canal period were found.

Gade, Susan

2012 Phase IB Archaeological Investigations of a Proposed New Parking Lot at Schoharie Crossing State Historic Site, Town of Florida, Montgomery County, New York. Landmark Archaeology, Altamont, New York. November. 19pp.

A total of 30 shovel tests was excavated to a depth of 40 in below ground surface in a grid pattern at the proposed parking lot location northwest of the visitors' center. This work produced 21 prehistoric and 27 historic period artifacts. The prehistoric artifacts include a broken flint scraper, a broken cobble stone with ground edge, and flakes. The historic artifacts include a possible gunflint and 19th- and 20th-century glass, ceramics, nails, clay pipes, and an iron bolt.

2013 Phase IB Archaeological Investigations of the Redesigned New Parking Lot at Schoharie Crossing State Historic Site, Town of Florida, Montgomery County, New York. Landmark Archaeology, Altamont, New York. May. 10pp.

Testing was conducted for a parking lot location west of the area tested in 2012. On a grid 20 shovel tests were excavated at intervals of 25 ft. Only seven prehistoric artifacts, all flakes, and nine historic period artifacts were found. The historic period artifacts include small fragments of brick, a blue transfer-printed ceramic sherd, and bottle glass fragments in the plow zone.

Grumet, Robert S.

1992 *Historic Contact: Early Relations Between Indians and Colonists in Northeastern North America, 1524-1783*. Final Draft. Cultural Resources Planning Branch, Archeological Assistance Division, MidAtlantic Region, National Park Service, Philadelphia. 435pp.

The Enders house at Fort Hunter is one of 54 major or intensively tested archeological sites located in Mohawk country dating to the historic contact period.

1995 *Historic Contact: Indian People and Colonists in Today's Northeastern United States in the Sixteenth Through Eighteenth Centuries*. University of Oklahoma Press, Norman and London. 529pp.

Fort Hunter is one of 27 sites with archeological

evidence of Anglo-Indian contact, dating from 1711 to 1781. At the Enders house site, archeological deposits have been found that might have been associated with the home of John Deserontyon, the Mohawk war leader. The evidence indicates a higher standard of living than most of his non-Indian neighbors in the years after 1763.

Harrington, Faith

1989a Current Research: Northeast. *The Society for Historical Archaeology Newsletter*. Volume 22, Number 3, October. 4pp.[1215].

Excavations at the Enders house, located adjacent to the Erie Canal and built ca. 1806, produced evidence of mid 18th-century Mohawk Indian activity and probable occupation of a previous structure on the site. In addition to 18th-century ceramics, there were wampum beads, glass seed beads, and unfinished red catlinite beads. Special interpretive programs, including a tour of the excavations, were presented to local school groups.

1989b Current Research: Northeast. *The Society for Historical Archaeology Newsletter*. Volume 22, Number 4, December. 2pp.[1516].

The evidence from archeology suggests that part of the foundation under the Enders house, built about 1806, was built in the mid 18th century. In addition to 19th-century material from the period of the adjacent Erie Canal, 18th-century artifacts from the site include several wampum beads, glass seed beads, and unfinished catlinite beads. Local school groups were given a tour of the excavations as well as a slide show on archeology.

Hartgen Archeological Associates, Inc.

2015 Inventory King William's and King George's Wars Battlefields: 1687-1689 and 1744 to 1748. Draft Historical Documentation Report. Rensselaer, New York. 334pp.

After the flood waters of Hurricane Irene and Tropical Storm Lee in 2012 exposed a portion of Fort Hunter, work to preserve the remaining elements of the fort has included documentation and excavation at the site. The material from the site and the design of the fort will provide an interesting comparison with Fort Clinton at Saratoga.

Hartley, Robert M.

1905 Annual Report. *Transactions: Montgomery County Historical Society For the Year Ending February 8th, 1905*. Evening Recorder Print, Amsterdam, New York. 3pp.[50-52].

Indian graves were discovered near Fort Hunter in April 1904 during repairs to the Erie Canal. Unfortunately, most of the evidence was destroyed and carted away to be dumped, but several more or less complete skeletons, pottery fragments, and a lead or pewter pipe were rescued. In one grave there was a "hat full" of wampum beads which were shoveled up and lost, of which only a few were saved.

Huey, Lois

2012 New York State: Current Research. *Council for Northeast Historical Archaeology Newsletter*. Number 81. March. 2pp.[6-7].

Flood waters of Hurricane Irene on August 28, 2011, washed away the visitors' center parking lot, exposing a series of 18th-century foundations. Small segments of the walls were discovered previously in 1986 prior to construction of the parking lot, and analysis of the artifacts suggested then that the walls were part of the stone church that was built in 1741. Excavations to remove the flood deposits and debris, however, followed by limited excavations to connect some of the walls and recover a sample of artifacts, revealed that the structure was not the 1741 stone church but was more likely the stone foundation for a 24 ft sq blockhouse and curtain wall of Fort Hunter, built in 1712. Artifacts include clay pipes, coins, musket balls, a Jew's harp, a knee buckle, and red slate and glass beads. A destruction layer included no creamware, suggesting a pre-1760 date for occupation. Above this layer other stone walls indicate there was a later structure or structures on the site. There is also a 19th-century well.

Hutchinson, Sandra J., and Dennis L. Wentworth

1978 Archaeological Test Excavations at Canal Store, Schoharie Crossing State Historic Site, Located in the Town of Florida, Montgomery County, New York. Waterford, New York. January. 79pp.

Excavations were conducted in 1976 around the Yankee Hill Canal Store to record the stratigraphy

adjacent to the foundation walls (Figure 4). Restoration work required the rebuilding of the south foundation wall and the installation of drains along the bases of the south and west walls. The stratigraphy adjacent to these walls indicates that the walls were surrounded by subsequent fill deposits after their construction. There were no distinct wall construction trenches, and the foundations were apparently built before or during the construction of the nearby canal lock. A repair trench was found that had been dug to facilitate reinforcement of the foundation at the southeast corner. Artifacts in the repair trench included a miniature ironstone pitcher. Whiteware constitutes 50 % of the ceramic sample. Artifacts representing shelter and furnishings were 61% of the total 702 artifacts. A brass spigot that was found dates probably from the 18th century.

1981 Archaeological Test Excavations at the Canal Store, Schoharie Crossing State Historic Site, Located in the Town of Florida, Montgomery County, New York. Waterford, New York. June. 17pp. [Revision of 1978 report for publication in *The Bulletin and Journal of Archaeology for New York State* by the New York State Archeological Association, Number 82, Fall 1981. 13pp.(46-58)]. Publication of Hutchinson and Wentworth 1978.

Jordan, Kurt A.

2002 The Archaeology of the Iroquois Restoration: Settlement, Housing, and Economy at a Dispersed Seneca Community, ca. A.D. 1715-1754. Ph.D. dissertation, Graduate School of Arts and Sciences, Columbia University. 627pp.

The sites at Fort Hunter and many other Iroquoian sites of the 18th century contain a number of artifacts made of red-colored stone.

2008 *The Seneca Restoration, 1715-1754: An Iroquois Local Political Economy*. University Press of Florida, Gainesville. 433pp.

Figure 4. Schoharie Crossing canal store excavations, 1976.

Other than the excavations at the Townley-Read Site, no excavations in Iroquois sites established during the first quarter of the 18th century have been conducted. Although the sites at Fort Hunter were occupied beginning around 1711, the excavations at the Enders house revealed remains post-dating 1750. The Enders house site and many other Iroquois sites of the 18th century contain artifacts made of red-colored stone.

2009 Regional Diversity and Colonialism in Eighteenth-Century Iroquoia. *Iroquoian Archaeology and Analytic Scale*, edited by Laurie E. Miroff and Timothy D. Knapp. The University of Tennessee Press, Knoxville. 16pp.[216-230].

The Mohawk region has provided evidence of a wide variety of Iroquoian house forms and the construction of true European-style houses by the Iroquois at an early date. Stone foundations of Iroquois houses have been uncovered at Indian Castle (a house occupied from 1754 to 1777) and at Fort Hunter (a house built about 1760). Seneca houses, at this time, were evidently mostly or all of longhouse form, such as the short longhouse uncovered at the Townley-Read Site (1715 to 1754). Houses of European form, but not with stone foundations, apparently began to appear in Seneca villages in the 1760s. The lower stratum at the Enders house from about 1750 to 1760 at Fort Hunter contained faunal remains of which 57.2 % were European domesticates, whereas the percentage at the Seneca Townley-Read Site was only 2.6 %. Of the mammalian remains at the Enders house, 4.6 % were of beaver, compared to 0.4 percent at the Indian Castle Site and 3.1 % at the Townley-Read Site, levels which are much lower than at the 17th-century Mohawk Jackson-Everson Site.

Kuhn, Robert D., and Robert E. Funk

2000 Boning Up on the Mohawk: An Overview of Mohawk Faunal Assemblages and Subsistence Patterns. *Archaeology of Eastern North America*. Volume 28. 33pp.[29-62].

Faunal samples from Fort Hunter and Indian Castle are the two assemblages from colonial period Mohawk sites. At Fort Hunter there was a much higher percentage of beaver than at Indian Castle. Sturgeon and white perch remains were recovered in the excavations at Fort Hunter. Sturgeon were available from the Hudson River but not the Mohawk River, and white perch remains have been found at no other Mohawk site. White perch probably did not occur in the Mohawk River in this period either. Deer remained an important source of meat in this period, but it was no longer predominant. From Indian Castle there are fewer native species represented in the faunal samples than at Fort Hunter. The occupants of the house site at Fort Hunter had a greater proportion of porcelain ceramics and relied more heavily, however, on European domesticates than the occupants of the house site at Indian Castle. The richness, evenness, and diversity of the native faunal assemblage from Fort Hunter are dramatically greater than the faunal assemblage from Indian Castle. This pattern may represent increasing social and economic disparities between Mohawk households or communities.

Lenig, Wayne

1975 An Archaeological Survey of Areas in the Schoharie Crossing State Park, Fort Hunter, New York, Which Will be Affected by the Construction of a Bicycle Trail and Parking Facilities. July. 13pp.

An archeological survey was conducted in areas proposed for a bicycle trail along the canal towpath and parking facilities. The proposed parking lot is along Main Street above Lock #30 of the 1862 enlarged canal. It is between the former firehouse and the existing Post Office. Maps indicate that the area includes the western third of the canal lock. Testing revealed that both walls of the center mall are intact, but the south channel wall could not be located. Stone rubble suggests that the wall was demolished in the 1950s. The north channel wall was probably north of the proposed parking area. Only one area was located along the short stretch of 1825 towpath that had not been cultivated in more recent times. A trench 2 ft wide and 11 ft long was excavated westward from the property stake marking the boundary of school district land and the Historic Site property. No evidence of paving material and no artifacts were found. A 1-ft-wide trench for a length of 13 ft was excavated across the towpath of the 1862 improved canal. A fine-textured gravel fill layer represents a surfacing material, at a depth of 3 to 14 in.

Mancall, Peter C., and James Hart Merrell

2000 *American Encounters: Natives and Newcomers from European Contact to Indian Removal, 1500-1850*. Psychology Press, Hove, East Sussex, England. 594pp.

Archeological evidence from the site of the Indians' chapel at Fort Hunter includes teapots, teacups, and saucers, indicating that the tea ceremony was practiced.

McDowell-Loudan, Ellie

2013 "Reflections on the Fall Program." *NYAC Newsletter*. Fall. 1p.[2].

The example at Schoharie Crossing makes clear the tumultuous extent of impacts from Hurricane Irene. The damage by the water beneath the parking lot pavement recalls the warnings by Marian White and others when portions of Seneca burial grounds were left beneath the pavement of Route 17. They recognized that paving does not protect what lays beneath it.

Moody, Kevin

1990a Who's Minding the Store?: Women as Breadwinners on the Erie Canal. 11pp. [Paper presented on January 12, 1990, at the Society for Historical Archaeology Conference, Tucson, Arizona.]

Excavations prompted by the proposed installation of sewer and water systems were conducted during the 1970s at the site of the Garret Putnam farm and canal grocery. This work produced new evidence that women as well as men were directly involved in the canal economy. The women's role as wage-earners was infrequently recorded, apparently because their economic roles were regarded as extensions of their domestic tasks. A total of 1,136 artifacts was retrieved, of which 40 % could be classified as dietary and 42 % as architectural. Eight distinct ceramic types are represented by 155 ceramic sherds. Whiteware makes up 64 % of the collection, while ironstone and other "institution porcelain" constitute another 27 % of the assemblage. The remaining 9 % consists of coarse stonewares and earthenwares. Aside from the limited number of ceramic types in the collection, there is a complete lack of consistency in decorative pattern or surface treatment, suggesting that few if any of the identifiable vessels came from the same set. The ratio of hollow wares to flat wares is more than 6:1, and 26 of 33 hollow vessels that could be identified specifically were soup plates or table bowls. The Putnam ceramics can be classified as a collection of bowls and certainly would not appear to be a collection one would associate with a domestic setting.

1990b Schoharie Crossing State Historic Site: Jacob Enders, Jr. House Site Survey. Waterford, N.Y. June. 12pp.

In 1987, portions of an 18th-century foundation were exposed during an archeological survey of the parking lot area proposed for the visitors' center. Associated with mid 18th-century artifacts, this feature demonstrated that not all evidence of the colonial occupation of the site had been destroyed by later development. In 1989 a survey at the Jacob Enders, Jr., house revealed that it stood on a foundation built in two stages (Figure 5). The western portion was originally a 16 ft by 18 ft cellar built about 1760, while the eastern section was built apparently between 1840 and 1850. Furthermore, the archeological evidence indicates occupation of the site from about 1750 to 1780 followed by abandonment of the site and then reoccupation after about 1850. Previous documentary research had indicated the house was built probably between 1795 and 1805 and had since been continuously occupied. In fact, the 18th-century construction had intruded through several even earlier 18th-century strata. Profile drawings show that the 18th-century cellar floor level inside the structure was very nearly level with the original exterior ground surface. Soil was subsequently built up around the exterior of the building, forming a mound. The structure was probably a private dwelling and would have been within 100 ft of Queen Anne's Chapel. It must have been within or adjacent to the 1755 defensive palisade and was probably a Mohawk Indian house. The artifacts from the site include both Mohawk pottery and European ceramics, kettle fragments, air twist wine glass stems, wine bottle fragments, buttons, buckles, a tinkler cone, more than 200 glass beads, several shell wampum beads, and a variety of red slate ornaments.

Figure 5. Enders house excavations, 1990.

Moody, Kevin, and Charles L. Fisher

1987 Archaeological Evidence of the Colonial Occupation at Schoharie Crossing State Historic Site, Montgomery County, New York. Waterford, N.Y. December. 42pp. [Published in *The Bulletin: Journal of the New York State Archaeological Association*. Number 99, Fall 1989. 13pp.(113).]

Historic features and 18th-century artifacts discovered during testing of the proposed parking lot reflect the activities that occurred at this location, which is within the historically documented church lot. It was possible to insure that the stone walls were not destroyed but remain buried under the parking lot. The artifacts that were found include the handle of a folding knife, a Jew's harp, a George II halfpenny, clay pipes, and ceramics. The archeological remains initiated a re-evaluation of the historical documents, and these features are perhaps from the church that was built in 1741. The artifacts, however, are similar to those that are found at domestic sites of the 18th century, except for a lack of bottle glass and window glass in this collection. The evidence here and at other colonial church sites suggests that the notion of structures as the scenes of single, specific functions is incorrect and that a wide variety of activities took place within these structures (Figure 6).

Parker, Arthur C.

1922 *The Archeological History of New York*. Part 2. The University of the State of New York, Albany. 272pp.[471743].

An Indian burial site in gravel was found about a half mile east of Fort Hunter. On the west side of the Schoharie Creek are Indian camp sites at the Blue Banks.

Regents of the University of the State of New York

1872 *Twenty-Fourth Annual Report on the New York State Museum of Natural History*. Transmitted to the Legislature April 18, 1871. The Argus Company, Printers, Albany. 233pp. + illus.

During 1870 Isaac De Forest of Fort Hunter, New York, donated bullets, buttons, and other relics from Fort Hunter to the Department of Archaeology and Ethnology of the New York State Museum. Other relics collected at Fort Hunter were also donated by J.H. Kasten of Fort Hunter.

Figure 6. Fragments of an unusual R TIP PET pipe bowl excavated in 1987 during excavations for the visitors' center parking lot.

Reid, W. Max

1902 *The Mohawk Valley: Its Legends and Its History*. G.P. Putnam's Sons, The Knickerbocker Press, New York and London. 463pp.+illus.

A flood in 1869 revealed two lines of palisades, one at an angle to the other. The evidence suggests that one was from the British fort, the other from the Indian fort or village. Each palisade line consisted of a double line of stakes each about 10 in in diameter. It is hoped the owner of the lot, Rev. J.H. Enders, will permit excavation of a trench to uncover the Indian stockade once again. A visit to Fort Hunter in 1897 enabled the author to determine the location of the chapel, but remains of a stockade at a greater distance from the chapel than documents would place it creates an unsolved mystery.

1906 *The Story of Old Fort Johnson*. G.P. Putnam's Sons, The Knickerbocker Press, New York and London. 251pp.+illus.

About a mile of the Erie Canal was badly damaged by floods and ice during the winter of 1903-1904. Nearly a mile east of the village of Fort Hunter, work to repair the canal by thousands of men with hundreds of wagons uncovered a number of Indian burials. As many as six skeletons were uncovered, of which three were nearly complete. These were disregarded by the laborers; other individuals with the assistance of the foreman managed to retrieve one skeleton and about 300 beads from the

remains of a wampum necklace around the neck of the skeleton estimated to contain about 2,000 beads. Bones were also collected by N. Burton Alter of Fort Hunter. A third, more complete skeleton was rescued by the author, and with it was part of an Indian pottery jar of large size.

Rick, Anne Meacham

1991 Faunal Remains from the Enders House: An Historic Mohawk Dwelling. Zooarchaeological Identification Centre, National Museum of Natural Sciences, Ottawa, Ontario. June. 14pp.

The faunal remains were recovered in 1989 and 1990. Of 4,062 fragments from pre-1760 strata, 294 (7.2 %) were identified. The smaller post-1760 sample of 1,605 fragments yielded 180 identifiable pieces (11.2 %). Remains of small wild animals include rabbit/hare, woodchuck, squirrel, and porcupine, mostly teeth. A few muskrat, fox, raccoon, and marten remains represent fur-bearing animals, but beaver and bear are the most common among the faunal sample. Most of the dog remains are from the early period, while domestic cat remains are present from both early and late strata. Deer is the most common wild animal at the Enders house, while pigs dominate the fauna. Cow is second in abundance, while sheep/goats remains are much less common. A duck and a chicken bone were found in each of the two periods. Turtle fragments are in remains from both periods, but only four fish bones (white perch) were found. The post-1760 sample contained three sturgeon plates.

1995 Animal Remains from 18th Century Layers at Johnson Hall, New York. Zooarchaeological Identification Centre, National Museum of Natural Sciences Ottawa, Ontario. May. 21pp. + Appendix.

The faunal remains from the 18th-century levels at Johnson Hall do not contain a variety of wild food animals, unlike the much more diverse sample from the Mohawk Indian house site at the Enders house at Schoharie Crossing State Historic Site. The Enders site fauna included many wild animals such as rabbit, woodchuck, gray squirrel, beaver, muskrat, porcupine, raccoon, fox, marten, bear, and deer. The geographical and chronological similarity with the Johnson Hall sample therefore suggests the great social distance between the Mohawk Indian farmers living at Fort Hunter and the Johnson family living on the grand estate at Johnson Hall.

Roets, Michael G.

2011a Archaeology Unit Presentation for Schoharie Crossing State Historic Site, May 24, 2011. May. 8pp.

Excavations in 1986 prior to the construction of a parking lot for the visitors' center in the former Quiri house included five 2 ft by 2 ft test units in the proposed location. These revealed stone walls and 18th-century artifacts. The mean ceramic date for the 114 sherds that were recovered was found to be 1758. The site was covered under the parking lot for preservation. In 1989 and 1990, prior to restoration and foundation repairs of the former Enders house nearby, excavations around the house revealed evidence that the western portion of the house was built upon stone walls dating from perhaps about 1760. The stem bore diameters of 623 measured pipe stems that were recovered suggest an occupation between 1710 and 1750. Several items, such as catlinite ornaments, clearly indicated that the site was occupied by Mohawk Iroquois (Figures 7, 8, 9 and 10).

2011b Archaeological Evidence of Life at the 18th Century Fort Hunter and Lower Mohawk Castle at Schoharie Crossing State Historic Site. October. 13 pp. [Paper presented October 16, 2011, at the 2011 Western Frontier Symposium, Fulton-Montgomery Community College, Johnstown, New York.]

Excavations in 1986 near the former Quiri house revealed 18th-century artifacts and stone walls at the proposed parking lot location. It was concluded the walls were remains of the church built in 1741, since the walls were discovered within the church lot described in a deed dated 1846. Three years later excavations prior to foundation repairs for restoration of a nearby 19th-century house revealed that one portion of the foundation dated to the 18th century. The excavation yielded 1,220 white clay pipe fragments, and measurements of the stem bore sizes indicated an occupation of the earlier house between 1710 and 1750. A triangular arrow point cut from brass and ornaments made from catlinite and red slate indicate the occupants

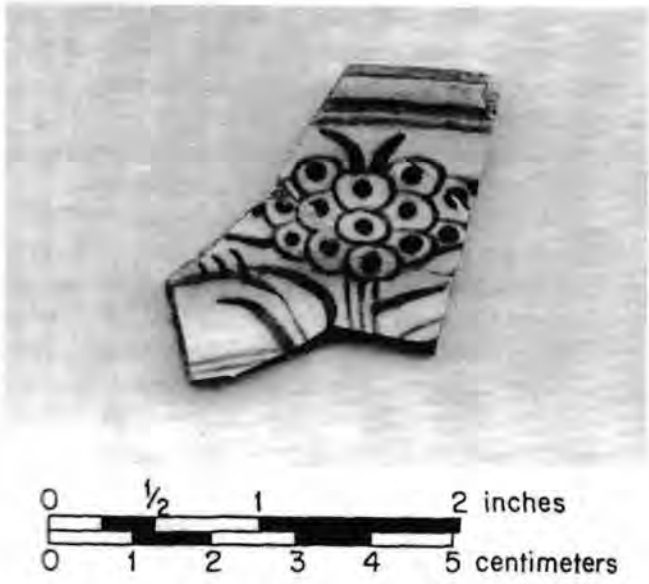

Figure 7. Delft rim sherd decorated in the "mimosa" pattern, excavated in 2011 (A.SX.2011.3.894).

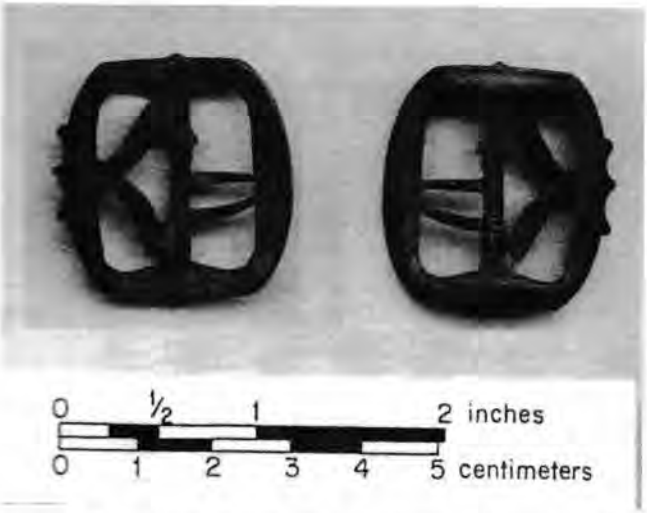

Figure 8. Tombac metal knee buckle, front and back, excavated in 2011 (A.SX.2011.3.896). The buckle has a maker's mark, HM, which also could be WH.

of the earlier house on the site were Mohawk Iroquois. On August 28, 2011, floodwaters of Hurricane Irene damaged many State Parks and State Historic Sites. Some of the worst damage occurred at Guy Park and at Schoharie Crossing, where floodwater washed out the Quiri house parking lot exposing walls which possibly included remains of the 1741 church. Two corners were exposed, and there are at least three other walls that may or may not be connected. More than one structure may be represented. A stone well also was discovered as gravel flood deposits were carefully removed from the site. Unfortunately, the flood water also scoured away archeological deposits and artifacts.

2012 Eighteenth-Century Fort Hunter Remains Exposed at Schoharie Crossing State Historic Site, Montgomery County: Current Research – Northeast, New York. *The Society for Historical Archaeology Newsletter*. Volume 45, Number 1, Spring. 2pp.[2728].

Hurricane Irene on August 28, 2011, washed away the visitors' center parking lot and exposed a series of 18th-century foundations. While the site gained its historic designation for its Erie Canal features, the property also is significant as the location of the Lower Mohawk castle and the British Fort Hunter. The 150 ft sq fort was built in 1712 of logs, with a blockhouse at each corner and a chapel in the center. There was construction of a new stone church in 1741 and new fortifications in the 1740s and again in 1755. Excavations prior to construction of the parking lot revealed foundations that were believed to be from the stone church of 1741 and we left protected under the pavement of the parking lot. The floodwaters uncovered these foundations but washed away archeological deposits and uncovered foundations in a much larger area. Careful removal of the flood-deposited asphalt, river cobbles, gravel, and sand revealed numerous 18th-century artifacts, a well, and other walls. Excavations were undertaken to find connections between the walls and to recover a sample of associated artifacts. It was determined that the walls exposed by the flood were not from the 1741 church but more likely foundations for a 24 ft sq blockhouse and curtain wall as shown on 1711 plans. The absence of creamware suggests the building was not in use after 1760. Other walls, and the well, were determined to date from the 19th century. Artifacts from the site include clay pipes, a silver utensil handle, a knee buckle, coins, wine bottle glass, musket balls, a Jew's harp, and a red slate bead.

Rothschild, Nan A.
2003 *Colonial Encounters in a Native American Landscape: The Spanish and Dutch in North America*. Smithsonian Books, Washington and London. 287pp.

The faunal remains at Mohawk sites from the 17th and 18th centuries show that the appearance of domesticated animals came relatively late to the Mohawks. When remains of domesticated animals appear in archeological deposits, pig is the most frequently occurring. Only at the Enders house, however, are remains of domesticated animals predominant both before and after 1760. Except at the Enders house and Indian Castle sites, both from the 18th century, deer was consistently the most important species.

Figure 9. Gun hammer excavated in 2011 (A.SX3.2011.894).

Figure 10. Jew's harp excavated in 2011 (A.SX3.2011.840).

Shannon, Timothy J.
1996 Dressing for Success on the Mohawk Frontier: Hendrick, William Johnson, and the Indian Fashion. *The William and Mary Quarterly*. Third Series, Volume LIII, Number 1, January. 30pp.[13-42].

Tea drinking, a consumer activity expressing gentility, became an agent of assimilation between Europeans and Indians in the Mohawk Valley. There is archeological evidence of the tea ceremony at the site of the Indians' chapel at Fort Hunter consisting of teapots, teacups, and saucers.

Shaver, Peter D., compiler
1993 *The National Register of Historic Places in New York State*. Rizzoli International Publications, Inc., New York. 248pp.

At Schoharie Crossing are archeological remains of canal buildings and structures.

Snow, Dean R.
1995 *Mohawk Valley Archaeology: The Sites*. The Institute for Archaeological Studies, University at Albany,SUNY, Albany. 521pp.

The archeological remains of the Mohawk Indian components of Schoharie Crossing State Historic Site have been investigated and deserve interpretation equal to what has been invested in canal history. Archeological investigation of the English fort site remains to be done, and the site is a very important archeological resource for the region. Excavations already conducted have produced important data relevant to Mohawk history and archeology.

Starbuck, David
1995 Current Research: Northeast. *The Society for Historical Archaeology Newsletter*. Volume 28, Number 1, March. 3pp.[25-27].

Archeological excavations along a proposed fence line route revealed evidence of a mid to late 19th-century canal store site.

Vandewater, R.J.
1830 *The Tourist, or Pocket Manual for Travellers on the Hudson River, the Western Canal, and Stage Road;Comprising Also the Routes to Lebanon, Ballston, and Saratoga Springs*. Printed by J. & J. Harper, No. 82 Cliff-street, New York. 58pp.+map.

The ruins of Fort Hunter are visible near the mouth of Schoharie Creek, near which is Queen Anne's Chapel.

INDEX

The Archaeology of Pigpens

Andrea Zlotucha Kozub, Public Archaeology Facility, Binghamton University

Pigpens were an integral part of the historic farm landscape and a frequent fixture on domestic house lots. Despite their near ubiquity in these contexts, the location of the pigpen may not always be apparent with standard unit excavation. This paper outlines several strategies for identifying subsurface traces of pigpens and discusses the interpretive values of pens identified within the domestic spaces of three farmsteads in upstate New York.

Introduction

Over the past few decades, archaeologists have devoted substantial efforts to the examination and interpretation of farmsteads (e.g., Hart and Fisher 2000). Researchers not only focus on those archaeological features common to most domestic sites (shaft features and sheet midden), but also incorporate barns, outbuildings, fields, walls, and roads into the analytical unit of the "farmstead" (Adams 1990; Peña 2000). The archaeological signatures of many farmstead elements are ephemeral (Peña 2000:41) and could be overlooked in favor of those features still visible on the landscape. One ephemeral feature is the animal pen, for although livestock was an integral part of nineteenth- century farming experience, the locations of pens situated outside the barn may not be visible as an element of the built environment. Recent research by the Public Archaeology Facility (PAF) at Binghamton University has explored one such feature, pigpens, and gleaned substantial interpretive information from analysis. The following discussion presents three examples of archaeological pigpens from sites in upstate New York and how these features were used to interpret site-specific issues of landscape usage, ethnicity, and class.

Pigs were ubiquitous on nineteenth-century family farms. They were livestock that did not require pasture, could be fed with food scraps, and "everything but the squeal" could be eaten or preserved for the following year. Prior to the nineteenth century, pigs were often allowed to roam freely but their physical bulk and rooting behaviors made them a destructive nuisance. By the early 1800s, farmers began to adopt the practice of penning their swine. Commercial pork farmers were advised to construct piggeries well away from the dwelling, leaving a smaller pen nearby for the housing of one or two hogs to be fattened for

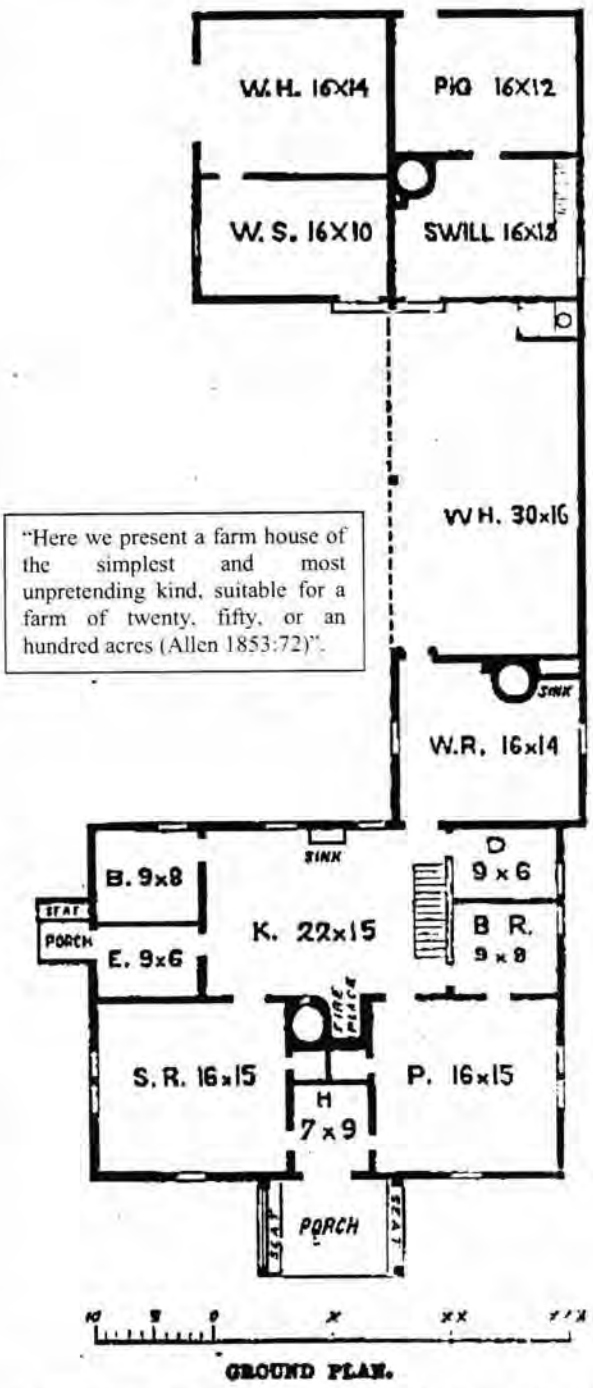

Figure 1. Suggested layout for nineteenth-century farmhouse and outbuildings (Allen 1853).

household consumption (Allen 1853). Smaller-scale farmers would have also kept a family hog pen within an easy distance of the kitchen, varying the size, configuration, and location of the pens to fit their needs. Historic descriptions of small sties are rare, but most would have shelter for the animal(s) and stout walls for the pen (Youatt and Sidney 1860). Some may have been incorporated into a network of semi-detached outbuildings (Figure 1, after Allen 1853:76) while others may have been freestanding. Unlike barns or dwellings which may continue to be used after farming has been discontinued on a property, pigpens are likely to be dismantled or simply abandoned. After the passage of time, these integral elements of the nineteenth-century farm are likely to be invisible. The archaeological signatures of pigpens may be difficult to discern at first glance since they may appear unrelated to farming activities and therefore of little import. As the following cases demonstrate, a suite of archaeological characteristics may be necessary to identify the presence of a pigpen on a site.

The E. Cornell Site

The Public Archaeology Facility excavated the E. Cornell Site (SUBi-2189), located on the edge of Cornell University's campus in Ithaca (Tompkins County), in 2001 and 2002 under the direction of Laurie Miroff (2002) and the author (Zlotucha Kozub 2003). The site was situated in a wooded lot which was formerly a house lot owned by Ezra Cornell and his descendants. The chief occupants were the Carneys, Irish immigrants who worked on the Cornell farm from 1860-1883. The house was occupied after their departure by a few short-term tenants, and was demolished around 1900. No structural features were discovered during extensive excavations but the house location was established with mapping and confirmed by the clustering of architectural artifacts.

The archaeological deposits consisted of a generalized sheet midden created by everyday refuse disposal in the yard area. There was also a well-defined, linear strip of rich organic midden in the southeastern corner of the site. The northwestern side of this feature abutted the mapped location of the house and south of the rear façade. The organic midden was capped with a layer of clay fill that was not present in units with the sheet midden, indicating that the midden was specifically targeted for burial. While artifact deposition was high in the vicinity of the house, the organic midden yielded a particularly dense assortment of domestic refuse. The assemblage included animal bones, food related artifacts, and berry seeds (recovered from flotation samples), and it was initially thought that the dark soil developed through the deposition of food remains. Spatial analysis of artifact densities showed, however, that the southern end of the organic midden zone was markedly less dense. In particular, the southeastern-most units contained the dark, rich soil but comparably few faunal remains or even food-related ceramics. It was clear that the organic midden did not develop solely from intensive backyard waste disposal. Analysis of botanical specimens produced similar results, with fruit seeds clustering towards the northern end and weed seeds dominating the samples derived from the southern end. While the northern organic soils could have developed from intensive disposal of kitchen scraps, it seemed clear that another agent was responsible for darkening the soil at the southeastern corner of the site. In the face of these data it was plausible that the "organic midden" was actually an animal pen: it was clearly bounded (though no post molds or walls were encountered); the soils were likely enriched by manure, rooting, trampling, and kitchen scraps and this rich soil extended beyond the reach of everyday midden disposal to the fringes of the lot where the rocks from agricultural clearing were piled and weeds proliferated.

Interpreting this space as a pigpen was the logical next step since these animals could be fed on kitchen scraps and were frequently kept for personal use by farmers and householders alike. The Cornell family's farm account book (Cornell 1859-71) showed that Christopher Carney had his own farm which, given the size of small lot, probably consisted of a garden, as well as hogs and chickens. Evidence to show that the Carneys kept pigs was found in a small, shallow pit located north of the house. The pit contained the intact heads and feet of two pigs that were buried as unwanted butchering waste.

The pigpen was placed very close to the house (Figure 2) and was clearly used as a dump for all sorts of domestic trash. This was not the only location available to the Carneys, as the northern yard was open and clear. Choosing to keep the sty adjacent to the house may have been a decision influenced by their ethnic heritage. In Ireland, the family pig was viewed as a financial investment and was dubbed "the man who pays the rent" (Seymour 2001:252). The poorest peasants often protected their investments by housing the pig inside the cottage at night (Rogerson and Tuxford 1866:205). Even when the construction of a byre or sty was possible, many Irish farmers placed them directly adjacent to the dwelling to create a tightly defined home space (Mulrooney 2002:165). This is in contrast to the several templates given by Allen (1853) for American farm layouts, all of which depicted the household sty situated on the periphery of the domestic space (see Figure 1). The Carney's pigpen was eventually abandoned, perhaps in deference to American practices.

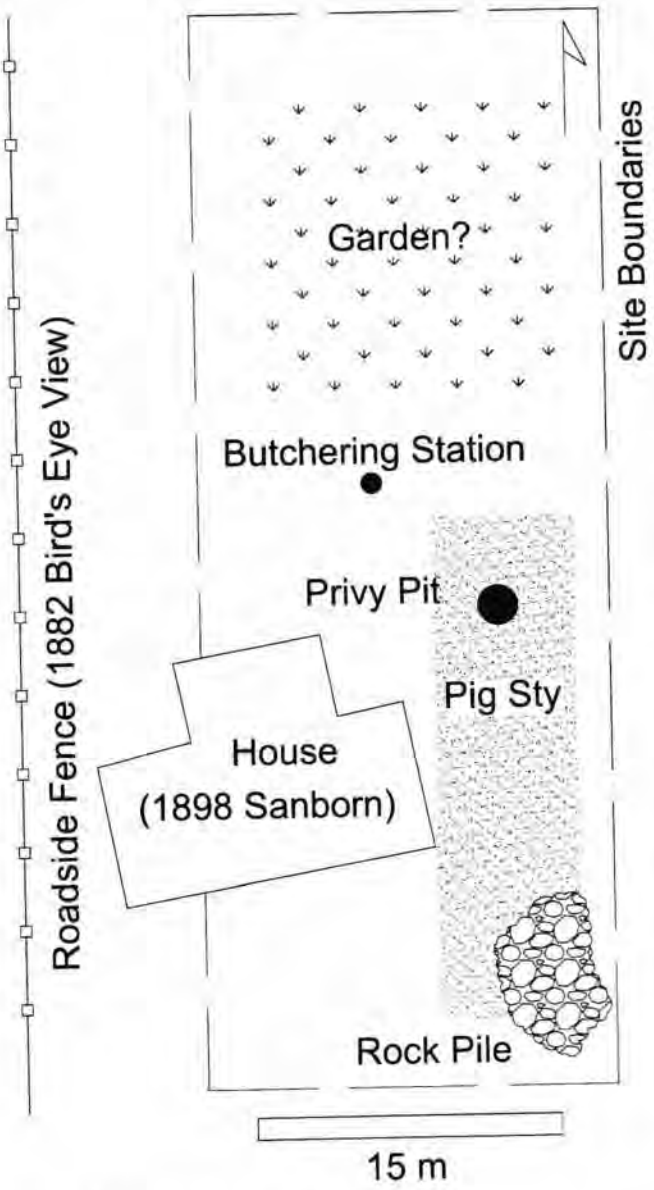

Figure 2. Schematic plan of the E. Cornell Site.

Their disposal practices changed at this time, too. Instead of broadcast scattering of their garbage, or confining it to the uninhabited sty, they excavated a pit in the north end of the pen that was used for trash and night soil disposal. The clay fill cap was deposited after 1892, possibly when the Cornells were cleaning up the property to attract new tenants. Burying the messy remains of the sty was a strategy used elsewhere, as discussed below. This stratigraphic anomaly appears to be a distinguishing archaeological characteristic of pigpens.

The Baldwin Site

The Public Archaeology Facility identified the second example at the Baldwin Site (SUBi-1742, NYSM 10502), a farm in the southern tier hamlet of Lowman (Chemung County) that has been continuously occupied since the late eighteenth century. Sara Grills directed site examination and data recovery excavations in 2002 and 2005, identifying complex midden deposits and two structural features situated in the narrow front yard of the c. 1789 farmhouse (Knapp et al. 2003; Grills and Zlotucha Kozub 2010). As with E. Cornell, the deposits were divided into a generalized sheet midden covering most of the site and an organic midden at the eastern end just off the corner of the original wing of the house. One of the structural features was a segment of dry-stacked stone wall which divided the majority of the organic midden soils from the remainder of the site (Figure 3). The wall was oriented perpendicular to the road; no corners or intersecting walls were encountered due to utility and road disturbances. Both the organic midden and the wall were buried by topsoil during the mid-nineteenth century, while the remainder of the site exhibited patchy topsoil fill deposition.

Archaeologists found that the majority of faunal remains concentrated in units east of the wall in the organic midden, and it is likely that these contributed to the enrichment of the soil. Middens are attractive foraging grounds for rats, and the bones of these creatures in the faunal assemblage testified to their presence onsite. What is interesting is that none of these bones were found east of the wall in the area of densest food deposition. Instead, they clustered directly west of the wall outside the organic midden zone. Analysis of rodent-gnawed bones showed a similar pattern. This evidence suggests that while the household food waste was primarily discarded east of the wall, the rats were unable or unwilling to scavenge there. Rats are determined foragers who can climb, crawl, and squeeze into very tight places, so it is probable that they could have enjoyed the midden's bounty had they wished. The fact that they didn't suggests that the rat population may have avoided the organic midden for reasons of self-preservation. Only another animal was likely to provoke such avoidance so it seems likely that this was an animal pen, an interpretation that is consistent with the enriched soils of the midden. Sheep and cattle were raised on the farm but these animals would not have harmed many rats, and dogs were probably not penned inside a stout walled enclosure. The abundant kitchen waste was probably fed to the household pigs which would not have taken kindly to invading rats and would have eaten any they could catch. The rats apparently chose to keep out of harm's way and content themselves with the yard pickings.

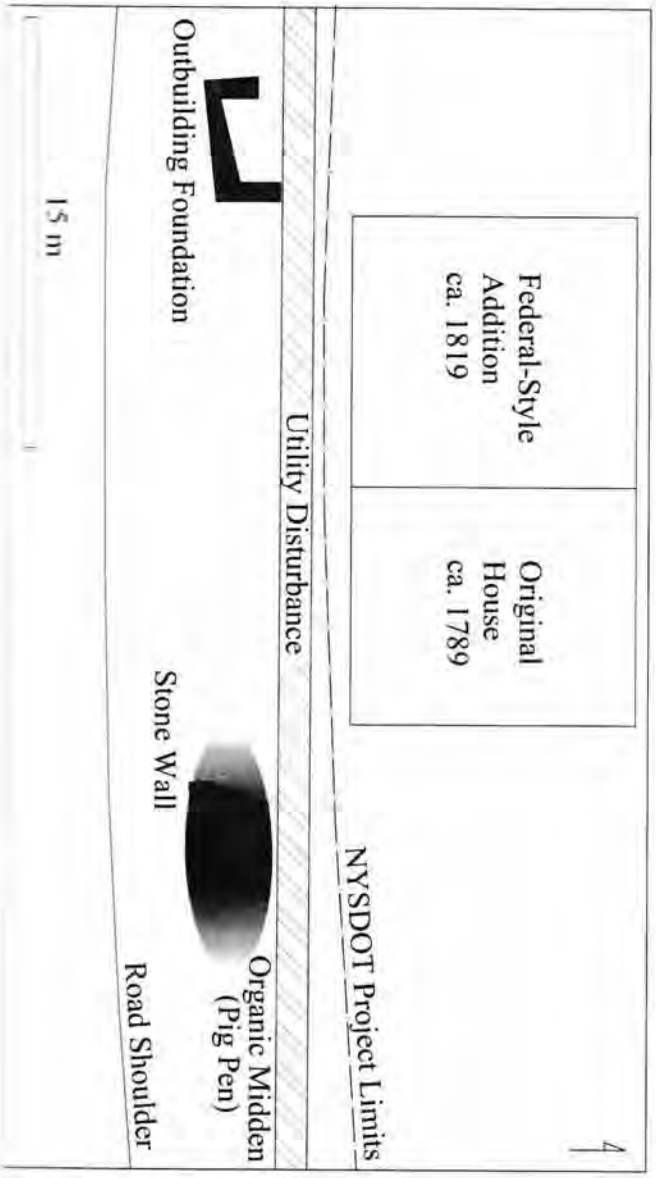

Figure 3. Schematic plan of the Baldwin Site.

The Baldwin Site pigpen was situated in the front yard, which was a narrow space between the house and the existing road. A second outbuilding was located on the western side of the yard. The presence of two outbuildings between the house and the road is atypical of farmsteads in the mid- and late-nineteenth century, as "modern" farm layouts promulgated in the literature insisted upon neatness: "The lawn or 'dooryard' should be the best kept ground on the place" (Allen 1853:53). This advice was heeded by many families and the gradual abandonment of the front yard midden has been well-documented by archaeologists. In 1789, however, Lowman was a frontier settlement and the Baldwin farm would have been confined to a clearing in the woods. The limited spatial options of the farmstead were further complicated by a 60 ft hill that rose up from the rear yard of the house. The Baldwin family owned 260 acres and could have selected a more spacious location for their house lot, but instead they chose to settle in a relatively constrained strip of land between the road and the steep hill. This choice necessitated the organization of a multi-functional farm and house lot that differs substantially from other rural farmsteads in upstate New York (Grills and Zlotucha Kozub 2010). By the mid-nineteenth century, the outbuilding and pigpen were removed and covered with topsoil to create a neater and more conventionally domestic yard.

The Houston Site

The third example is from the Houston Site (SUBi-2349, NYSM 11336) located near the hamlet of Phillipsburgh in Wallkill (Orange County); the Public Archaeology Facility excavated the site in 2004 and 2009 under the direction of Claire Horn and Kevin Sheridan, respectively (Kudrle et al. 2005; Zlotucha Kozub 2012). The pigpen was identified by its similarities to the other sites, including high density clustering of food remains and food-related artifacts, targeted burial of the deposits, and a stone wall fragment. The distribution of smoking pipes provided indirect support for this interpretation, as fragments were found on either side of the wall, while food remains and ceramics were discarded on the presumed interior of the pen. This spatial arrangement suggested that pipes, which are usually dropped, rather than purposefully discarded, were easily dropped at the wall of the pigpen. This pattern suggests the image of the smoker losing control of his or her pipe when slopping the hungry hogs.

The Houston Site was named for dairy farmers who owned and occupied the site from 1841 to 1931. Their house and barn foundation were visible during the data recovery but few artifacts were associated with their occupancy. A deed from 1775 (Orange County Deed Book I, page 208) shows that the site was first owned and occupied by a "yeoman" named John Cox and his wife, Keziah. The Coxes probably lived in a cabin, the location of which was established using spatial analysis of the artifact assemblage. The family went bankrupt in 1824 and the property was sold to local land speculators (Orange County Deed Book FF, page 211). No occupants were documented for the subsequent period until the Houston family's 1841 purchase, but the artifact assemblage and a change in landscape usage both suggested that there was probably a tenant in the interim (Figure 4). In particular, the pigpen was buried after the Cox's departure.

Discussion

The decisions to abandon and bury the E. Cornell and

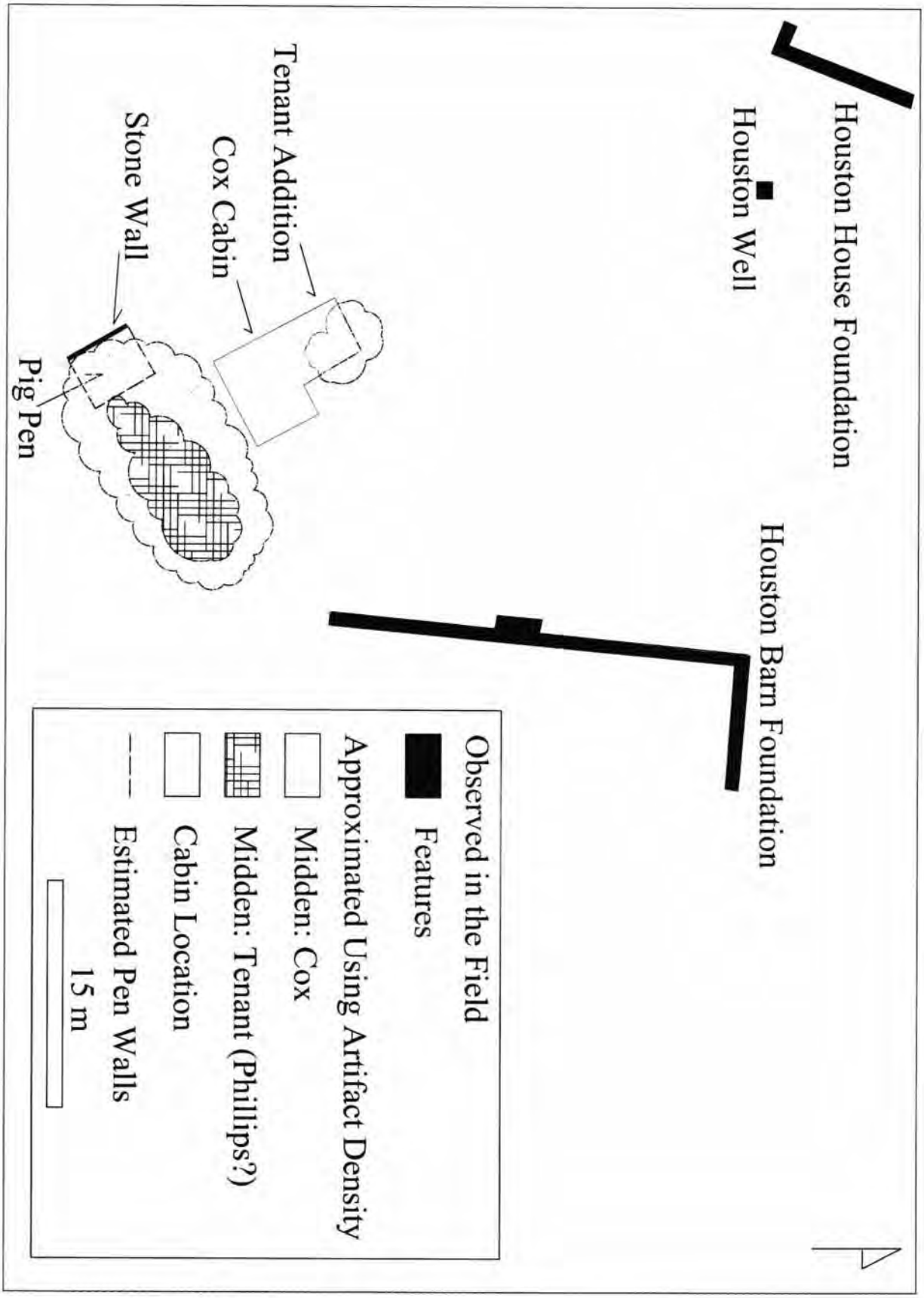

Figure 4. Schematic plan of the Houston Site.

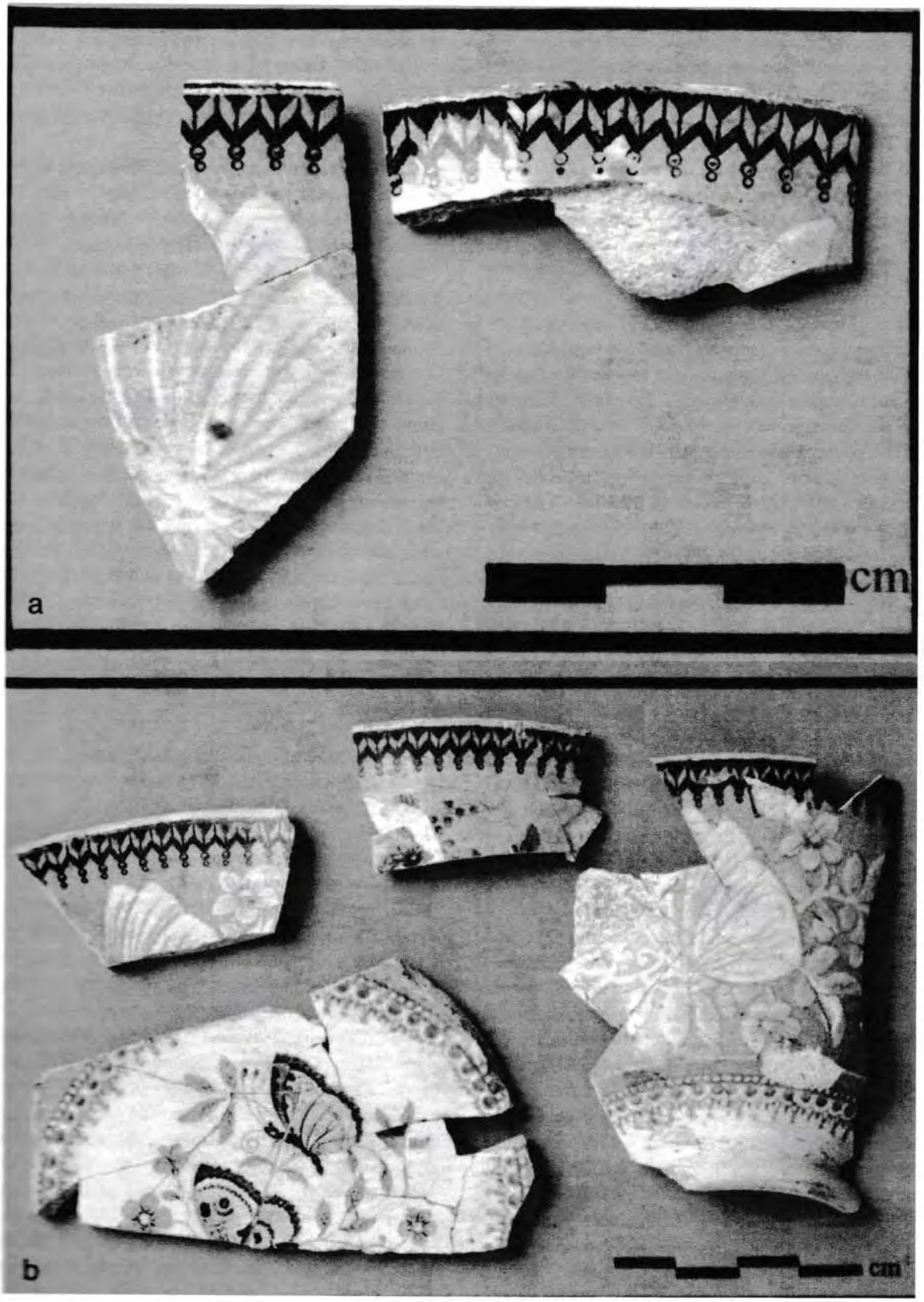

Figure 5. Black-on-blue transfer print pattern "American Fly," (c. 1831-1846) (Zlotucha Kozub 2012); **a.** E. Main Street 2 Site (pre-1834 residence of Phillips family); **b.** Houston Site (pre-1841 residence of unknown tenants).

Baldwin sties probably reflected growing consciousness of the public eye. The E. Cornell Site was situated between the fledgling university and increasingly populated Ithaca neighborhoods; these neighbors and even the Cornell family themselves may have found the pigsty offensive so close to the road. The Baldwin sty was situated even closer to the road, and though Lowman was never much more than a large hamlet, the mid-nineteenth century site occupants may have wanted passers-by and guests to notice the Federal-style addition rather than the smelly pigpen. In contrast, the Houston site was situated over 450 ft from the road, and the pen was behind the cabin and thus further removed from sight. There would have been little need to conceal the pigpen from public view, so why bother? It is possible, of course, that the post-Cox tenants did not keep a pig for personal consumption and thus had no need of a pen. However, this seems to be an unlikely oversight for people living on a rural farmstead in the early nineteenth century.

A possible answer to this question was suggested by evidence from a site located just down the road. The East Main Street 2 Site (SUBi-2348, NYSM 11335) was excavated in 2004 and 2009 under the direction of Jim Levandowski of PAF (Kudrle et al. 2005; Zlotucha Kozub 2012). This site was situated on a neighboring property owned and occupied by the Phillips, the socially connected and moneyed family for whom Phillipsburgh was named. The Phillips family declared bankruptcy in 1834 and sold their extensive property in and around the hamlet (Orange County Deed Book 51, page 21). Moses Phillips continued to hold interests in local concerns so the family did not leave Wallkill until about 1840, when Harriet Phillips' name was removed from the parish records (Coleman 1933). The family needed a place to live during these six years and the Cox farmstead next door was unoccupied by the speculators who currently owned it. The evidence that suggests the Phillips moved to the Cox farm is a distinctive and unusual ceramic ware present on both sites (Figure 5). "American Fly" is a black-on-blue transfer-print so rare that it "generated a lot of crowd interest" at the annual meeting of a national ceramics enthusiasts organization (Weinburg 2010:4). The manufacturing dates for this pattern are unknown, but two-color transfer-prints generally date from 1831-1846 (Miller 2000). This time frame post-dates the Cox departure and is consistent with the Phillips family's change in residency. This ware was not found at a third Phillipsburgh site (excavated by Rich Kastl of PAF in 2004 and Stephanie Roberg-Lopez of City/Scape in 2007), which was the home of William Phillips, Moses' brother and business partner (Kudrle et al. 2005; City/Scape 2009). The presence of a rare and probably pricey ceramic ware at a manor home and at a nearby rental cabin is arguably more than a coincidence. It is likely that these vessels were from the same set, which indicates that Moses and Harriet moved into the Cox cabin after declaring bankruptcy. This was certainly a "step down" for the Phillips family and it is likely they wished to preserve a veneer of gentility while living in reduced circumstances.

Before his bankruptcy, Moses Phillips was a gentleman farmer celebrated for prize-winning hogs (Eager 1846) but no evidence of a pen was found in the domestic space of the manor home. Apparently he chose to keep the unsightly sty well removed from the house, which was no burden to the Phillips family as there were plenty of enslaved people (and after 1824, servants) to carry slops out to distant pens. Spatial analysis of the Houston Site showed that the post-Cox tenants were particular with their yard refuse. The front yard midden was not used after the Cox departure, and clustering of architectural debris suggests that an addition was built over the midden in an effort to enlarge the eighteenth-century cabin. The tenants used the rear midden almost exclusively and confined their disposal habits to a smaller area. The burial of the sty shows that any pigs kept onsite were housed well away from the dwelling. Maintaining a neater yard, erecting an addition, and removing the pigpen from the domestic space suggests that the Houston Site tenants were exhibiting behaviors consistent with the Phillips' more "gentlemanly" mode of living.

Conclusions

These case studies demonstrate that pigpens can be found nearly anywhere on a farm or house lot and can be identified by several archaeological characteristics. Discrete areas of organic-rich soils targeted by site occupants for burial or filling should be considered possible pigsties. Such areas may be bounded by the remains of a wall or stout fence. Dense faunal remains in association with these features are significant and it seems that food related artifacts may also be present. Late nineteenth- and twentieth- century municipal waste programs featured the separation of food waste from trash to enable pig farmers to collect slops for their stock (Miller and Slaughter 1999), but these households showed less scrupulous disposal practices by dumping ceramics and other trash into their pens. Less obvious artifact distributions may also hint at the presence of a pigpen: at E. Cornell, it was the *absence* of fauna, edible flora, and artifacts at the far end of the midden that signaled an unexpected source for its organic content; at Baldwin, the rats stayed away from the best pickings onsite; and at Houston, folks dropped their pipes by the wall, either while slopping or stopping to watch the hogs feed. However they are identified, pigpens will provide important information about

farm layouts and practices, and may possibly illuminate broader issues like class, ethnicity, and the organization of farm landscapes.

Acknowledgements

This paper is adapted from a presentation I made at the 2014 NYSAA Meetings held in Oneonta. I thank Nina Versaggi of the Public Archaeology Facility for her encouragement and support of this research. I also thank my colleagues at PAF who excavated the sites described in these reports: Laurie Miroff (E. Cornell), Sara Grills (Baldwin), Kevin Sheridan and Claire Horn (Houston), and Jim Levandowski (East Main Street 2).

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City/Scape: Cultural Resource Management
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The Vroman I Site (NYSM # 10146 and 10148): A Transitional/Early Woodland Camp in the Town of Schoharie, Schoharie County, New York

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The Vroman I site consists of a small Transitional/Early Woodland campsite located near the confluence of the Fox and Schoharie Creeks in the Town of Schoharie, Schoharie County, New York. The site produced a small concentration of chert flakes, broken bifaces, a broken (Woodland) projectile point, and small expedient tools. The absence of features reinforces the site's tentative nature. Comparisons with contemporaneous sites in eastern New York place the site within a larger regional settlement and interaction system.

Introduction

The Vroman I site is a small campsite located southwest of the intersection of Route 30/30A and 443 in the Town of Schoharie, Schoharie County, New York (Figure 1). The site is located approximately 20 m (64 ft) from the northern bank of the Fox Creek and produced radiocarbon dates associated with the site's occupation during the Transitional/Early Woodland Period (1000 B.C. to A.D. 200). Traditional studies of sites dating to this time period in eastern New York focus on larger camp and burial sites rather than smaller loci. As a result of these studies, the important contributions of smaller camps in reconstructing past settlement and interaction patterns are often overlooked. A detailed study of the types of artifacts recovered from these sites, as well as the materials used in the manufacture of such artifacts, not only provide important information about the activities of the site's occupants but also about the internal and external use of the site prehistory.

Excavations by the New York State Museum's Cultural Resource Survey Program in 1995 and 2001, in advance of a federally funded highway improvement project, produced data about the range of lithic resources exploited by these groups and the role of such campsites within the settlement patterns of the region's early occupants (Schafer 1995; Rieth 2002, 2015). This paper discusses the results of these excavations and compares the settlement and interaction patterns identified at the Vroman I site with those of similar mid to late Holocene sites in eastern New York. Emphasis is placed on the role that the natural environment played in the decision to settle at this location and the decisions that influenced prehistoric groups to reoccupy the site several hundred years later.

Figure 1. Map showing the location of the Vroman I Site within Schoharie County, New York (NYSM # 10146 and 10148).

The Transitional and Early Woodland Period in New York

The Transitional (B.C. 1,500-1,000) and Early Woodland (B.C. 1,000-A.D. 200) periods remain poorly understood in New York. Our understanding of these periods derives largely from the work of William A. Ritchie and Robert E. Funk during the 1950s, 1960s and 1970s. During this time period, sites producing remains believed to be associated with the Orient, Meadowood, and Adena cultures were excavated, leading Ritchie (1994) to conclude that the Transitional and Early Woodland settlements in eastern New York were fairly uniform, with native groups practicing a mixed hunting/gathering/fishing subsistence strategy that was largely reliant on the occupation of small seasonal camps located along or at the shallow portions of major waterways. Lindner and Folb (1998:107-132) suggest that although such sites were located along major waterways, most sites were situated back so as not be regularly subjected to flooding and/or geologic changes in the landscape.

Habitations at the Orient and Stoney Brook Sites on Long Island (Ritchie 1959, 1994:174-177) as well as the Vinette, O'Neil, and Riverhaven No. 1 sites (Ritchie

1994:156-165) in central New York and the Scaccia site in western New York (Ritchie 1973:99-116) contained limited size occupations suggesting use of the site by one or two bands simultaneously. Currently, little or no evidence of residential structures has been identified at these sites. The artifacts recovered from these sites are diverse and suggest that a wide range of activities were occurring including steatite/clay pottery manufacture and lithic tool production. Netsinkers suggest the importance of fishing at these sites (Ritchie 1973:123-153). Food storage, along with circular and stone cooking features, food processing areas, and other refuse disposal pits have been identified and suggest that group stability and local experimentation with semi-permanent settlement may have also begun during this period.

The internal arrangement of these sites has not been widely examined in eastern New York (Funk et al. 1967:1-10). Occupations identified at the Dennis (Funk and Johnson 1964), Nahrwold 2 (Ritchie 1994:xxiii; Granger 1978:Table 2), Van Orden (Ritchie 1994:174), and Crawbuckie Beach (Brennan 1962:12-15) Sites have undergone limited examination, resulting in a suggestion that eastern New York was not extensively occupied when compared with the more populous sites in central and western New York. More recently, however, archaeologists working in eastern New York have begun to reconstruct the internal features of these sites as well as their relationships and have begun to look at their association with nearby sites. Excavations at the Schoharie Creek I and II sites near the village of Central Bridge have recently identified activity areas associated with the manufacture of stone tools as well as a range of features associated with food processing (Rieth 2012). The identification of several small postmolds suggests that a small lean-to-type of structure may have also been erected by the site's occupants.

Likewise, the analysis of a Transitional/Early Woodland occupation at the Pethick Site (Rafferty et. al. 2014:177-199) produced artifacts and features suggesting that the site was repeatedly used by groups as evidenced by Orient and Meadowood points recovered from the same features. The identification of features, including postmolds, associated with the occupation have provided information about the spatial organization as well as the range of materials gathered for use by its occupants. The recovery of non-local artifacts, including Pennsylvania jasper, chalcedony, and Normanskill chert, suggest that the occupants of the Vroman I site, along with the occupants of other nearby sites in the Schoharie Valley, had far reaching interaction networks.

Across the state, back-country and upland sites, often used as resource extraction and hunting-gathering stations, were considered by Ritchie (1994:190-191) and others (Funk 1976:29-42; Ritchie and Funk 1973:123-153) to be of limited importance with only a few sites identified. Such sites were often small in size and did not contain large quantities of artifacts leading to the perception that such sites contributed little to our understanding of the overall settlement system. Recent studies of back-country sites, during the Woodland period, have shown that not only were these sites integral to prehistoric life but the number of sites located in back-country areas is greater than once believed. In eastern New York, later Middle (circa A.D. 200-900) and Late Woodland (circa A.D. 900-1500) sites were often reoccupied, due to their strategic location as important viewsheds across river valleys, their ability to provide important goods, and/or their role as crossing areas along high ridges (Rieth 2011). Although currently unevaluated, it is not unreasonable to believe that the Transitional and Early Woodland groups living in the Schoharie Valley may have also occupied and used similar locations for the same purpose.

Finally, Ritchie (1994:201-226) suggests that mortuary sites were important components of both Transitional and Early Woodland settlement systems. Many of the burials that have been reported in Ritchie (1994:201-226) in central and western New York, are described as being part of cremations or multi-bundle cemeteries. Such sites often contained elaborate funerary objects that were deposited in burials as caches. Included among these objects were Meadowood preforms, tubular pipes, birdstones, trapezoidal gorgets, non-local lithics (including pieces of Pennsylvania Jasper) and carbonized basketry/woven mats (Tache 2011). Local materials including hematite (red ochre) and limonite are also commonly found at Early Woodland sites (Ritchie 1994). Despite their identification in central and western New York, very few Transitional/Early Woodland burial sites have been located in the Schoharie Valley.

Archaeological studies have recently suggested that Transitional/Early Woodland sites across the Northeast are variable and display a wide range of characteristics based upon their use and function (Stewart 2003:1-15). By comparing the features of these sites (i.e., site size, geographic location, settlement arrangement, types of features and artifact classes, etc.), archaeologists can hope to gain a more complete understanding of the diversity of these sites within larger settlement systems (Rieth 2002:153-154) and range of activities practiced by the state's earliest occupants.

The Vroman I Site

Project and Site Description

A reconnaissance survey was completed during the spring of 1995 by the New York State Museum prior to the realignment of the Route 30/30A and Route 433 Intersection (Schafer 1995). One hundred and thirteen shovel test pits were excavated within the project limits. Of these, 37 shovel test pits produced prehistoric remains. Due to the cluster of prehistoric artifacts within these shovel test pits, two archaeological sites (the Vroman I and Vroman II Sites) were identified within the project limits (Rieth 2015). The remainder of this paper focuses on the Vroman I Site and its relationship to other contemporaneous sites in eastern New York.

The Vroman I Site was identified in STPs 4, 4N, 4E, 4W, 4S, 5, 5N, 5E, 5W, 5S, 6, 7, 8, 9, 9N, 9E, 9W, and 9S (Figures 1 and 2). Two different occupations were identified. The first occupation consists of a small concentration of historic artifacts that are associated with the occupation of the property during the mid-late nineteenth century. The second component consists of a scatter of prehistoric flakes and bifacially worked tools that were believed to be associated with the occupation of the property as a repeated campsite. One hundred and thirty artifacts were recovered from both of these components and included the following items: utilized and non-utilized flakes, bone and shell fragments, decorated and undecorated ceramic sherds, architectural debris (i.e., brick fragments, window glass, nails, pieces of mortar, etc.) and other domestic remains (e.g., coal, cinder, and slag fragments, amethyst and aqua bottle glass, etc.). Given the large number of artifacts that were recovered and the integrity of the deposits, additional work was recommended to determine if the site was eligible for the National Register of Historic Places.

Archaeologists from the New York State Museum's Cultural Resource Survey Program undertook additional excavations at the site in 1998 (Rieth 2015). Within the project limits, nine test units and 21 shovel test pits (STPs) were excavated. Seven of the nine test units measured 1 x 1 m (3.2 x 3.2 ft). Unit 3 measured 1.5 m x 0.75 m (4.8 ft x 2.4 ft) while Unit 5 measured 0.75 mx 0.75 m (2.4 ft x

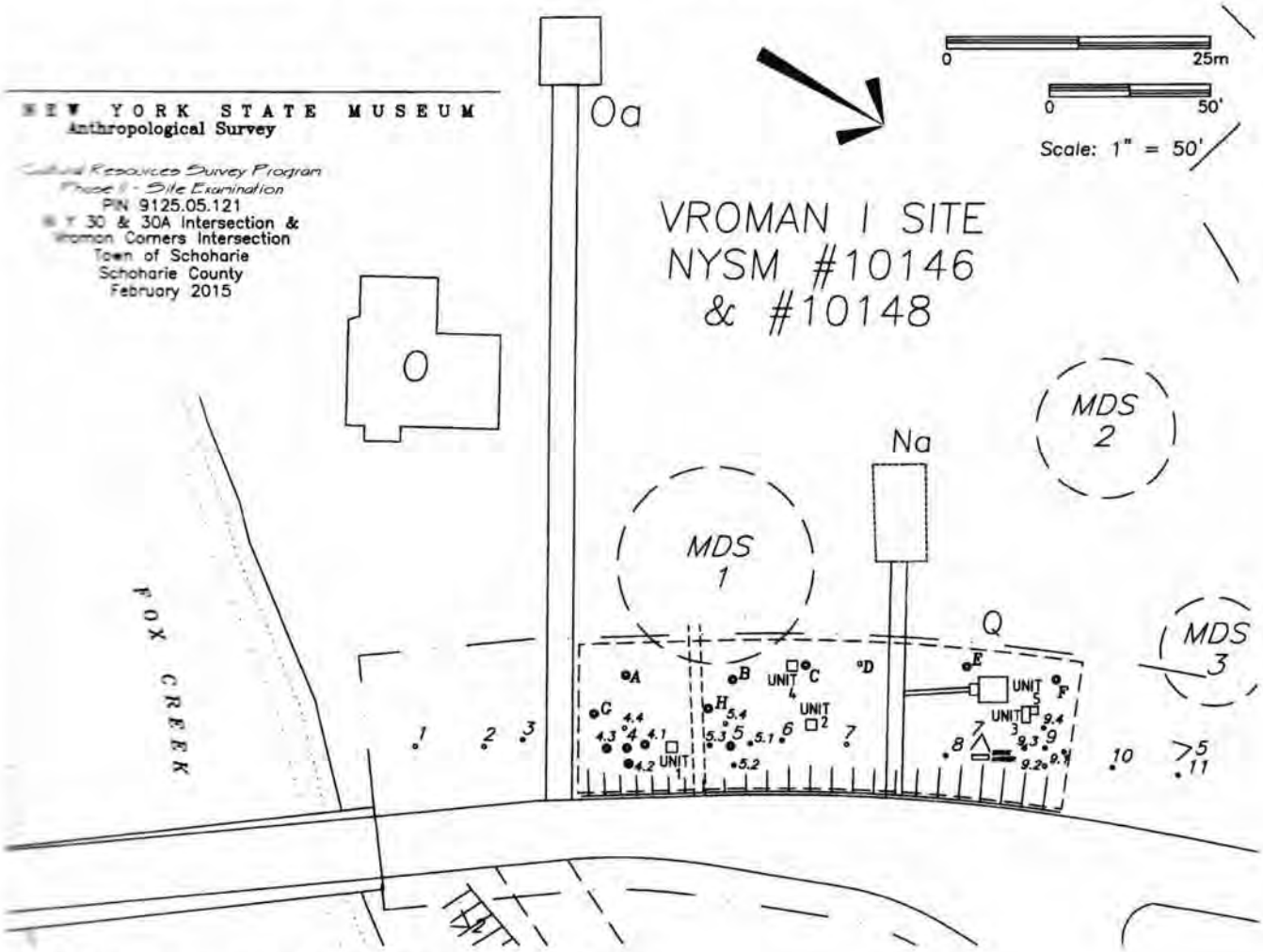

Figure 2. Map of the Vroman I Site showing units excavated in 1998 and 2001.

2.4 ft). Each of the 21 shovel test pits measured 50 cm by 50 cm (20 in by 20 in) and were excavated to provide supplemental information about the horizontal and vertical arrangement of artifacts across the site.

All test units were hand excavated in 10 cm (4 in) arbitrary levels cross-cutting natural soil horizons (Rieth 2015). Once sterile, or non-artifact bearing soils, were encountered in the floor of the unit, a 50 cm by 50 cm (20 in by 20 in) square shovel test pit was excavated through the floor of the unit to: (1) insure that no deeply buried deposits were located underneath; and (2) collect additional information concerning changes in soil stratigraphy across the site. Changes in natural soil horizons were determined based on changes in the soil color and texture. Soil color was determined using the Munsell Soil Color Charts (Munsell 1975) while soil texture was determined based upon the quantity or frequency of sand, silt, and clay present in a particular layer. The contents of each of the units were bagged by soil layer or feature and were returned to the Anthropology Laboratory at the New York State Museum to be curated. Approximately 13.7% of the Vroman I Site was excavated as a result of the reconnaissance survey and site examination.

Site Setting

The Vroman I Site is located on a small floodplain overlooking the main channel of the Fox Creek. Approximately 0.8 km (0.5 mi) west of the project area is the main channel of the Schoharie Creek, which is the primary waterway through the valley. The site is surrounded on the east by a small terrace and to the west by a large expansive floodplain of the Schoharie Creek. As will be discussed later, both the Fox and Schoharie Creek were important waterways connecting the Schoharie Valley with other smaller tributaries to the east and west as well as the Mohawk River to the north. Such waterways would not only have facilitated the transportation of groups throughout the region but would have provided important causeways for increasing interaction between groups.

Over 50 prehistoric sites are located within 3.2 km (2 mi) of the site with three prehistoric sites located immediately adjacent to the Vroman I Site. Site NYSM # 9281 is located approximately 30 m (100 ft) south of the current project limits. The site is described as a small surface scatter of artifacts that were recovered from the top of the plowzone. Several projectile points were recovered from the site including one Wading River point and a small stemmed point (New York State Museum Site Files, Albany 2014).

Across from the Vroman I Site is the Vroman II Site. The Vroman II Site was identified during the same survey as the Vroman I Site and underwent a site examination by the State Museum in 2002. The results of these excavations suggest that the site consists of a small campsite mainly composed of a concentration of flakes manufactured from Onondaga chert (Rieth 2015:31-33). No diagnostic artifacts were recovered from the site making it difficult to refine its period of use. However, its location in between the Vroman I Site and the Middle Woodland Westheimer Site suggests that the site may date to the Transitional/Early Woodland or Middle Woodland (A.D. 200-800) periods. The site extends to the edge of Route 30/30A and portions of the site may be have been buried underneath the current road surface.

Finally, the Westheimer Site is located on the floodplain of the Schoharie Creek across from the Vroman I Site approximately 100 meters (330 feet) away. Excavations by William A. Ritchie and Robert Funk in 1966 produced prehistoric occupations dating to the Middle and Late Woodland Periods (Funk 1973:146-147). The site was characterized as a camp with a small living floor consisting of several small activity areas with circular hearths, shallow basin- and saucer-shaped pit features, as well as one prehistoric burial dating to the Middle Woodland period. Artifacts recovered from the site include a mixture of prehistoric ceramic fragments, pieces of lithic debitage, pestles, as well as netsinkers and hammerstones that suggest that food processing was a major activity at the site. The site produced radiocarbon dates of A.D. 410-450 (Funk 1973:149-151) suggesting that it post-dates the occupation of the Vroman I Site.

Site Size and Stratigraphy

The Vroman I Site measures 45 m (144 ft) long and 12.75 m (40.8 ft) wide within the project limits. The site encompasses 573.75 sq m (5,875 sq ft) or 0.05 ha (0.13 a). The site examination indicates that cultural deposits associated with the Vroman I Site can be found to a depth of 95-100 cm (37–39 in) below the ground surface intersecting several soil horizons including a buried Ap- and B-horizon. The stratigraphy of the site is relatively simple with only minor variations exhibited in the stratigraphic profiles of Units 1, 2, and 4. The first soil layer and the top of the second soil layer consist of secondary deposits that have been transported to their present location in dirt that was used to fill in a cellar hole left by a mid-nineteenth century structure (MDS 1) that previously occupied the property. Underneath were an Ap-, B-, and C-horizon. The Ap-horizon contains a brown sandy loam (10YR4/3) soil with gravel which extends to a approximate depth of 50-65 cm (20-26 in) below the ground surface. This soil layer produced prehistoric artifacts and is believed to date to the Early Woodland period based on radiocarbon dates and a broken projectile point recovered

from within, as discussed below. Underneath is an artifact-bearing B-horizon. This soil horizon extended to a maximum depth of 95-100 cm (39 in) and contained a dark yellow brown sand loam (10YR4/6) soil (Munsell 1975). This soil layer is believed to date to the Transitional period based on radiocarbon dates and the artifacts recovered within the layer. A sterile buried C-horizon was encountered in Units 1, 2, and 4 at an average depth of 129 cm (51 in) below the ground surface.

Chronology

Two wood charcoal samples were sent to Beta-Analytic for Accelerator Mass Spectrometry (AMS) dating. The first sample consists of a piece of wood charcoal from Unit 3, Level 2. This sample returned an AMS date of 2,460 ±40 B.P. (Cal B.C. 780 to 410) (Beta 186306) placing the sample within the Early Woodland period. The date also seems consistent with a broken projectile point (possibly Early Woodland) that was recovered from the site. When compared with similar dates recovered from other Early Woodland occupations in the valley, the date is contemporaneous with dates ranging from B.C. 790 to 430 (Beta 199858) recovered from the Pethick Site (Rafferty et al. 2014: Table 1) and similar dates of B.C. 790 to 530 from Unit 56 and a date of B.C. 790-420 from Unit 47 at the

Figure 3. Chipped stone artifacts recovered from the Vroman I Site (NYSM # 10146 and 10148).

Schoharie Creek II Site (Rieth 2008:Table 2, 2012) and Unit 15 at the Smith-Holloway 4 Site (B.C. 780 to 400) (Beta-173344) (Rieth et al. 2003: Table 1).

A second sample was also submitted to Beta Analytic and produced a date that was older at 3,060 ±40 B.P. (Cal B.C. 1400 to 1190) (B-186305). The sample was run on a piece of wood charcoal recovered from the base of Unit 1, Level 2. The date recovered from the site is a bit older and falls within the Transitional period (1,500-1,000 B.C.) and resembles similar dates recovered from the Smith-Holloway 4 Site (Beta-173343) at 1420 to 1260 B.C. (Rieth et al. 2003:Table 1).

Features

No prehistoric features were identified during the site examination; however, several pieces of wood charcoal and a piece of fire-cracked rock were recovered from the buried Ap- and B-horizons. These artifacts may indicate that one or more prehistoric features were located within the project limits.

Artifacts

Nine hundred and fifty-nine prehistoric artifacts were recovered from the Vroman I Site. Four hundred and fifty artifacts were recovered from the Ap- and B-horizons during the site examination in 2002, while an additional two hundred and sixty-two prehistoric artifacts were recovered during the 1998 reconnaissance survey (Rieth 2015). The remaining two hundred and forty-seven artifacts were recovered during the reconnaissance survey and site examination from fill deposits at the site. The recovered artifacts include utilized and non-utilized flakes, a pitted stone, a projectile point tip, chipped stone bifaces, and modified core fragments (Figures 3 and 4).

One ground/pecked stone tool was recovered during the site examination of the Vroman I Site. This artifact consists of a small pitted stone that was recovered from the buried B-horizon of STP G and is believed to be associated with the Transitional period deposits. This small expedient tool measures 8 cm (3 in) in diameter and is made from a small quartzite cobble believed to have been recovered from the

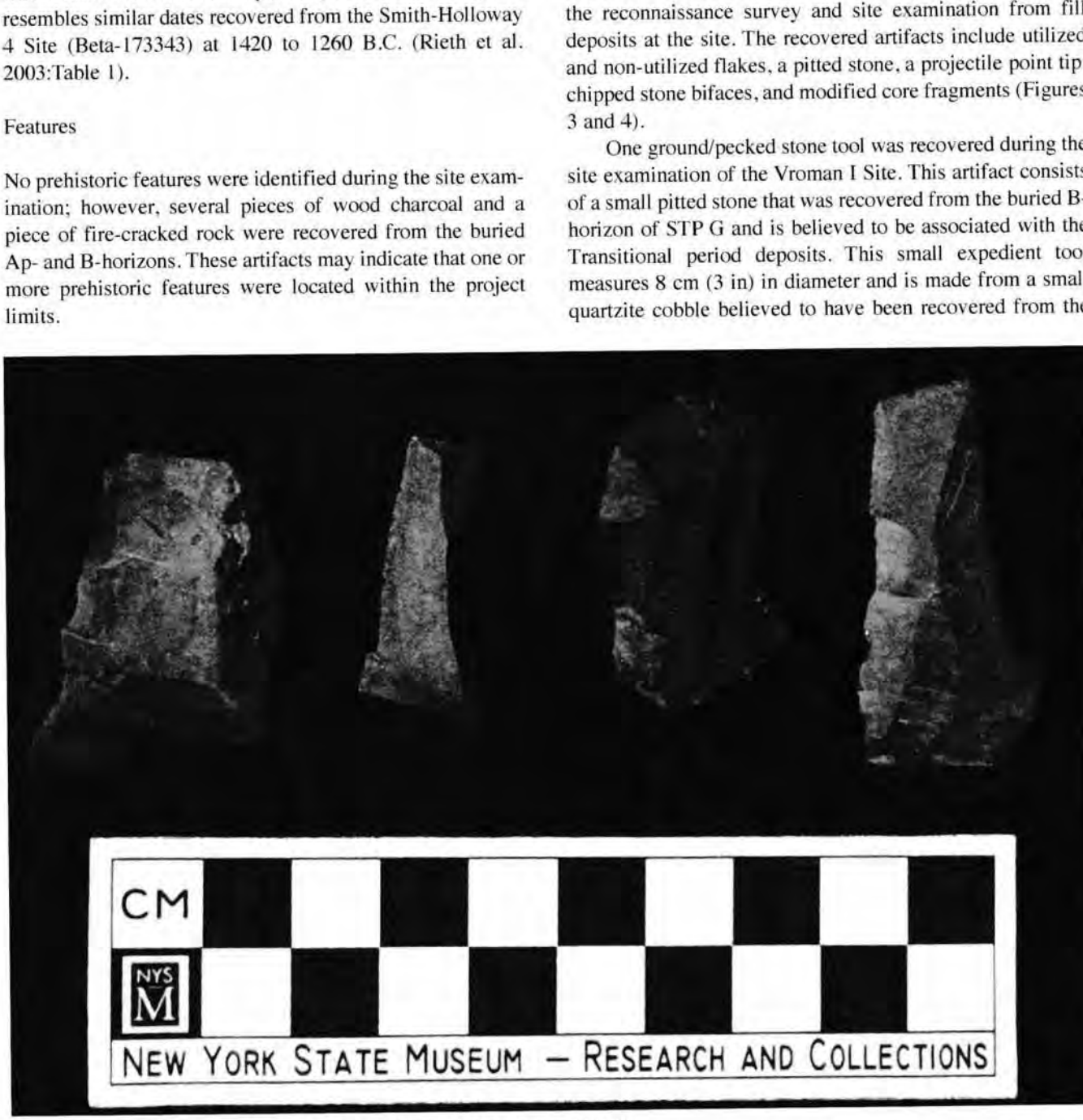

Figure 4. Utilized flakes recovered from the Vroman I Site (NYSM # 10146 and 10148).

nearby Fox Creek. The surface of the object contains a single "pit" along the dorsal surface and shows some battering on the end, suggesting it may have also served a secondary function as a hammerstone. The limited battering on the surface suggests that it may have been used for short period of time before being discarded. This is not surprising since cobbles would have been readily available from the nearby Fox and Schoharie Creeks.

Four chipped stone tools were also recovered from the buried Ap-and B-horizons. The first of these consists of a small worked core. This artifact measures approximately 4 cm (1.57 in) in diameter and contains several flake scars along the dorsal surface. This artifact is made from a medium grey Onondaga chert. Onondaga chert outcrops have been identified by Funk (1973:125) within 3.2 km (2 mi) of the site along Terrace Mountain and would have been readily accessible to the occupants of the Vroman I Site. This material is found at other sites in the valley (Funk 1973; Rafferty et al. 2014; Rieth 2008:157-161, 2012) and was likely the predominant material used in the prehistoric manufacture of stone tools.

Two broken bifaces were also recovered during the reconnaissance survey and site examination. One of these bifaces was recovered from the Ap-horizon in STP 4.3. This artifact is broken along the midsection and is manufactured from dark grey Onondaga chert. This artifact measures 25 mm (0.98 in) long, 49 mm (0.39 in) wide, and is 15 mm (0.59 in) thick. The artifact is missing its base and may have been broken during thinning. A second biface was recovered from the Ap-horizon in STP G and is broken along the midsection. This artifact measures 10 mm (12 in) long, 24 mm (0.9 in) wide and has a thickness of 6 mm (0.2 in). Like the first biface, the artifact was made from dark grey Onondaga chert. The object is missing its tip and is also incomplete. Both of these artifacts were recovered from the Ap-horizon and were recovered from the same soil layer that produced radiocarbon dates from the Early Woodland Period.

One projectile point tip was recovered from the Ap-horizon in Unit 2. The artifact is manufactured from grey Onondaga chert and contains a lateral fracture along the mid-section. This artifact is 20 mm (0.78 in) wide and is 21 mm (0.83 in) long from the tip to the broken midsection. The shape of the point tip resembles that of a Meadowood projectile point (Ritchie 1961) and may resemble a second Meadowood point previously recovered by the property owner. As discussed below, Meadowood points have been recovered from Early Woodland sites located along the Schoharie and Fox Creeks.

The non-fill deposits in Units 1-5 and STPs A-H produced 645 flakes. Seventy-four percent of these artifacts were recovered from the Ap-horizon while 26% were recovered from the B-horizon. The majority of the flakes were recovered from the eastern half of the site in Units 1, 2, 4 and STP G. Table 1 provides a summary of the various types of flakes found at the site. As shown in that table, tertiary flakes represent the largest number of flakes recovered from the entire site with bifacial thinning and primary/secondary flakes being found in smaller proportions. The absence of cortex on most of these flakes suggests that the reduction of chert cores was not a major activity at the site. Likewise, the relatively low number of pressure flakes also suggests that re-sharpening and/or the creation of expedient tools was not a major task at the site.

Nine flakes (or 1.4% of the artifacts from the buried Ap- and B-horizons) contained evidence of retouch and were probably utilized as expedient tools. Five of the artifacts were recovered from the Ap-horizon while the remaining two were recovered from the B-horizon. Two of these flakes were made from chalcedony, one flake was recovered from Normanskill chert, and the remaining artifacts were made of Onondaga chert. No evidence of polish or other signs of use were visible on the surface of the artifacts.

In addition to these utilized flakes, eight "blade-like" or "elongated" flakes (Lowery and Custer 1990) were also recovered. These artifacts measured 3.5-4.0 cm (1.4-1.6 in) long and 1.5-1.7 cm (0.6-0.7 in) wide. The majority of these artifacts were manufactured from gray Onondaga chert with approximately 63% (or 5) of these artifacts exhibiting evidence of retouching along the dorsal surface of the artifacts. Presently, these types of artifacts have not been reported at other floodplain prehistoric sites in the Schoharie

Table 1. Summary of Prehistoric Flake Classes by Vertical Provenience at the Vroman I Site (NYSM #10146 and NYSM #10148)

Soil Horizon	Primary/ Secondary (%)	Tertiary (%)	Bifacial Thinning (%)	Pressure (%)	Broken (%)	Utilized (%)	Shatter (%)	Total (%)
Ap-horizon deposits	62 (12.9)	81 (16.9)	60 (12.6)	6 (1.3)	176 (36.9)	5 (1.0)	87 (18.2)	477 (100)
B-horizon deposits	22 (13.1)	28 (16.6)	38 (22.6)	4 (2.4)	67 (39.8)	4 (2.4)	5 (3)	168 (100)
Total	**84 (13)**	**109 (16.9)**	**98 (22.8)**	**10 (1.6)**	**243 (37.7)**	**9 (1.4)**	**92 (14.3)**	**645 (100)**

Valley (e.g., Rieth 1998a, 2002, 2015; Funk 1973:123-153) and may indicate that a different set of activities were being performed at the Vroman I Site. Preliminary analysis of these expedient tools using a binocular microscope at a magnification of 10x failed to identify any conclusive evidence of polish or residue on the edges of the artifacts.

Over 95% percent of the flakes that were recovered in the units excavated during the reconnaissance survey and the site examination were made grey Onondaga chert. Several chert outcrops are located within 8.1 km (5 mi) of the Vroman I Site with the most prominent outcrops located 0.81 km (0.5 mi) from the project area at Terrace Mountain. Terrace Mountain, is described in Ritchie and Funk (1973:125), as a high ridge of Onondaga chert appearing in outcrops along the east and west sides of the feature. In their description of this feature, Ritchie and Funk (1973:125) also indicate that several "aboriginal quarries have been reported...on the east side of the hill."

In addition to Onondaga chert, other lithic materials were used in the production of stone tools by the occupants of the Vroman I Site. Approximately 4% of the flakes that were recovered from the Vroman I Site were manufactured from Normanskill chert. According to Hammer (1976:52), outcrops of Normanksill chert outcrop in the northern and central Hudson Valley and produce materials that range in color from green to black to bluish-green. A large chalcedony core was also recovered from the Ap-horizon of Unit 2. This artifact measures approximately 6 cm (2.4 in) in diameter and is characterized by the presence of several narrow flake scars along the doral surface. Chalcedony does not regularly outcrop in the Schoharie Valley and, like Normanskill chert, was likely procured from an outcrop beyond the Schoharie Valley (Rieth 2011; Van Diver 1985). Evidence of long distance interaction is also suggested by the recovery of a (possible) piece of jasper from the interface of the fill and buried Ap-horizon. Jasper is not readily available in the Schoharie Valley and may represent interaction with groups living to the south in Pennsylvania and/or the larger Middle Atlantic region. Both of these materials have been recovered from other sites in the Schoharie Valley (Rafferty et. al. 2014:177-199; Rieth 2008, 2012) and may represent the existence of a larger regional trade network.

The method of tool manufacture that was utilized by the occupants of the Vroman I Site undoubtedly involved the heat treatment of chert. Approximately, 1.8% of the artifacts recovered from the Ap- and B-horizons exhibit evidence of heat-treatment. Although many of the artifacts contained potlids, some artifacts in each of the flake categories contained a reddened surface that may also indicate that the heat-treatment of lithic materials was not limited to a single reduction stage but rather occurred throughout the reduction process (Callahan 1979).

Evidence of subsistence remains in the form of faunal or floral remains from the site include a few small pieces of calcined bone, some charred pieces of nutshell, and a few unidentified long bone fragments likely from white-tailed deer. Given the site location near the Fox and Schoharie Creek, and similar comparative evidence identified at the nearby Westheimer Site (Funk 1973:123-153; Guilday 1973:149-152), it seems likely that fishing was another activity carried out at the site although evidence of fishing in the form of fish bone or scales was not recovered in any of the test units.

Noticeably absent from the assemblage are pieces of prehistoric pottery. Other sites in the Schoharie Valley have produced pieces of cord-marked pottery containing interior and exterior cord-wrapped paddle impressions (Rieth et al. 2007:59-80, 2012). The absence of these artifacts may either indicate that pottery was not a major activity at the site, or that pottery manufacture and use areas were located in areas that were not tested.

The prehistoric artifacts that were recovered from the fill deposits in Units 1.5 and STPs G and H resemble the artifacts that were recovered from the buried Ap-and B-horizons. The majority of the artifacts (over 90%) consist of small chert flakes. Like the flakes that were recovered from the Ap- and B-horizons, when the lithics from the Vroman Site are compared with other small camps in the valley, the range of materials that were recovered from these deposits suggest that the occupants of the Schoharie Valley may have had wide ranging interactions with groups across the Northeast.

The flakes that were recovered from the fill deposits are characterized by a diverse array of reduction stages including primary/secondary, tertiary, bifacial thinning, and lithic shatter. In addition, to these artifacts one small side scraper and three small bifaces were recovered from the fill deposits. These artifacts resemble the chipped stone tools recovered from the buried Ap- and B-horizons both in terms of the types of materials that were used during their production and the size of the objectives. All of these artifacts were manufactured from grey Onondaga chert and most of the artifacts contained a diameter of 1-3 cm (0.39 and 1.2 in).

Spatial Arrangement of Artifacts

The spatial arrangement of flakes within the boundaries of the Vroman I Site show that the largest distribution of materials is located near map-documented Structure 1. Four hundred and fifty prehistoric artifacts were recovered from STP A-H and STPs 4-9.4, with the largest number of artifacts recovered from the southeast portion of the site. In

southeast portion of the site, Unit 1 produced 157 artifacts, Unit 2 produced 202 artifacts, and Unit 4 produced 89 artifacts. Unit 3 failed to produce any prehistoric artifacts in the buried Ap-horizon.

In general, the shovel test pits that were excavated during the reconnaissance survey and the site examination generally produced smaller quantities of artifacts than the units due to their size. However, STP G produced an exceedingly high number of prehistoric artifacts (n=165) suggesting that the unit may be located in a prehistoric activity area. This assertion is supported by the diverse array of artifacts recovered from the unit (e.g., small core fragment, utilized and non-utilized flakes, a broken biface, pitted stone, etc.). The prehistoric deposits at the Vroman I Site appear to be contained south of the driveway leading to Structure N1. Only two flakes were recovered from the north side of the driveway, with one flake being found in the buried Ap-horizon in Unit 5 and one flake being recovered from the Ap-horizon of STP 9.

Prehistoric artifacts were recovered from both the buried Ap-horizon and buried B-horizon. The largest number of artifacts was encountered in the buried Ap-horizon. More than 97% (n=477) of the artifacts were recovered from this stratigraphic level, including biface fragments, a projectile point tip, chert and chalcedony lithic cores, a biface, pieces of fire cracked rock, and several elongated flakes. The recovery of a small Woodland-like projectile point tip combined with radiocarbon dates from wood charcoal found in the layer suggest occupation during the Early Woodland period.

Smaller quantities of artifacts were recovered from the buried B-horizon. One hundred sixty-eight utilized and non-utilized flakes, a pitted stone, a biface fragment, and several core fragments were recovered from this soil level. Several pieces of fire-cracked rock were also recovered and suggest one or more features remain intact within this soil layer. No diagnostic artifacts were recovered from the B-horizon; however, as previously discussed, a piece of charcoal recovered from this soil layer has produced radiocarbon dates placing it within the Transitional period.

Discussion

Evidence for the prehistoric occupation of the Vroman I Site is demonstrated by the recovery of 959 prehistoric artifacts. Two hundred and forty-seven artifacts were recovered from the fill and Ap- and B-horizons. Sixty-two artifacts were recovered from the non-fill and fill deposits in STPs 4-9,4 and STPs A-H. In total, 309 artifacts were recovered from the fill deposits, 481 artifacts were recovered from the buried Ap-horizon, and 169 artifacts were recovered from the buried B-horizon. The artifacts that were recovered from the buried Ap-horizon, include 62 primary/secondary flakes, 81 tertiary flakes, 60 bifacial thinning flakes, 263 broken flakes and pieces of shatter, 6 pressure flakes, 1 projectile point tip, and 2 broken bifaces. One piece of fire-cracked rock was also recovered from the site and may indicate that one or more features are present within the project limits.

Based upon the recovery of incomplete and complete bifaces, along with a diverse array of flakes, the deposits that are located within the Ap-horizon are believed to be associated with the occupation of the site as a small residential camp. The areal extent of the site, the presence of possible features and large number of artifacts recovered from this stratigraphic layer support this assumption. Several elongated flakes, resembling blades were also recovered and may be associated with the processing of fish and other aquatic resources that may have been present in the Fox and Schoharie Creeks during the spring, summer, and fall months.

The reduction of small lithic cores into complete or nearly complete bifacially worked tools appears to have been an important activity at the site. The large number of chert flakes combined with the large amount of cortical and non-cortical debitage suggests that the occupants of the site were bringing larger cores to the site to be worked into small bifaces and chipped stone tools. As discussed in Magne (1985), such activities are usually not performed at short term encampments and at special-purpose sites, further supporting the idea that the site was not an overnight occupation but was something occupied for a more substantial period of time. Several utilized flakes were also identified and suggest that the tool kits of these groups were complex and composed of both formal and expedient tools. Although the occupants of this site appear to have procured most of the raw materials from local chert outcrops that have been identified both at Terrace Mountain, which is within the viewshed of the site, as well as at other chert outcrops identified to the east of the site in the uplands that linking Schoharie and Albany Counties. In addition, tools made from other materials, including Normanskill chert, chalcedony, and possible jasper, suggest that the Early Woodland occupants of the site were also acquiring materials from other parts of the Northeast and may have been participating in more extensive interaction networks.

The artifacts that were recovered from the B-horizon include 1 pitted stone, 1 broken biface, 22 primary/secondary flakes, 28 tertiary flakes, 38 bifacial thinning flakes, 4 pressure flakes, 4 utilized flakes, and 72 broken flakes and pieces of shatter. No projectile points or other diagnostic tools were recovered from this stratigraphic level, however pieces of wood charcoal recovered from the layer produced

radiocarbon assays dating to the Transitional period. The artifacts recovered from this soil layer resemble those found in the buried Ap-horizon, in terms of their diverse array of flake categories, their predominant manufacture from Onondaga chert, and their overwhelming concentration along the southern boundary of the site.

The prehistoric deposits at the Vroman I Site can also be discussed within the context of the settlement of the Schoharie Valley and nearby areas. The prehistoric settlement of the Schoharie Valley probably resembled that of the adjacent Susquehanna Valley and may have involved the use of both lowland summer camps and smaller upland winter camps along with short-term resource procurement stations (Versaggi 1987; see also Versaggi 1993). Comparisons between the Vroman I Site and other nearby sites suggest that this model may also be applicable to the Schoharie Valley. When compared with sites located within 3.2 mi (2 km) of the current project area, several Woodland base camps and residential sites have been reported along the main branch of the Schoharie, Onesquethaw, and Fox Creeks (Dale 2008; Davis 1995; Funk 1973:123-153; Institute for Archaeological Studies 1989:1-2; Rieth 1998a, 2012, 2015:1-12; Ritchie and Funk 1973; Schafer 1995; Versaggi 1993; Wellman 1996). Many of these are comparable to the Vroman I Site in terms of the number of artifacts that have been produced, the size of the site, and the potential identification of small activity areas.

East of the Vroman I Site are the Helderberg Mountains. According to Jones et al. (1992) and Versaggi (1993), small resource procurement stations were identified in this upland area during a reconnaissance survey for the Tennessee gas pipeline. Since many of these sites are located within a day's walking distance of the Schoharie Creek watershed, it is not unreasonable to believe that the occupants of these small resource procurement stations may have seasonally moved between the upland areas between Albany-Schoharie counties and smaller camps (such as the Vroman I Site) located on the terraces and floodplains along the Fox and Schoharie Creeks. As previously discussed, the recovery of artifacts manufactured from Normanskill chert and chalcedony suggest that the occupants of the Vroman I Site may have regularly traveled between the Schoharie Valley and the Helderberg Escarpment in western Albany County in search of high quality lithic materials. Seasonal camps in the uplands may have been established in relationship to the outcrops and their repeated exploitation year after year.

The repeated movement of groups between upland and low lying areas in the Schoharie Valley would not only have had utility in the procurement of resources but may have had social importance in that it helped to forge social alliances between groups in neighboring river valleys. As evidenced by the movement of lithic materials between the Hudson and Schoharie Valleys, contact between groups living in these areas was occurring during the Transitional/Early Woodland periods. The establishment and regular interaction of groups living in these areas was not insignificant and the corridor along Route 443 would have been an important prehistoric transportation route. Further, its use can be documented in the archaeological record as continuing until the time of European Contact (Bragadon 1996; Cassedy and Webb 1996; Diamond 1995; Dunn 1994; Rafferty et al. 2014:177-199). Lastly, the Vroman I Site is located in an area that is on the margins of what has traditionally been described as the boundary of the "Meadowood Culture" (Granger 1978, 1981:63-100; Tache 2011; Versaggi 1989:45-56). If the occupants of the Schoharie Valley were extensively displaced from related groups residing in a core area in central and western New York, the establishment of positive interaction networks with neighboring groups would have been all the more important since interaction with groups to the east would not only have helped to create support networks during periods of hardship and subsistence failure, but would also have created important mechanisms for insuring protection in times of upheaval and warfare.

Comparison with other sites in Eastern New York

The importance of small campsites such as those identified at the Vroman I Site cannot be downplayed, given that they characterize locations where much of the day-to-day activities of those living in the valley were carried out (Cassedy and Webb 1996; Davis 1995; Lennox 1995; Tooker 1991; Van den Bogart 1988). As evidenced by the large number of sites that surround the Vroman I Site, the landscape was likely characterized by a large number of small sites used for a variety of activities. Table 2 provides a brief summary of the Vroman I Site and other Transitional/Early Woodland sites that have been excavated as a result of cultural resource management investigations in the Route 443/155/85/32 Corridor extending from the confluence of the Fox and Schoharie Creeks in Schoharie County eastward to the Hudson River in Albany County. The remainder of this paper provides a comparison of these Transitional/Early Woodland sites in eastern Schoharie and western Albany Counties and the range of sites that may have been occupied in these upland and lowland areas during this time period. Included among these sites are the Schoharie Creek II Site (Rieth 2008, 2012; Rieth and LoRusso 1996), the Winnie II Site (Sopko 1999), the Nyquist Site (Fisher 1974; Sopko 1999), the Van Wie Site (Rieth 1998a:17-36), the Pethick Site (Rafferty et al. 2014:177-199; Rafferty et al. 2007:167-186; Rieth et al. 2007:59-80), the Dennis Site

Table 2. Comparison of Settlement Patterns at the Vroman I Site and Other Transitional/Early Woodland Sites in Eastern New York (NYSM # 10146 and NYSM # 10148).

Site Name	Drainage	Setting	Size (m)	Features	Artifacts	Reference
Vroman I	Fox Creek/ Schoharie	Terrace	573 m² (5,875 ft²)	None; fire-cracked rock	Debitage, chipped stone tools, utilized flakes, faunal remains	Rieth 2001, 2015
Schoharie Creek II	Schoharie	Floodplain	500 m² (5,120 ft²)	Hearths; charcoal scatters	Debitage, chipped stone tools, utilized flakes, Vinette I pottery, faunal remains, botanical remains	Rieth 2012
Smith-Holloway IV	Schoharie	Floodplain	64 m² (688 ft²)	Hearths; charcoal stains	Meadowwood - Orient projectile points; Vinette I projectile points	Rieth et al 2002
Winnie III	Onesquethaw	Floodplain	112.5 m² (1,250 ft²)	Charcoal stains; hearth	Debitage	Sopko 1999
Van Wie	Onesquethaw	Upland	0.33 ha (0.8 ac)	None; fire-cracked rock	Debitage, ground stone tools	Rieth 1998a
Normanskill	Normanskill	Upland	1,059 m² (11,400 ft²)	None	Biface, preforms, utilized flakes, debitage	Dean et al 1999
Sopko I	Onesquethaw	Terrace/ Upland	800 m2 (11,200 ft2)	None	Debitage	Sopko 1999
Dennis	Hudson	Terrace/ Floodplain	27.87 m² (300 ft²)	Pits	Cordmarked pottery, Orient projectile points, knives, debitage, bifaces	Funk 1976
Pollock	Schoharie	Terrace	286 m² (3078 ft²)	Hearths; charcoal scatters; post-molds	Debitage; chipped stone tools, utilized flakes, Orient-Meadowwood points; Vinette I pottery; anorthrocite; ground stone tools	Rafferty et al 2014

(Funk 1976:29-42), the Wormouth Prehistoric Site (Dean et al. 1999) and the Smith-Holloway IV Site (Rieth et al. 2002:1-15).

The artifacts from the Vroman I Site are similar to those found at the upland Van Wie and Wormouth sites in the nearby Normanskill and Onesquethaw Drainage Basins. The artifacts recovered from the Vroman I Site most closely resemble those of the Van Wie Site (Rieth 1998b). At the Van Wie site, a small camp located along Route 443 in the Town of New Scotland, Albany County, the artifact assemblage lacks large quantities of utilized flakes and small expedient block tools. According to Jones et al. (1992) and Versaggi (1994), these artifacts are commonly found on upland sites in Albany and Schoharie Counties and are characteristic of temporary forays into the uplands to procure materials for use at settlements located in lowland areas. The absence of these expedient tools at the Vroman I and Van Wie Sites may suggest that the chert sources surrounding the site were abundant enough that such small block tools weren't needed, or the site's occupants possessed tool kits that were sufficient for the tasks occurring at the site.

Nearby at the Wormouth Prehistoric Site, located in the upper Normanskill Creek Valley and its tributaries in Albany and Schenectady Counties (Dean et al. 1999:49-55), a different set of activities may have been occurring when the lithic assemblage is compared with that of the Vroman I Site. More than 66% of the total artifact assemblage from the Wormoth Prehistoric Site consists of early stage reduction flakes suggesting that initial reduction chert cores was an important activity occurring at the upland site. Combined with the early primary/secondary flakes, the preform further reinforces the belief of tool manufacture occurring at the site. Chert believed to have come from the Onondaga and Kalkberg limestone formations was found. When compared with that found at the Vroman I Site, similarity in lithic resources may suggest that the occupants of both sites exploited similar resources along the Onondaga and Helderberg escarpments.

The Vroman I, Wormouth, and Van Wie Sites are similar in that all three failed to produce evidence of cultural features within the project limits. While this may be in part a result of their small size, the fact that all three sites were partially excavated during cultural resource management projects may also account for their absence. The presence of fire-cracked rock found within the project limits of the Vroman and Van Wie Sites (Rieth 1999, 2015) may also suggest that features previously existed within the project limits but have since disappeared due to natural processes.

Repeatedly occupied seasonal camps, located on the floodplain of the Schoharie and Fox Creeks, show a much greater diversity of artifacts than that of the Vroman I Site, as evidenced by deposits at the Smith-Holloway an Schoharie Creek II Sites near Central Bridge (Rieth al. 2003). Excavations in 2000, 2001, and 2002 at the Smit Holloway 4 Site by staff from the New York State Museu produced mixed Transitional and Early Woodland assem blages containing concentrations of lithic debitage, Orie and Meadowood projectile points, cord-marked Vinette pottery fragments, pieces of calcined bone, side and en scrapers and oval bifacially worked tools. Wood charco recovered from several small hearths and living flo contexts suggest that the site's occupants were collecti pieces of deadwood from nearby forest floors and floo plains around the site, while botanical remains from the si suggest a seasonal occupation. Radiocarbon dates we produced that are contemporaneous with those produced f the Transitional eriod occupation at the Vroman I Site.

The Schoharie Creek II Site, another Transitional/Ear Woodland campsite located along the main branch of t Schoharie Creek, resembles the occupation identified at t Smith-Holloway 4 Site, both in terms of its diversity of ar facts and the presence of feature and living floor deposi Included among these features were several small hearth postmolds, and charcoal scatters representative of a sm campsite. The artifact assemblage from the site consists o mix of bifacially worked tools, debitage, and ceram pottery fragments. Among these artifacts were several piec of chalcedony, Pennsylvania jasper, and Normanskill ch suggesting that the occupants of this campsite, like the occ pants of the Vroman I Site, were engaged in interacti networks that included access to these materials. Like t Vroman I Site, much of the debris at this site is made fr Onondaga chert (possibly from the same Terrace Mount outcrops exploited by the occupants of the Vroman I Si suggesting that this material was important in stone t manufacture.

Camps along the floodplain of major tributaries of nearby Onesquesthaw Creek also exist, as evidenced occupations at the Winnie III Site (Sopko 1999). The Win III Site represents a small camp located in the Town of N Scotland, Albany County. It produced lithic debita projectile points indicative of the Transitional/Ea Woodland Periods, and chipped stone tools. A small feat and scatters of charcoal were identified during the site exa ination. Like the other camps located on the floodplain of Schoharie Creek, as well as the Vroman I Site, most of debitage suggests that the reduction of larger cores occur elsewhere, while the manufacturing processes carried ou the site appear to be related to the reduction and shaping tools.

Finally, in addition to upland and floodplain settin larger camps surrounded the Vroman I Site. Among the m

well-known of these sites is the Dennis Site located along Route 32 in the Town of Menands, Albany County. The site was initially excavated by Robert Funk and Arthur Johnson in 1964 and 1965 (Funk 1976:29-42) and produced evidence of a large campsite occupied during the Transitional and Early Woodland time periods. Diagnostic artifacts including Meadowood and Orient Fishtail projectile points, Vinette I cordmarked pottery, and Meadowood cache blades were found. Other artifacts included pieces of debitage made from Onondaga, Kalkberg, Oriskany, and Normanskill chert, suggesting that the occupants of this site too were using a variety of materials not found in the immediate vicinity. Soapstone vessel fragments were also recovered and represent a material not found at the Vroman I Site. In addition to artifacts, a number of features including hearths and pits were also identified, suggesting that the site was full of activity for a substantial portion of the season.

Similarly large occupations were recently reported by Rafferty et al. (2014) at the Pethick Site, located on the floodplain of the Schoharie Creek near the Village of Central Bridge. The site produced occupations associated with a mixed Transitional/Early Woodland campsite containing hearths, possible postmolds, and soil stains indicative of the occupation of the site for some duration. Radiocarbon dates from the site are contemporaneous with those identified for the Vroman I Site as previously discussed. Artifacts from the site include a mixture of Orient Fishtail and Meadowood points, Meadowood cache blades, and pieces of cordmarked Vinette I pottery, as well as pieces of steatite indicating the use manufacture of stone vessels at the site. The occupants of the Pethick Site probably also exploited many of the same chert outcrops at Terrace Mountain as those exploited by the occupants of the Vroman I and Schoharie Creek II Sites. The presence of chalcedony and Pennsylvania jasper artifacts at the site also suggests that the occupants of this site were participating in similar interaction networks as those identified at the Vroman I Site.

Conclusion

The Vroman I Site was excavated by the New York State Museum's Cultural Resource Survey Program in 1998 during a survey of the property for the New York State Department of Transportation and the Federal Highway Administration. Excavations at the Vroman I Site produced information concerning the occupation of a small Transitional/Early Woodland camp site along Fox Creek in the Town of Schoharie, Schoharie County, New York. The occupants of this site were engaged in various activities including the manufacture of stone tools at the site. The recovery of non-local chalcedony, Normanskill, and Pennsylvania Jasper, none of which outcrop in the Schoharie Valley, suggest that the occupants of the site had access to resources in the lower Hudson Valley and coastal New England. These interaction networks are not unique to the occupants of the Vroman I Site but can be found at other Transitional/Early Woodland sites located in eastern Schoharie and western Albany counties.

Although the site deposits identified at the Vroman I Site, on their own, do not dramatically alter our understanding of the past, future settlement studies need to continuously incorporate such sites into existing models. Small campsites such as the Vroman I Site represent important pieces of the puzzle of past land use activities. Through the continuous examination and incorporation of these small sites within larger regional settlement pattern analyses, it is hoped that we can develop a more complete picture of the range of activities occurring at these sites and the choices that underlie the behaviors of past groups in eastern New York.

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The Macauley 9 Site: A Late Archaic and Probable Early Woodland Site

Richard N. Maxson, State University of New York at Geneseo

The Macauley 9 Site is one of a group of sites called the Macauley Complex of sites located on the eastern bank of the Genesee River in Livingston County, New York. It was excavated by field school students in the 1970s. The artifacts from the site indicate that it was occupied during the Late Archaic period, and probably also in the Early Woodland period.

Introduction

The Macauley 9 Site (Cda 140) is one of the sites comprising the Macauley Complex. It was excavated by students in an archaeological field school at SUNY Geneseo under the direction of Dr. Wendell Rhodes, then Chair of the Department of Anthropology. The excavations took place during the summers of the mid and late 1970s. This report is based on the extant artifacts and documentation that have been stored at SUNY Geneseo.

The Site

The Macauley 9 Site is located on the first terrace of the east bank of the Genesee River about 200 m (650 ft) north of the confluence of the Genesee River and Canaseraga Creek. Figure 1 indicates a more exact location of the site. As is evident from the map, Mac 9 is bounded on the west by an abandoned railroad bed and on the north and south by gul formed by erosion from water flowing down from a ridg the east. At present, the eastern end of the site is within right-of-way of Route I-390. The topographic map re duced in Figure 1 predates the highway.

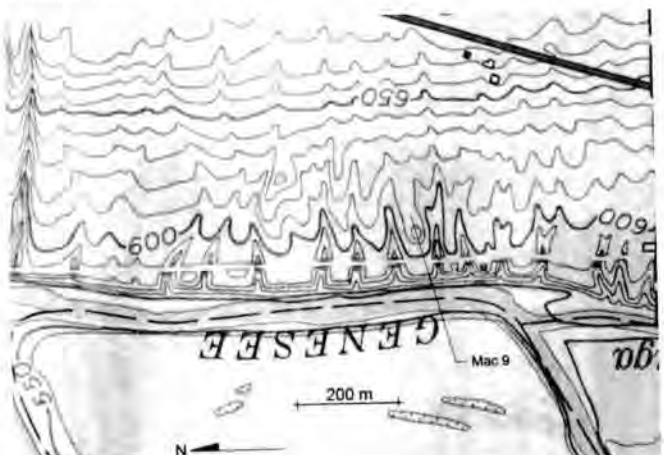

Figure 1. Map showing the location of the Macauley 9 Site (Mac 9). The map is copied from USGS map of the Geneseo quadrangle dated 1978.

Mac 9 consists of two loci: one, apparently quite the railroad bed, about 15 m (50 ft) above the river level the other, further east, about 20 m (70 ft) above the river. terrain to the east continues to rise, slowly at first, and more rapidly to the above-mentioned ridge about 3 km mi) distant and 180 m (600 ft) higher. West of the river plain that is about 3 km (2 mi) wide at the site. This pla the bed of former Lake Geneseo, a peri-glacial lake extended several kilometers both north and south of the (Muller et al 1988:125).

The soils at the site are Ottawa loamy fine sand, u lating phase (USDA 1956:map 3, 78). The topso "...strongly acid where unlimed." The soil beneath topsoil is "...yellowish-brown loose strongly acid lo fine sand." A few of the reports made by the students a time indicate that the topsoil depth at the site was only a inches, implying that the site had not been extens plowed.

Excavations

The information in the files indicates that there were loci at the Mac 9 Site. According to the field notes primary datum for Locus 1 was located 420 ft (130 m of the abandoned railroad bed. That locus was in portions with about 17 m (55 ft) between them. Fig shows the units comprising Locus 1. Locus 2 is smaller and nearer the old railroad. The extant records show the exact location of Locus 2, but perhaps it was of the small knoll shown on the topographic map in Fig

The excavated units were 5 ft by 5 ft (1.5 m by square. Fifty-five 5 ft by 5 ft units were excavated at 1 and eleven at Locus 2. There is no extant record screen size used in the excavation; probably it was ¼ which was standard by this time in American archaeol addition, a number of test pits were dug at unknown tions—based on the incomplete information in the

documentation. The artifacts from these test pits are included in the databases, but I have not included them in the analysis because of the uncertainty of their locations.

Laboratory Procedures

Lithics

The lithic artifacts were identified, measured, and weighed, except for the fragments, which were not measured. The tools and a few other interesting lithic artifacts were photographed. The debitage was sized into four classes:

- Size 1 were those pieces of debitage that would fit inside a 1 by 1 cm square;
- Size 2 were those pieces that would fit inside a 2 by 2 cm square;
- Size 3 were those pieces that would fit inside a 4 by 4 cm square;
- Size 4 were those pieces that were too large to fit inside the 4 by 4 cm square.

All the lithic data was recorded in a Filemaker Pro 11 database; it contains 501 records, and is entitled "Mac 9 Lithics." The photographs of the artifacts are in a file labeled "Mac 9 Photos" located in the Anthropology Department at SUNY Geneseo.

Potsherds

The potsherds were few. Rim sherds were separated from body sherds. I sized and counted the sherds as described above for the chert flakes and fragments. These data were recorded in a Filemaker Pro 11 database entitled Mac 9 Other. As there were no decorated sherds, no photographs were taken of potsherds.

There were a few artifacts that did not fit into either of the above categories. These artifacts were identified, weighed, and measured if appropriate. The data describing these artifacts, along with the data describing the potsherds is contained in a database named "Mac 9 Other," containing 181 records.

Features

Information about the possible features that were found at the Mac 9 Site was found in several places:

- One extant completed Feature Record form.
- Notes about possible features were sometimes found on the Unit Record sheets. These forms contained a plan view of the unit and the students marked the location and depth of each artifact on this "map." Often they made sketches of the artifact on the margins. Sometimes a feature was indicated on this form. These forms were useful in reconstructing the excavation.
- The Archaeological Field Record forms also sometimes contained information about possible features.
- Occasionally, there was information about a possible feature in the "Remarks" field on the tags in the artifact bags.

Feature data were recorded in a file entitled "Possible Features," also written in Filemaker Pro 11; there are 22 records in that database. I reviewed the available information about each possible feature to see if there was enough credible data to decide if the reported observation was indeed a cultural manifestation, and if so, whether there was enough data to characterize it. The results of this effort are described below in the Feature Data section.

Artifactual Data

Lithics predominate in the artifacts from the Mac 9 Site. There were 181 chipped stone artifacts; detailed data are presented in Table 1. This does not include the debitage (count 10,639). I measured the angle of the working edge of the scrapers using a contact goniometer. In a few cases the edges were so damaged from use that a meaningful measurement was impossible. The working edge angle of the

Table 1. Chipped Stone Artifacts from the Macauley 9 (Mac 9) Site.

Description	Count
Biface Fragment	12
Cache Biface	4
Chert Nodule/Pebble	16
Core/fragment	12
Drill/fragment	6
Knife	4
Point/fragment	108
Point Preform	1
Scraper/fragment	18
Total	**181**

Table 2. Pecked and Ground Stone Artifacts from the Macauley 9 (Mac 9) Site.

Description	Count
Adze/fragment	10
Netsinker	1
Nutstone	1
Stone Fragment	1
Total	**13**

Table 3. Rough Stone Artifacts from the Macauley 9 (Mac 9) Site.

Description	Count
Hammerstone/Anvilstone	19
Hammerstone/Muller	1
Stone Ornament	1
Total	**21**

scrapers averaged 61.2° with a standard deviation of 8.0°. Chert nodules/fragments/pebbles varied in weight from 17.2 to 441.7 gm.

The pecked or ground stone artifacts from Mac 9 totaled 13 and are detailed in Table 2. The beveled adze is a diagnostic artifact for Lamoka sites (Ritchie 1944:226). Many such fragments have been found at the other Macauley sites. The "stone fragment" was a small piece of gneiss that was ground on one surface. The radius of curvature of this ground surface was small.

Rough stone artifacts numbered 37 and are detailed in Table 3. The artifact labeled "hammerstone/muller" showed evidence of use both as a hammerstone and for crushing hematite. The artifact that I called an ornament was a thin ovate stone. A hole in the smaller end was formed by the loss of a crinoid fossil (Dr. Paul Pacheco, personal communication, c. 2013). The stone was water-polished but had not been further smoothed by grinding. There were a few chips around the hole: perhaps the stone had been suspended from a thong. There also were three bags containing hematite, the total weight of which was 70.2 gm.

Figures 2 and 3 show the distribution of the stone tools in Locus 1 and Locus 2, respectively. The ceramic artifacts uncovered at Mac 9 consist of three potsherds: one fairly large rimsherd and two smaller body sherds. All three can be comfortably placed in the Vinette I type (Ritchie and MacNeish 1949:100). The rimsherd was found in Locus 1, unit N20 /E10. The two body sherds were found in Test Pit 1, excavated in 1974. According to a document in the Mac 9 files, this test pit was "341' E of the N/S datum." Given the date of the test pit excavation, this is presumed to be a reference to the Locus 1 datum. This would place the location of the test pit well within the present right-of-way of I-390.

The non-lithic and non-ceramic artifacts are detailed in Table 4.

Features Data

There were 22 possible features identified by the excavators. An examination of the extant data relating to each of these features allowed me to characterize only two of them with any confidence. These were in Locus 1, units N15/W35 and N15/W45 and were probably hearths. This judgment was based on the reports of the circular shape of the soil discol-

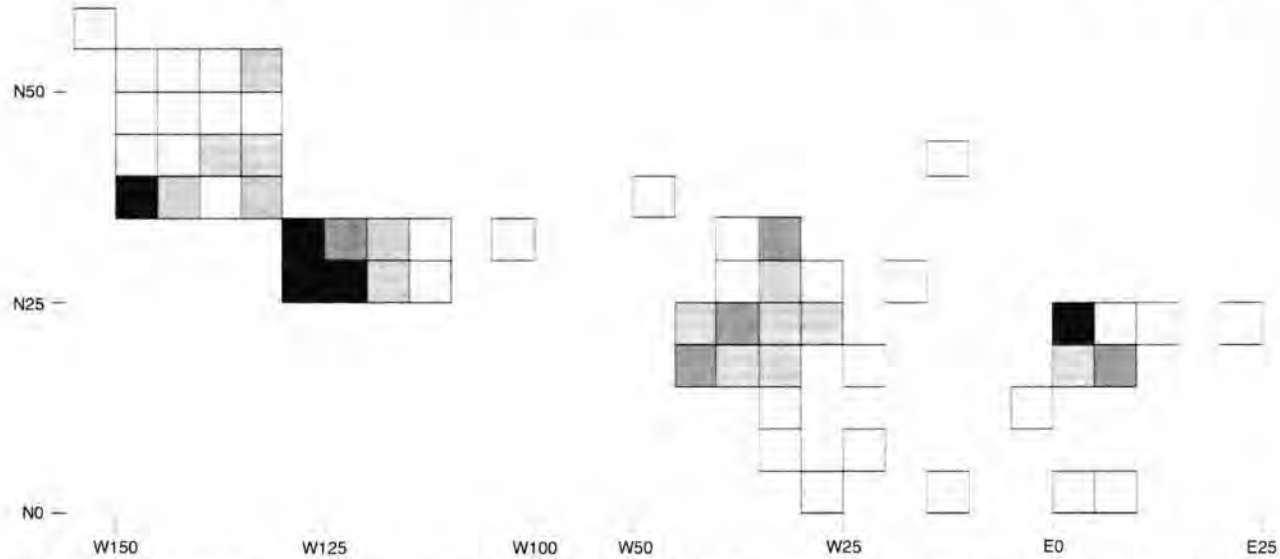

Figure 2. Stone tool distribution in Locus 1 at the Macauley 9 Site (Mac 9). Note the discontinuity in the east-west direction. Key: 15% shading denotes 1 to 2 artifacts; 30% shading denotes 3 to 4 artifacts; 50% shading denotes 5 to 7 artifacts; 100 % shading denotes 8 to 13 artifacts.

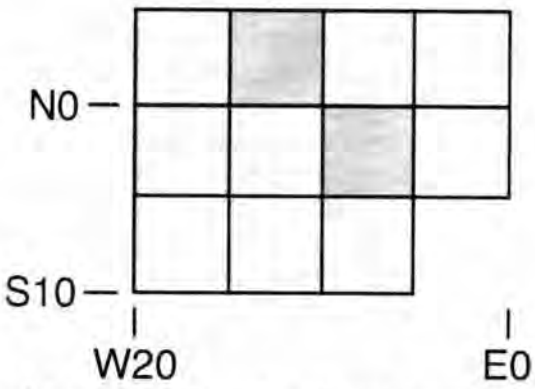

Figure 3. Stone tool distribution in Locus 2 at the Macauley 9 Site (Mac 9). Key: 15% shading denotes 1 to 2 artifacts; 30% shading denotes 3 to 4 artifacts; 50% shading denotes 5 to 7 artifacts; 100 % shading denotes 8 to 13 artifacts.

oration, the discoloration being redness, and the presence of charcoal. Had there been extant profiles, the identification might have been more positive.

Analysis

The projectile points and the potsherds recovered from the Mac 9 Site are the primary markers for identifying chronologically distinct components of the site. Since both of these artifact classes have been well-dated by radiocarbon techniques at many sites, they may tell when the Mac 9 Site was occupied. Table 5 presents the data for the Mac 9 Site. It lists the projectile point counts using the cluster concept of Noel Justice (Justice 1995:6, 9). It also lists the identifiable point fragments found at the site and a scraper that had been reworked from a projectile point.

From these data, it seems clear that there was occupation of the Macauley 9 Site by both the makers of Brewerton and Lamoka points. Lamoka points date from 3500 to 2500 B.C. (Justice 1995:129) and Brewerton points date from 2980 to 1723 B.C. (Justice 1995:115) . A Susquehanna presence dating from 1700 to 700 B.C. (Justice 1995:167) is also indicated. Finally, evidence of a Meadowood presence on the site is indicated by the finding of the cache bifaces listed in Table 1; Meadowood points date from 1300 to 500 B.C. (Justice 1995:171).

The potsherds, although they are few, also provide information about occupation of the site. All three potsherds identified as Vinette I, which lends much credence to a Meadowood occupation. The small fragment of gneiss mentioned above may be a fragment of a stone vessel. This is not too surprising since several fragments of at least two stone vessels made from gneiss were discovered nearby at the Mac 6 Site (Maxson 2014:6). Thus the presence of this fragment, if I have interpreted it correctly, is additional evidence of a Susquehanna presence at Mac 9. Given the above information, the general time periods of occupation of the site extend from about 3500 to 500 B.C.

Conclusions about site utilization might have been inferred from the data about features, had it been more abundant. We are left with what we might be able to infer from the distribution of debitage. I plotted the debitage count, by unit, for the two loci. The count per unit varied widely, from zero to 761, but there did not seem to be any particular pattern to the distribution. Hence, I have not reproduced those plots in this report.

Stanley Ahler (1989) presented data on a method of analyzing debitage that is derived from both debitage from experimental knapping and from debitage collected at archaeological sites. Ahler's premise is that an analysis of debitage can tell much about the process of tool making at a site. To put it crudely, big flakes came from early stages of tool making and tiny flakes were products of pressure flaking. Ahler sorted the debitage using sieves and both counted and weighed the fractions. He then compared the flakes from the experimental, controlled knapping with the archaeological assemblages. He calls this method "mass analysis."

A particularly good critique of Ahler's work is in Andrefsky (2007). The criticism that resonated with me was

Table 4. Other Mac 9 Artifacts from the Macauley 9 (Mac 9) Site.

Description	Count
Historic Bone	4 bags
Charcoal	1 bag
Spent Cartridge	1
Deformed Bullet	1
Button	1

Table 5. Points and Identifiable Point Fragments and Scrapers from the Macauley 9 (Mac 9) Site.

Cluster	Points	Point Fragments	Scrapers	Total
Brewerton	5	4	1	10
Lamoka	38	22	0	60
Meadowood	0	3	0	3
Susquehanna	0	1	0	1

Table 6. Percentages of Debitage Sizes for Western Portion of Locus 1 at the Macauley 9 (Mac 9) Site.

Debitage Size	Average Percentage	Std. Dev.
1	18.4	12.7
2	61.2	11.3
3 plus 4	19.4	11.9

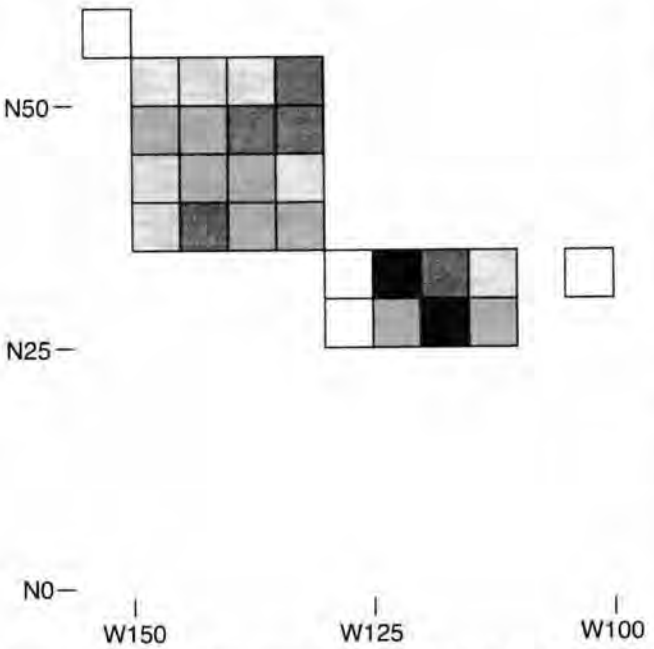

Figure 4. A plot of the percentage of large debitage from the selected area of the Macauley 9 Site (Mac 9). The numbers along the horizontal axis are the unit numbers west of the Locus 1 datum. Similarly, the numbers along the vertical axis are the unit numbers north of the datum. A glance at Figure 2 will help you locate the area in this figure. Key: 15% shading denotes 1 to 2 artifacts; 30% shading denotes 3 to 4 artifacts; 50% shading denotes 5 to 7 artifacts; 100 % shading denotes 8 to 13 artifacts.

that an archaeological assemblage is very likely to be a palimpsest of different stages of tool making, taking place at different times and probably even by different groups of occupants. Thus, trying to assign a particular array of flake sizes and weights from an archaeological assemblage to a specific stage of manufacture is difficult, if not impossible. However, it seems to me to be only logical that large flakes, flakes with cortex, and chert fragments are an indication of an early stage of tool making.

To see if a location where early stages of toolmaking existed at Mac 9, I calculated the percentage of each size of debitage for each of the 26 units in the western portion of Locus 1 (The Laboratory Procedures section above describes the sizing process.). I chose that area because it contained more contiguous units than either of the other two areas. The results are shown in Table 6. The data in the table are based on counts of the debitage of each size. Because I thought that both Size 3 and Size 4 (i.e., pieces larger than 2 by 2 cm, would be indicative of primary reduction, I combined the counts for Sizes 3 and 4. Figure 4 is a plot of the combined count of Size 3 and Size 4 for each of the units in the chosen area. The area near N25/W125 is conspicuous, making me think that it was likely an area of primary reduction. I have subsequently learned that the data in Table 6 are not normally distributed, and thus that the usual statistical measures do not apply. This has not been resolved at this writing but Figure 4 leads me to believe that this topic is worth following up.

I have devised a metric that I have called Points per Year (PPY) to get some idea of how intensely the site was used during its period of occupation. Almost surely the site was used episodically; the Late Archaic people were probably hunter/foragers who moved on when the resources at Macauley diminished. The PPY metric may tell us a bit about the combination of how often and by how many people the site was used. PPY is probably only accurate to an order-of magnitude or so; errors may be due to:

- The point counts for Mac 9 are few, particularly for the Meadowood and Susquehanna artifacts.
- The radiocarbon dates are not exact.
- The cost of chert and the time to make new points (i.e., it was probably "less expensive" to sharpen an old point than to make a new one.
- The point counts are probably influenced by factors other than number of occupants. The circumstances of the artifacts being in the ground, and of their discovery, are probably important and unknown.

That being said, the calculation gives us the following numbers indicated in Table 7. If these numbers mean anything at all, they suggest that the makers of Lamoka points used the site by far the most.

Some Unusual Artifacts

Two drills that have not been found at previously analyzed

Table 7. Intensity of Occupation at the Macauley 9 (Mac 9) Site.

Point Type	Point Count	Years of Point Use	Reference	PPY
Brewerton	11	1257	Justice 1995:115	0.009
Lamoka	58	1000	Justice 1995:129	0.06
Susquehanna	Possible 2	1000	Justice 1995:167	<0.002
Meadowood	Possible 3	800	Justice 1995:171	<0.004

Macauley sites are Accession Numbers 9.345 and 9.348. One of these artifacts is shown in Figure 5. The unusual feature of these drills is that their shape is that of an isosceles triangle. Instead of having a broad proximal end to provide for leverage when used in the fingers, the proximal end is comparatively narrow and is notched. Assuming the notches are provided for hafting, which seems obvious, the drills' rotational motion must have been affected by rolling the haft between the palms or perhaps by a bow. These drills are very much like those in Plate 22 in Ritchie (1980) illustrating artifacts from the Lamoka Lake site.[1] I scanned the other photos of drills in Ritchie's book without finding other pictures of drills having this shape. However, in his 1944 book, Ritchie does not list these drills as diagnostic of a Lamoka occupation.

A spectacular artifact was found at Mac 9 that has earned the nickname "Christmas Tree Point" because of the serrated shape of the blade. It is illustrated in Figure 6. This point style is not illustrated in Ritchie's typology (Ritchie 1971), nor in that of Justice (1995). The presence of serrations is not uncommon in points from the Early Archaic period. One possibility is that it is an Early Archaic point called a Kirk Serrated (Justice1995: 83, 84). The illustration in Justice is of a point that apparently has been damaged and one side of the blade is missing. The serrations on the pictured fragment are not unlike those on the Mac 9 point. The major discrepancy between the Mac 9 point and the Kirk Serrated is the shape of the base; the Kirk points have a straight stem and the Mac 9 point is side-notched with a slightly convex base.

Another possibility is that the Macauley 9 point could be classified as the Early Archaic Palmer Corner Notched (Justice1995:75, 79). Justice pictures three of these points (Justice 1995:75 i, j, and k), two of which are serrated, although much less "boldly" than the Macauley point. Ritchie and Funk (1973:39) report finding Palmer points at Richmond Hill, which is on Staten Island, but they do not say whether they were serrated.

Funk (1993), in his report of excavations in the upper Susquehanna River valley, pictures two point fragments that may have been serrated. These are Funk 1993:366 Plate 107, Figure 3 and Funk 1993:439 Plate 149, Figure 5). It is very difficult to tell from the photographs if these points were indeed serrated or if the damage to them resulted in what now appears to be the remains of a serrated point. The stems on both these points are "Brewerton-like," as is the Mac 9 point.

[1]A hafted drill was identified at another Macauley site (Mac 6) but it was not trianguloid; it is quite unlike those discussed here (Maxson 2014).

Figure 5. A triangular drill, notched for hafting, from the Macauley 9 Site (Mac 9).

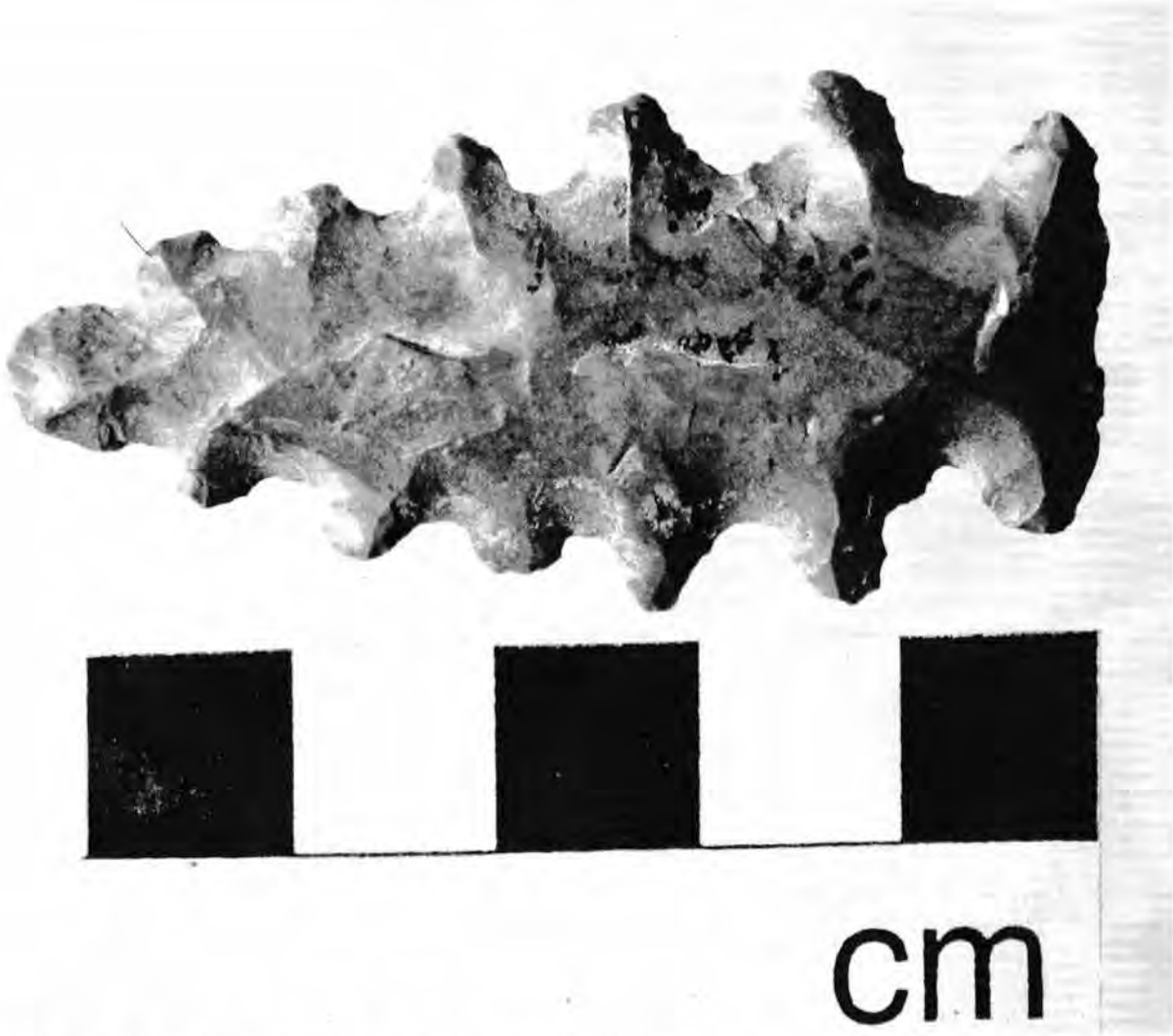

Figure 6. An unusual point, dubbed a "Christmas tree point" from the Macauley 9 Site (Mac 9).

I would characterize all the above-mentioned points as being trianguloid, while the Mac 9 point is elliptical. All in all, an Early Archaic origin is plausible.

Conclusions

The primary occupation at the Macauley 9 Site appears to be Lamoka. The artifacts that are diagnostic of that period are the Lamoka points and the beveled adze, several fragments of which were found at the site. A lesser Brewerton presence is manifested by several Brewerton points and a scraper that was made from a Brewerton Corner-Notched point. Three point fragments, though they are not definitely Meadowood, and three Vinette I pottery fragments attest to the probable presence of the Meadowood people at Mac 9. The possibility of a Susquehanna occupation is suggested by a single point fragment and a scraper that may have been made from a Perkiomen point.

The data about subsistence are few. The projectile points are evidence of hunting of birds and large and small game. Although there is only one netsinker in the collection, it seems likely that fishing provided at least some of the food needs of the population. The acidity of the soil may preclude the presence of the remnants of shellfish in the collection, but again, it seems likely that this resource was utilized. The abundance of oak and hickory trees in the valley probably furnished nuts for the diets of the inhabitants. The finding of a nutstone, although only one, lends some credence to this hypothesis.

Acknowledgements

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The Macauley 10 and Macauley 12 Sites: Two Late Archaic Sites in Livingston County, New York

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The Macauley 10 and Macauley 12 Sites are two small loci in the Macauley Complex, located on the banks of the Genesee River, a few kilometers south of the village of Geneseo. The two sites are situated about 100 m apart on adjacent low ridges. They were excavated by SUNY Geneseo field school students in the 1970s and 1980s under the direction of Wendell Rhodes. Few tools were found, but a comparatively large amount of debitage was collected, perhaps indicating that these were tool-making and maintenance locations.

Introduction

The Macauley 10 Site (Cda 139) is one of the sites in the Macauley Complex excavated by students in field schools directed by Dr. Wendell Rhodes in 1974 and 1985. The Macauley 12 Site (Site No. in process) is a second site on the adjacent low ridge that was excavated in 1982, again under the direction of Dr. Rhodes. Both sites were small. The unusual thing about them is that both yielded few tools, but about the average amount of debitage found at other sites in the Macauley Complex. I have reviewed the artifacts and the associated documentation related to these sites; this article contains the results of that review.

Information about the excavations comes from inspection of the artifacts themselves, the tags in the artifact bags, and copies of a form that I have called *Unit Record Sheets*. These forms contained a plan view of the unit on which the students recorded the location of the artifacts within the unit. Usually they sketched the artifacts in the margins. In addition, a few of the student notebooks are extant.

The Sites

The Macauley Complex is located on the east bank of the Genesee River about 5 km (3 mi) south of the village of Geneseo in Livingston County New York. The banks of the river are punctuated by gullies, created by drainage from a ridge to the east. Low ridges are situated between these gullies and Mac 10 and 12 were located on adjacent ridges. A student notebook and a document, presumably written by Dr. Rhodes, place the sites about 700 m north of the confluence of Canaseraga Creek and the Genesee River. Mac 10 was, according to a brief document found in the files and presumably written by Dr. Rhodes "...4 to 500 ft [120 to 150 m] east of the railroad bed." Mac 12 was, according to several student notebooks, 80 to 100 ft (about 30 m) east of the railroad bed. Thus the sites are about 100 m (330 ft) apart. The railroad bed mentioned above is the abandoned bed of a railroad that runs along the river at this location. The sites are indicated in Figure 1, an enlarged photograph of one corner of the USGS topographical map of the Geneseo quadrangle, issued in 1976.

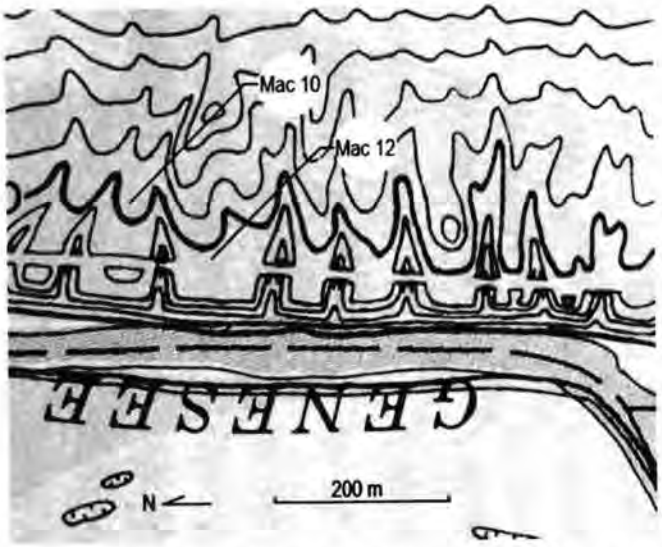

Figure 1. Map showing the location of the Macauley 10 and Maculey 12 Sites (Mac 10 and Mac 12). The map is copied from USGS map of the Geneseo quadrangle dated 1978.

The terrain rises from the river bank, slowly at first, then more rapidly to a high ridge about 5 km (3 mi) east of the river and about 180 m (600 ft) above it. West of the river is a flat plain about 3 km (2 mi) wide that is the relict bed of a peri-glacial lake, Lake Geneseo (Muller et al. 1988 126). The site soils are Ottawa loamy fine sand, rolling phase (USDA 1956:Map 3, 79). This document states that "...the topsoil is ...strongly acid where unlimed" and that the soil beneath the topsoil is "...yellowish-brown, loose, strongly acid loamy fine sand" (USDA 1956: Map 3:79).

Excavations

The sites were excavated in 5 ft by 5 ft (1.5 m by 1.5 m) units. Thirty units were excavated at Mac 10 and ten at Mac 12. In addition, several test pits were dug at both sites; unfortunately, the size and location of these test pits is not well documented. The tables associated with the Data section contain all the data about artifacts recovered from the actual excavations; however, because the spatial relationships are important in the data analysis, I opted to not include the data from the test pits in the analysis. The mesh of the screens used at the sites was not documented but was probably ¼ in since that was the accepted standard in the 70s and 80s (personal communication, Dr. Paul Pacheco).

Lab Procedures

Lithics

I identified the lithic artifacts. I measured and weighed them and entered the data in databases, one for each site. I photographed most of the tools. I separated the chert flakes into four size groups: Size 1 was the pieces that would fit in a 1 cm square; Size 2 was the pieces that would fit in a 2 cm square; Size 3 was the pieces that fit in a 4 cm square; Size 4 was the pieces too large to fit in the four cm square. I counted the number of pieces of debitage in each size group and, in the case of Mac 12, I weighed the groups separately. All four sizes of the Mac 10 debitage were weighed together.

There were also a number of "chunks" of chert that did not have a bulb of percussion. Often these objects had some limestone cortex. Some of them had flake scars; these may have been core fragments. Others had no markings on the fractured surfaces. My experience with fractured surfaces of glass led me to believe that some of these were very low stress breaks, perhaps due to freezing of moisture in existing cracks. Others may have been shatter from the reduction process. For lack of a better term I called these "chert fragments" and included them in the debitage. In the case of the Macauley 10 Site, I weighed the entire bag of flakes and fragments.

Potsherds

A few potsherds were found. These were sized and weighed as described above for the chert flakes. There were no decorated sherds, and thus no photographs.

Other Artifacts

There were a few items in the collection that did not fit into either of the above categories. These artifacts were weighed, and counted as appropriate.

Features

There were no extant Feature Record sheets for either of the sites. I searched the extant Unit Record sheets and the Remarks field on the tags in the artifact bags for information about possible features. I found none.

Data

Lithics

The lithics can conveniently be separated into three groups: chipped stone, rough stone, and pecked or ground stone artifacts. Table 1 contains the chipped stone artifact data, Table 2, the rough stone data, and Table 3, the pecked or

Table 1. Chipped Stone Artifacts From the Macauley 10 (Mac 10 and Macauley 12 (Mac 12) Sites.

Description	Mac 10	Mac 12
Biface fragment	0	1
Core	0	1
Drill fragment	1	
Knife/ fragment	2	4
Point/fragment		
Brewerton	1	2
Lamoka	0	3
Meadowood	1	0
Unidentified	1	1
Scraper	0	2
Total	**6**	**14**

Table 2. Rough Stone Artifacts From the Macauley 10 (Mac 10 and Macauley 12 (Mac 12) Sites.

Description	Mac 10	Mac 12
Chert Nodule/Pebble	3	2
Hammerstone/Anvil stone	4	3
Hammerstone/Nutstone	1	0
Total	**8**	**5**

Table 3. Pecked or Ground Stone Artifacts From the Macauley 10 (Mac 10 and Macauley 12 (Mac 12) Sites

Description	Mac 10	Mac 12
Adze fragment	3	-
Stone Vessel Fragment	0	1
Total	**3**	**1**

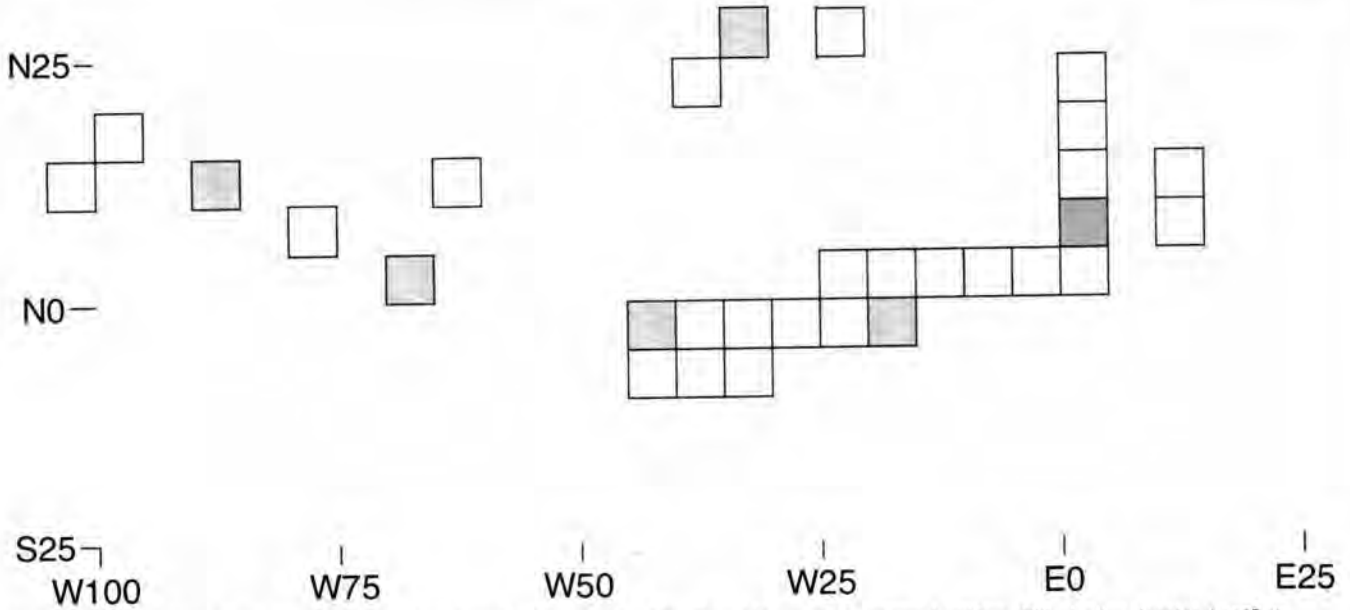

Figure 2. Distribution of the lithic artifacts at the Macauley 10 Site (Mac 10). Key: 15% shading denotes 1 artifact; 30% shading denotes 4 artifacts.

ground stone data. The patterns of distribution of the lithic artifacts for Mac 10 and Mac 12 are shown in Figures 2 and 3, respectively. The hammerstone/nutstone mentioned in Table 3 had the typical hammerstone pitting and one surface had a depression a centimeter or so in diameter and half that depth. The "possible vessel fragment" mentioned in Table 3 was small (5.6 gm) and was ground on one surface. If it was a vessel fragment, it was probably a "stray" from the nearby Macauley 6 Site where a number of vessel fragments were found.

Debitage at Mac 10 totaled 3007; and at Mac 12 the total was 1053, averaging 57 pieces of debitage per square meter. The pattern of distribution of the debitage at Mac 10 and Mac 12 are shown in Figures 4 and 5, respectively.

Pottery

Three potsherds were found at Mac 10. All were body sherds and were found in unit N5/E0: (See Figure 2 for the location of this unit.) These sherds have been refit. They were classified as Vinette I (Ritchie and MacNeish,1949:100). Two potsherds were found at Mac 12. Again, both were body sherds and were also classified as Vinette I. One was found in N0/W35 and the other in the adjacent unit, S5/W35. (Figure 3 shows the location of these units.)

Other Artifacts

The weights of the artifacts other than the lithics and pottery found at the sites are shown in Table 4. All are believed to be historic era artifacts.

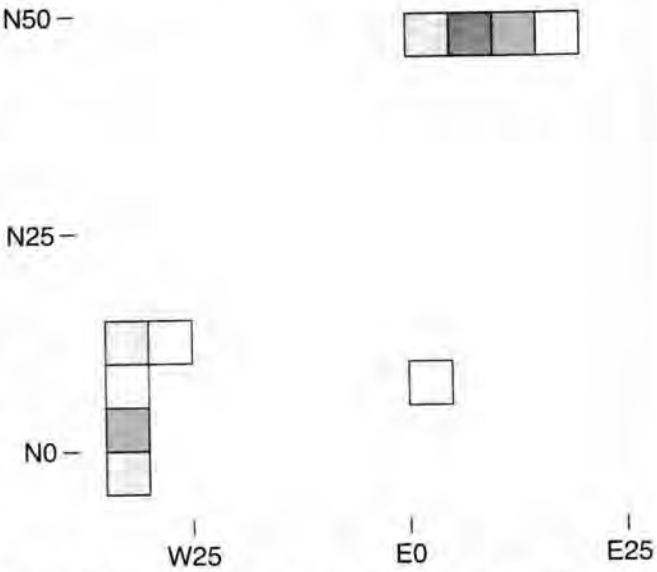

Figure 3. Distribution of the lithic artifacts at the Maculey 12 Site (Mac 12). Key: 15 % shading denotes 1–2 artifacts; 30% shading denotes 3–4 artifacts; 50% shading denotes 5–7 artifacts.

Analysis

The occupants of the sites can be inferred from the projectile points they left behind. Brewerton points were found at both sites, implying the presence of those point makers. (See Table 1 for the details). Lamoka points speak to the presence of the Lamoka people at Mac 12. The fragments of beveled adzes, found at Mac 10, are another indication of a Lamoka presence (Ritchie 1944:226). Mac 10 yielded a single Meadowood point fragment. As mentioned above, a total of

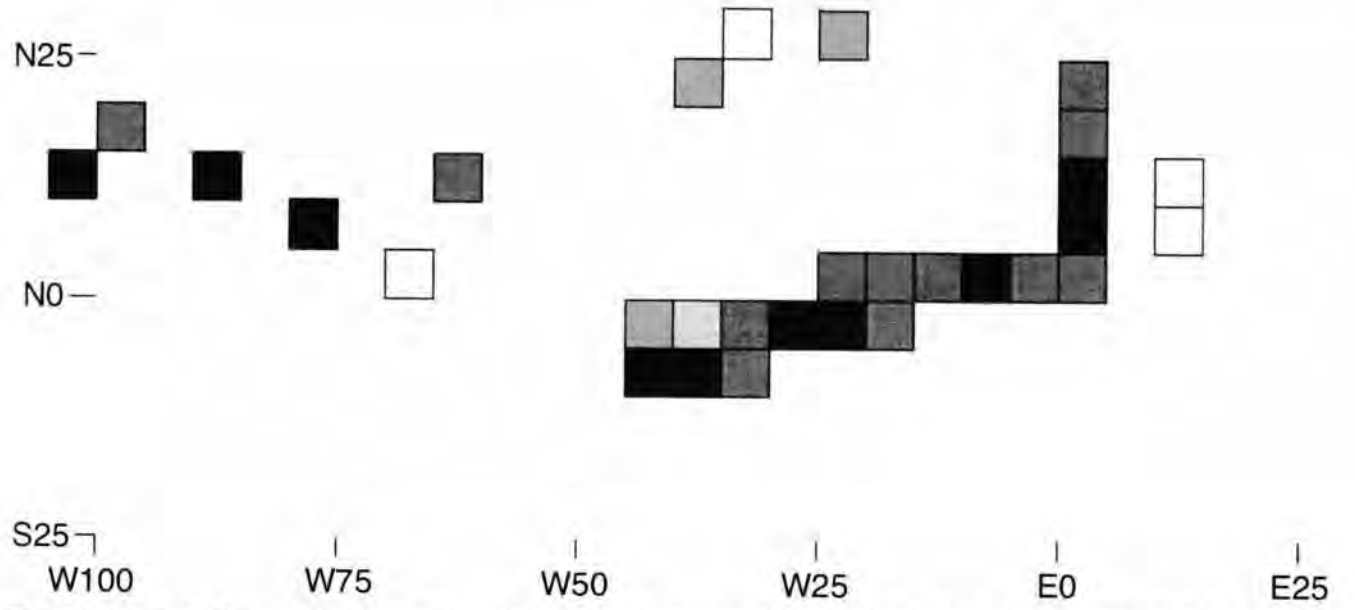

Figure 4. Distribution of debitage at the Macauley 10 Site (Mac 10). Key: Distribution of Debitage at Mac 10. Key: 15% shading denotes 1–4 flakes or fragments; 30% shading denotes 5–18 flakes or fragments; 50% shading denotes 19 to 79 flakes or fragments; 100% shading denotes 80–338 flakes or fragments.

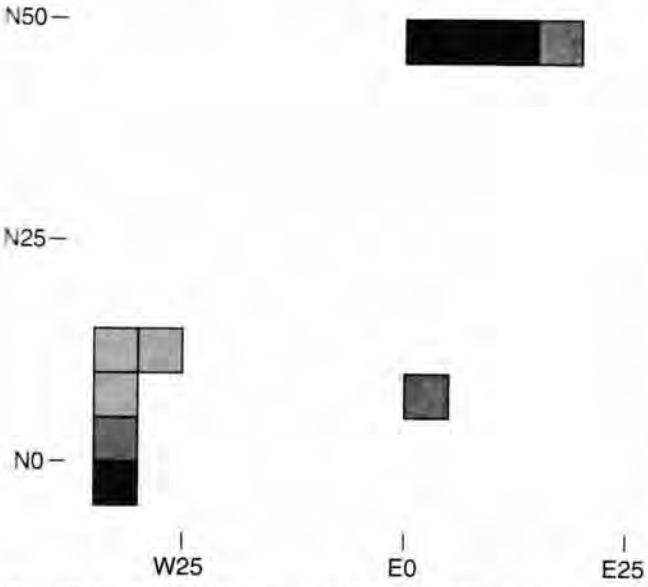

Figure 5. Distribution of Debitage at the Macauley 12 Site (Mac 12). Key: 15% shading denotes 1–4 flakes of fragments; 30% shading denotes 5–18 flakes or fragments; 50% shading denotes 19–79 flakes or fragments; 100% shading denotes 80–338 flakes or fragments.

five Vinette I potsherds (Ritchie and MacNeish 1949:100) were found at the two sites; Meadowood (or later) people were responsible for these artifacts. According to Justice, the makers of Lamoka points are thought to have been in New York State from about 3500 to 2500 B.C. (Justice 1995:129), while the makers of Brewerton points are thought to have occupied this area from about 3000 to 1700 B.C. (Justice1995, 115). Estimates for the Meadowood presence here are from about 1300 to 500 B.C. (Justice 1995:171), and Vinette I pottery is dated from about 800 B.C (Ritchie 1980:xxiii) to perhaps 500 A.D (Ritchie and MacNeish1949:100). Thus, the data show that the site was used in the Late Archaic period, and into the Early Woodland period.

Table 4. Faunal Artifacts From the Macauley 10 (Mac 10 and Macauley 12 (Mac 12) Sites.

Description	Mac 10	Mac 12
Bone	28.8 gm	10.8 gm
Shell	1.8 gm	none

As we have seen, both Mac 10 and Mac 12 were small sites and, hence, yielded small numbers of artifacts. It seemed noteworthy, however that compared with the average number of artifacts, exclusive of debitage, at all the Macauley Complex sites, the number of Mac 10 artifacts was very small. I spent some time investigating the possibility that Mac 10 was a lithic reduction site rather than a habitation site. Some of the statistical calculations indicated that this might be true. However the numbers were so small that I felt that basing calculations on them was probably not wise. A miscount of two or three would have changed the calculations, and probably the conclusions a great deal. I realize it is not conventional to include inconclusive results, but, in this case, the differences were so striking that I thought it was worthwhile to do so.

Conclusions

Mac 10 and 12 are both small sites. While one might wish that more units had been excavated, yielding more data on which to base conclusions, it is probable that all the units that contained an appreciable number of artifacts were excavated. The data indicate that the sites were occupied in the Late Archaic and the early part of the Early Woodland period. It might be tempting to consider Mac 10 and Mac 12 as a single site. I think this is problematic; they were at least 100 m apart and there would have been plenty of opportunity, over the few thousand years that they were occupied, for two sites to have been established.

Acknowledgments

My thanks to Dr. Rose-Marie Chierici, then chair of the Department of Anthropology for the use of the collection and for all the support the Department gave me. Dr. Pacheco, in particular, answered many questions. Esmeralda Askenas entered the data into the databases. Thank you all! Any errors are, of course, mine.

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IN MEMORIAM

John "Jack" R. Lee, C.S.B., Ph.D. (1928-2015)

John, better known as Jack to all his friends, passed away on Sunday, August 2, 2015 at the age of 87. Born in Michigan, Jack often spoke of his father who had served in WWI. Jack grew up during the Great Depression and would spend many hours listening to the radio. As a young man, he had always had an interest in history and archaeology, but felt a calling to serve a higher power. Early in life, he chose to enter the Congregation of Saint Basil and was ordained a priest. In addition to his religious duties, he found time to study and completed an MA in anthropology from the University of Michigan and a PhD in archaeology from the Hebrew University of Jerusalem. In 1976, he joined the faculty of St. John Fisher College were he taught archaeology. Father Lee always sought to include students in his research projects and served as a mentor for many. Upon his retirement, he was awarded the title of Faculty Emeritus.

Jack was active for many years in the Lewis Henry Morgan Chapter of the New York State Archaeological Association and served terms as president of both the Morgan Chapter and the NYSAA. His involvement with the Morgan Chapter led to his serving as the long-time editor of the Chapter's journal, *The Iroquoian*. For his service, Professor Lee was awarded the Certificate of Merit for his contributions to New York State archaeology.

Father Lee had a great variety of interests. For his doctorate, he focused on Neolithic ground stone tools and continued to spend his summers and sabbaticals on digs in Jordan and Israel. He worked on a number of sites there, but spent more than ten years excavating a prehistoric site in Nazareth, Israel and Tell Safut outside of Amman, Jordan. He was an active member of the American Schools of Oriental Research. He also maintained a research interest in the exploits of T. E. Lawrence, better known as Lawrence of Arabia, both during the Great War and for his studies of Crusader castles. Jack had a special interest in the Crusader castle at Karek and conducted fieldwork at the site. In his later years, Jack spent some time putting together a guide-book about the history and architecture of the fortification. He also had a strong interest in the Native Americans of the Great Lakes, and was involved in the birth of Historical Archaeology in the United States. He edited the writings of local Rochester historian and clergyman, Alexander Stewart, and the book was published by the NYSAA in 1970. In the late 1970s Jack worked closely with the Iroquois and became involved with the Canandaigua Treaty Commemorations.

In the mid 1980s, Father Lee's passion for lighthouses

Photograph of "Jack" Lee processing artifacts in Zboriv, Ukraine (2002).

on the Great Lakes led to explorations of the Light at Sodus Point, New York, and later he conducted archaeological excavations on the grounds of the Genesee Lighthouse in Charlotte, New York. Often putting the interests of his students ahead of his own, Jack placed my name ahead of his when we published the results of our excavations of the 1822 lighthouse keeper's house. After the excavations came to an end, Jack remained an active member of the Genesee-Lighthouse Historical Society.

With the end of the Cold War, Jack became involved with historical archaeology in Ukraine. Throughout the 1990s, he dug at the early modern city of Kam'ianets-Podilsky. At that time he served as the senior archaeologist for the Kam'ianets-Podilsky Foundation, a nonprofit organization that brought students and scholars to study and preserve the city's past. During the course of his ten years of involvement with the project, he conducted fieldwork and helped author and edit each of the Foundation's yearly archaeological reports. In 2002, he participated in a battle-

field survey of the 1649 Battle of Zboriv (Ukraine) and in 2003, and took part in an archaeological survey at the site of the 1649 Siege of the Castle at Zbarazh (Ukraine).

In the span of his life, Father Lee touched the lives of many students, peers and colleagues. He had the ability to relate to almost everyone he spoke with, even when they did not necessarily hold to his point of view. He was always humble and sought to educate both himself and the world he lived in. Jack enjoyed travelling and sought to do so as much as he could. He often said that travelling breaks down barriers and expands horizons, allowing a person to better understand other people and places.

by Adrian Mandzy

Selected Publications

1970 *French Pioneers in the Eastern Great Lakes Area, 1609-1791*. Occasional Papers of the New York State Archaeological Association. No. 3.

1996 *Light on the Genesee: Excavations of the 1822 Charlotte-Genesee Lighthouse Keeper's Dwelling on Lake Ontario 1983-1989*. KPF Press, Rochester New York (with Adrian O. Mandzy).

Theodore Whitney Award
Presented at 2016 NYSAA Annual Meeting

Paul Huey and Lois Feister/Lois Miner Huey
Van Epps-Hartley Chapter

Paul Huey and Lois Feister/Lois Miner Huey both exemplify the criteria of the Theodore Whitney Commendation with their lifetime of dedication and support for New York State Archaeology. They are both Fellows of NYSAA and have been actively involved in the organization for decades. Since the 1970s they have given numerous conference papers at NYSAA, CNEHA, and SHA making other archaeologists aware of the rich heritage of New York State archaeology.

Paul began his involvement in New York State archaeology as a high school student working on an excavation at Crown Point. Lois began her New York work as a graduate student in the early 1970s. They evolved from young scholars to mentors and supporters of other archaeologists. As archaeologists with New York State Office of Parks, Recreation, and Historic Preservation, Historic Sites Bureau they have both worked on countless historic period sites including early Dutch sites, Revolutionary War sites, urban and rural sites, and residential sites ranging from mansions to almshouses. Also they are specialists on ceramics and archaeologists still bring them artifacts to identify.

Paul is well known for his work on Dutch sites, especially his landmark work on Fort Orange, which culminated in his doctoral dissertation. He has published extensively on Dutch sites and culture including editing a thematic volume on Dutch sites for *Northeast Historical Archaeology*. Paul has and continues to be concerned about bringing archaeology to the public. In the 1980s he was involved in a major exhibit on Dutch lifeways and culture at the Albany Institute of History and Art. Both Paul and Lois worked on a multi-year project at Crailo State Historic Site, a landmark 18th century Dutch site in Rensselaer. They also worked with the museum staff to exhibit archaeological materials in the museum displays at Crailo.

Both Paul and Lois have worked for years on New York State's Revolutionary War sites. Their research has shed light on the construction of fortifications, battle and defense strategies, and on the living conditions of both the officers and the enlisted men, especially the life of the ordinary soldier. In 2003, Charles Fisher noted that "Paul and Lois have made lasting contributions through their efforts to understand the violent origins of our nation, but avoiding the celebratory 'drum and guns' history of American conflicts."

They have also excavated the homes of many influential state residents, but one that stands out is Johnson Hall, the home of Sir William Johnson, Head of Indian Affairs for the English. Lois undertook extensive research on Molly Brant, a Mohawk Matriarch and the "significant other" of Sir William Johnson, and a woman who was a cultural power-broker with diplomatic and leadership skills. Lois co-authored a book on Molly Brant (*Molly Brant: A Legacy of*

Her Own) that provides a gentle feminist reminder of the role, importance, and footprint of women on our sites.

Paul has been researching almshouses and the care of the poor for years. He worked on the Albany almshouse with archaeologists from Hartgen and has written an overview of 17th- and 18th-century almshouses for the *International Journal of Historical Archaeology*. Lois has also researched the poor in Albany. She excavated the 19th-century orphanage housed at the Schuyler mansion in Albany and wrote an article on the orphanage for *Northeast Historical Archaeology* and a book chapter in the *Archaeology of Institutional Life*.

Year after year Paul and Lois bring their findings to the public in terms of numerous lectures at museums and historical societies. They have both been involved in museum exhibits, such as the exhibit at Crailo. Lois also has made archaeology accessible to schoolchildren through her numerous books, such as *American Archaeology: The Dutch Colonies* and her book on the Albany cemetery *Forgotten Bones: Uncovering a Slave Cemetery*.

Because of their lifelong dedication and commitment to New York State archaeology in terms of their research, publications, conference papers, public lectures, and museum exhibits they exemplify the criteria of the Theodore Whitney Commendation.

Selected Publications

Paul Huey

Books:

Thomas Barker and Paul Huey

2010 *The 1776-1777 Northern Campaigns of the American War for Independence and Their Sequel: Contemporary Maps of Mainly German Origin*. Purple Mountain Press, Fleischmanns, N.Y., and The Lake Champlain Maritime Museum, Vergennes. Vermont.

Articles

Paul Huey

1991 The Dutch at Fort Orange. In *Historical Archaeology in Global Perspective*, edited by Lisa Falk, pp: 21-67. Smithsonian Institution Press, Washington, D.C.

2000 Research Problems and Issues for the Archaeology of Nineteenth Century Farmstead Sites in New York State. In *Nineteenth- and Early Twentieth-Century Domestic Site Archaeology in New York State*, edited by John Hart and Charles Fisher, pp. 29-35. New York State Education Department, Albany.

2001 The Almshouse in Dutch and English Colonial North America and its Precedent in the Old World: Historical and Archaeological Evidence. *International Journal of Historical Archaeology* 5(2): 123-154.

2003 Thirty Years of Historical Archaeology in the City of Albany. *In People, Places, and Material Things*: Historical Archaeology of Albany New York, edited by Charles Fisher, pp. 11-21. NYS Museum Bulletin 499.

2007 Archeological Evidence of Utility Stoneware Made in the Greater Albany Area, c. 1780 to 1850. *Paul Cushman: The Work and World of an Early 19th Century Albany Potter*. Albany Institute of History and Art, Albany New York.

2010 Dutch Colonial Forts in New Netherland. *First Forts: Essays on the Archaeology of Proto-colonial Fortifications*, edited by Eric Klingelhofer. History of Warfare, Volume 60 Brill, Leiden and Boston.

Selected Publications

Lois Feister/ Lois Miner Huey

Books

Lois M. Huey and Bonnie Pulis

1997 *Molly Brant: A Legacy of Her Own*. Old Fort Niagara Association, Niagara Falls, New York.

Lois M. Huey

2009 *American Archaeology: The Dutch Colonies*. Marshall Cavendish,Tarrytown, New York.

2015 *Forgotten Bones: Uncovering a Slave Cemetery*. Lerner Publishing Group Millbrook Press, Minneapolis, Minnesota.

Articles

Lois M. Huey

1984 Building Material Indicative of Status Differentiation at the Crown Point Barracks. *Historical Archaeology* 18 (1): 103-107.

1991 The Orphanage at Schuyler Mansion. *Northeast Historical Archaeology* 20: 27-36.

2009 The Orphanage at Schuyler Mansion. In *The Archaeology of Institutional Life*, edited by April M. Beisaw and James G. Gibb, pp: 105-116. University of Alabama Press, Tuscaloosa.

Theodore Whitney Award
Presented at 2016 NYSAA Annual Meeting

George R. Hamell, Lewis Henry Morgan Chapter

A native of the Rochester area, George Hamell began his professional career as an interpretive naturalist for the Monroe County Parks Department in 1962. Seven years later, he attended St. John Fisher College where he majored in Anthropology and American History. In 1974, he joined the Anthropology Department of the Rochester Museum & Science Center where he served as Curator of Anthropology until 1980. In 1981, he joined the New York State Museum where he served in several capacities including Senior Exhibits Planner in Anthropology and Senior Historian.

George retired from the State Museum in October 2007, returning to Rochester to become the Curator of the Rock Foundation Collections. These collections have been on loan to the Rochester Museum & Science Center since 1977. George continues to serve in this capacity, providing assistance and valuable commentary to the many scholars, Native and non-Native, who use this unique archaeological resource. Over the years, George has always been extremely generous with his time and the sharing of his "encyclopedic" knowledge of Iroquoian historic sources and oral traditions.

Throughout this period, George has been an active and inspirational scholar. While his contributions cover a wide range of subjects, George's primary interest has been the intersection of archaeological, historic and oral tradition for Northern Iroquoian people, especially the Seneca, their antecedents, and relations such as Ontario Iroquoians. In this domain, George's many presentations, articles, and book chapters have provided the basis for understanding the material culture record from a Native rather than a Western point of view. His work has been widely cited in Iroquoian archaeological and historical publications. He has also inspired many of his fellow scholars, thus launching a new generation of collaborative scholarship. A short list of publications is attached.

George has also been a stalwart member of the Morgan Chapter and led field excavations for the chapter and the RMSC at many sites in the Rochester area, including the Footer and Cameron sites. In a recent conversation, George admitted that during the 1960s and 1970s, "I think I held every position in the Chapter... President, Vice President, Secretary, Treasurer, Chapter Newsletter Editor, Executive Committee member, and Trustee."

The Theodore Whitney Commendation was created to honor Ted's "lifetime of dedication and service" to New York State archaeology through his fieldwork, reporting, and service to the Chenango Chapter. Given his outstanding scholarship and service to the Morgan Chapter, we can think of no better candidate for this award than George Hamell.

Selected Publications

2005 Rattlesnake Tales. *Ontario Archaeology*, Number 79-80:127-149 (with William A. Fox).

1998 Long-tail: The Panther in Huron-Wyandot and Seneca Myth, Ritual and Material Culture. In *Icons of Power: Feline Symbolism in the Americas*, edited by N. J. Saunders, pp. 258-291, Routledge, New York.

1992 The Iroquois and the World's Rim: Speculations on Color, Culture, and Contact. *American Indian Quarterly*, 16(4):451-469.

1987 Strawberries, Floating Islands, and Rabbit Captains: Mythical Realities and European Contact in the Northeast during the Sixteenth and Seventeenth Centuries. *Journal of Canadian Studies* 21 (4):72-94.

1980 Gannagaro State Historic Site: A Current Perspective. In *Studies on Iroquoian Culture*, edited by Nancy Bonvillain, pp. 91-108. Occasional Publications in Northeastern Anthropology, No. 6, Franklin Pierce College, Rindge, New Hampshire.

Fellow Award
Presented at 2016 NYSAA Annual Meeting

Timothy J. Abel, Thousand Islands Chapter

As an active member of his NYSAA chapter, a scholar, teacher, and working archaeologist, Timothy J. Abel has amply demonstrated his commitment to the archaeology of New York State. Tim's research and publication record cover a range of subjects, but two sets of papers, in particular, reflect the breadth of his outstanding contributions to our knowledge of the archaeology of the state. The first is his work on St. Lawrence Iroquois sites. After completing his dissertation on *The Clayton Cluster: Cultural Dynamics of a Late Prehistoric Village Sequence in the Upper St. Lawrence Valley* in 2001, Tim published a summary of this work in *Archaeology of Eastern North America* the following year (1). This, plus an earlier review article on The Prehistory of the St. Lawrence Headwaters Region, published with David Fuerst (2), continue to serve as essential references on the St. Lawrence Iroquois in New York. More recently, Tim has conducted a number of major investigations of historic sites related to the War of 1812. Among the publications that have resulted are his 2015 article on naval shipbuilding on Lake Ontario in the *NYSAA Bulletin* (3) and camp life at Cantonment Saranac in Plattsburgh, New York (4).

Tim's contributions to New York archaeology also include teaching appointments across the North Country including SUNY Canton, Jefferson Community College in Watertown, and Clinton Community College in Plattsburg. In 2014, his teaching was recognized with a SUNY Chancellor's Award for Excellence. His work on behalf of the NYSAA and Thousand Islands Chapter are equally impressive. He received the Meritorious Service Award in 1998 and has been awarded the Certificate of Merit twice, in 2001 and again in 2003. Finally, as a consulting archaeologist, Tim is the sole proprietor of a CRM firm based in Carthage, New York, and since 1997 has completed more than 160 successful projects.

It is certainly time to recognize the outstanding contributions Tim Abel has made to New York archaeology and welcome him as a Fellow of the Association.

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(1) 2002 Recent Research on the Saint Lawrence Iroquoians of Northern New York. *Archaeology of Eastern North America* 30:137-154.

(2) 1999 The Prehistory of the St. Lawrence Headwaters Region *Archaeology of Eastern North America* 27:1-52 (with David N. Fuerst).

(3) 2015 Storrs Harbor: Archaeology of a War of 1812 Naval Shipyard on Lake Ontario. *The Bulletin*, Journal of the New York State Archaeological Association 129:19-35.

(4) 2016 I Wish You Could See the Style in Which We Live: Archaeology of a Soldier's Cabin at Cantonment Saranac, Plattsburgh, New York. In *Archaeology of the War of 1812*, edited by Michael T. Lucas and Julie M. Schablitsky, Routledge, New York, (First Published by Left Coast Press 2014).

NEW YORK STATE

ARCHAEOLOGICAL

ASSOCIATION

ADIRONDACK CHAPTER – QUEENSBURY
AURINGER-SEELEY CHAPTER – SARATOGA SPRINGS
WILLIAM M. BEAUCHAMP CHAPTER – SYRACUSE
CHENANGO CHAPTER – NORWICH
FINGER LAKES CHAPTER – ITHACA
FREDERICK M. HOUGHTON CHAPTER – BUFFALO
INCORPORATED LONG ISLAND CHAPTER – SOUTHOLD
LOUIS A. BRENNAN/LOWER HUDSON CHAPTER – CROTON-ON-HUDSON
METROPOLITAN CHAPTER – NEW YORK CITY
MID-HUDSON CHAPTER – REDHOOK
LEWIS HENRY MORGAN CHAPTER – ROCHESTER
INCORPORATED ORANGE COUNTY CHAPTER – MIDDLETOWN
INCORPORATED UPPER SUSQUEHANNA CHAPTER – OTEGO
THOUSAND ISLANDS CCHAPTER – PHILADELPHIA
TRIPLE CITIES CHAPTER – BINGHAMTON
VAN EPPS-HARTLEY CHAPTER – FONDA

Minutes of the General Business Meeting
NYSAA 99th Annual Meeting
Ramada Inn, Watertown, NY
May 1, 2015

Opening:

Called to order at 7:20 pm by President Sherene Baugher. Minutes will be taken by Lisa Marie Anselmi (Vice-President) as Lori Blair (Recording Secretary) could not be here this evening.

Present:

Chapter Roll Call:

Present: Adirondack, Auringer-Seelye, William M. Beachamp, Chenango, Finger Lakes, Frederick M. Houghton, Inc. Long Island, Lewis Henry Morgan, Inc., Mid-Hudson, Orange County, Inc., Upper Susquehanna, Thousand Islands, Triple Cities, Van Epps-Hartley

Absent: Brennan/Lower Hudson, Metropolitan

A. Reports of the Officers

President's Report, Sherene Baugher: Critical issues that have arisen this year:

- 501c3 status came through this year
- Next year is the 100th anniversary year of NYSAA

Vice-President's Report, Lisa Marie Anselmi:

- Encouraged membership and members at large to renew through the website. There is now a join tab on the website.
- Articles for the newsletter are always needed.

Treasurer's Report, Ann Morton:

- Thank you to all of the chapters for forwarding membership lists and dues with explanations, etc.
- Bulk mailing duties for the bulletin will be handled by the Treasurer and our Bulk mailing professional, Steve Austin
- Formal reports on file. Year end 2014 Total assets $47,347.62. Interim 2015 Total assets $51,986.54.

Corresponding Secretary: not applicable

Recording Secretary, Lori Blair:

- Minutes from 2014 Executive Committee meeting not available. These will need approval at the November executive meeting.
- No other report.

B. Report of the Committees

Awards and Fellowships – Peter Pratt

- Awards and new 'Fellows' will be presented tomorrow at the banquet.
- "New" award honoring public archaeology to be created; criteria will be sent to chapters. To be given to community groups/organizations. Will be first awarded next year at the 100th anniversary meeting.

High School Clubs – Christina Reith

- fielding inquiries through the website.

- If you know of field school/laboratory courses please let her know.

Publications

Bulletin – Martha Sempowski report on file

- #128 came out last year. #129 proofs and illustrations being worked on, due out by December 1.
- The editors encourage submissions for #130. Please see the guidelines in the Bulletin. These are set to be amended, especially with regard to digital images shortly and will be put on the website when possible.
- Digitization of #119-129.

Newsletter – Lisa Marie Anselmi

- Newsletter needs of submissions of articles and images.
- Please submit these directly to me at anselmlm@buffalostate.edu.

Legislative – Fred Stevens

- Working with Nikon which is an organization that helps non-for-profits understand the amended 501c3 legislation. There is a regional officer Andrew Marrotta at Cooperstown that might be able to help us.
- We are in compliance through grants/funding since 2013.
- Likely a few by-laws changes that need to be made relative to this.

Library – Long Island Chapter

- Report by David Elliston. Everything is fine.

Special Appointees

ESAF – Tim Abel

- Next conference is October 16-18, combined with the Ontario Archaeological Society meetings in Midland for the 400th anniversary of Champlain's journey to Wendake.

NYAC – Marie-Lorraine Pipes

- Founders Award to Karen Hartgen. Student award to Aimee Mitchell (UB).
- Next meeting tentatively scheduled to be at the Seneca Cultural Arts Center (at Ganondagan).
- 2015 archaeology poster is in the bookroom. Please distribute.

Funk Foundation – Ed Curtin

- Legacy gift of ~$15,000 received from Beth Wellman and Dan Demico.
- Five grant proposals are under review, with one to be funded in May 2015. There were two previous grants issued in 2015 and another round will be reviewed in Fall 2015. One can reapply if they do not receive an initial grant from the foundation.

SPA – Fred Stevens

- Meeting already held in Sharon PA April 15-17th.

Facebook – Tim Abel

- Please send meeting events, pictures, and miscellaneous announcements for inclusion on the Facebook page.

Website – Sissie Pipes

- Chrissy doing a good job with the website. She is very responsive with regard to requests for posts, etc. with a day or two turn around. The List Serv will move to the website.

OLD BUSINESS

- Ann Morton, treasurer explained: IRS/501c3: no lapse in 501c3—pile of paperwork needed. 990 does need to be filed but in postcard form. Chapters were incorporated in the group filing but we need to re-file the group exemption.
- Chapters received an email and need to respond by May 15th for this year in order for 990 filing once the group exemption is reinstated.
- For this process, chapters need to send in a list of the Chapter name, meeting place and time (regular), chapter officers and a separate treasurer's statement with basic financial information and activities/publications listed.
- Also, we need to switch to a calendar year system. Information has been distributed about this and Sherene Baugher, President, explained again that there is a marked difference between paid staff and volunteer staff. Moving to a calendar year system is necessary for filing of IRS documents, etc. This is the By-Law change that was previously distributed to the membership for consideration.

➢ Vote for this switch taken, passed unanimously of all chapters present.

Adirondack	Aye
Auringer-Seelye	Aye
Beachamp	Aye
Chenango	Aye

Finger Lakes	Aye
Houghton	Aye
Inc. Long Island	Aye
Brennan/Lower Hudson	absent
Metro	absent
Mid-Hudson	Aye
Morgan	Aye
Inc. Orange Cty.	Aye
Inc. Upper Susquehanna	Aye
Thousand Islands	Aye
Triple Cities	Aye
Van Epps-Hartley	Aye

NEW BUSINESS

Discussion of back issues of Journal:

- Sissie Pipes reminded the members that the organization received a grant from ESAF to digitize the original volumes of the journal and that NYSAA, as a result of the sale of the cd-rom collections of these volumes, made a large profit. She mentioned that a plan going forward would be to place the back issues on the website (free on our own website) but that the newer volumes need to be digitized. Chrissy Morganstein, our webmaster, would take care of putting these up for us. Martha Sempowski stated that she will look into getting the other issues of the journal in digital versions for uploading. Sue Maguire, editor of Northeast Historical Archaeology, relayed her experiences with establishing a two year moving wall of NEHA with PayPal access to purchase newer articles. She remarked that this model is used by many journals and could be used by NYSAA. Tim Abel pointed out that ESAF has a three year moving wall through JSTOR for this purpose.
- Martha pointed out that RMSC still had hard copies of the back issues of the journal.
- Discussion about the fee attached was generally positive with members Louise Basa and Vicki pointing out that this is the cost of doing business and appropriate for the journal in this day and age.
- Sue Maguire pointed out that the journal is more accessible if available online and that impact factor of the research presented therein rises considerably if the journal is accessible online to researchers. Sissie Pipes pointed out that a mixed model, with older articles available online free to members is beneficial to researchers too.
- The question of continuing to publish the journal in hard copy was raised. Sherene Baugher reminded the members that our major survey from two years ago yielded evidence that members across all age categories wanted hard copy of the journal. Therefore we need both hard copy and digital versions at least for the foreseeable future. Sue Maguire pointed out that images could be black and white for the hard copy and in color for the digital copy.

➢ MOTION: Sue Maguire moved that NYSAA consider a three year moving pay wall for the journal. Seconded by Denis Foley. Vote was unanimous of chapters present with one abstention.

➢ MOTION: Sue Maguire moved that NYSAA allocate monies for adding journal articles/materials to the website. $1000 for creation of the website, with basic maintenance of $150 per year thereafter. Seconded by Dolores Elliott. Vote was unanimous of chapters present.

➢ MOTION: Dolores Elliott moved that NYSAA open a PayPal Account for this purpose. Seconded by David Moyer. Vote was unanimous of chapters present.

Upcoming Meetings:

- The 2016 Centennial meeting will be jointly hosted by the Morgan, Houghton, and Beachamp chapters in Victor NY at the Woodcliff spa on April 15-17, 2016. This was also the location of the 2009 meeting. Morgan chapter has negotiated room/meal prices. There is to be a raffle for a free suite at the conference. Funds raised through this raffle will go to Morgan Chapter to fund a public outreach excavation project in the Rochester area.
- Houghton chapter, specifically Sue Maguire and Lisa Marie Anselmi, will co-chair the program for the event. The Banquet speaker is Jon Hart from the NYSM and chapters will be asked to contribute materials for a special poster session.
- Beachamp chapter is working on a commemorative plate for the event.
- The three hosting chapters would like to encourage all chapters to consider participating by sponsoring coffee breaks or other events through the weekend.
- The 2017 meeting will be hosted by the Adirondack chapter in honor of their 25th anniversary.

Contributions to Funk Foundation:

- NYSAA's usual $300 donation to the Funk foundation was held during the reorganization for the last several years. The total amount on hold is $1200.

➢ MOTION: Dolores Elliott motioned to donate $1000 to the Funk foundation. Seconded by Tim Abel. Sissie Pipes made a friendly amendment to this motion to

raise the donation amount to $1200 which equals the amount that NYSAA had placed on hold for the foundation. Motion passed unanimously of the chapters present to vote.

Archaeology poster, Sissie Pipes:

- Morgan Chapter is completing the archaeology poster for 2016 with financial assistance from NYSAA. 600-2000 copies will be made at a cost of $1500-$2000.

➢ MOTION: Fred Stevens moved, and David Elliston seconded, for NYSAA to contribute $500 towards this cost. Motion passed unanimously of the chapters present to vote.

Liability Insurance:

- NYSAA's general liability insurance was cancelled in February by the Insurance Company. It officially expires May 17th, 2015. Ann Morton, treasurer, has been working with an agent at Brown and Brown in order to find similar coverage under a new policy. There are new underwriters working on our possible coverage. One stumbling block is public tours that some chapters offer of archaeological sites.
- Bob Hasenstab asked if personal waivers would limit our liability. Sissie Pipes responded that these would not hold up in court if we were to be sued.
- Laura suggested that NYSAA should also acquire Officers/Directors Insurance. A recent quote for NYAC for this was approximately $800 per year.
- Chapters with open weekend excavations need insurance that covers members and that usually this is additional insurance that is not part of the NYSAA's umbrella policy. Fred Stevens reminded members that the original insurance only covered paid members of NYSAA. One possibility is the acquisition of special event riders. Ann volunteered to go back to the agent with this request for a policy for members only that would limit public tours. Any tour fees would essentially become a membership fee. If we invite legislators or other 'guests', chapters would be responsible for paying membership fees for these individuals.

ESAF Membership

- Ann Morton raised the payment of the ESAF membership fee. ESAF has in the past purchased a lifetime membership to NYSAA. A NYSSAA ESAF membership cost is calculated by base member numbers with an additional fee on top of this. For this, NYSAA receives three copies of the ESAF bulletin, unlimited ad space in bulletin, discounts on different services such as memberships to JStor (for $99), NYSAA is eligible for the Brennan award/grant, and NYSAA is eligible for $6 recruitment fee for each NYSAA member that joins ESAF—essentially a referral fee.

➢ MOTION: Louise Basa motioned to continue NYSAA's ESAF membership and to pay our dues. Seconded by Fred Stevens. Motion passed unanimously of the chapters present to vote.

Treasurer reminders:

- Ann requested updates to the membership lists from chapters.
- Ann mentioned that NYSAA sends Bulletins to approximately 30 repositories throughout the US and Canada, including the Library of Congress. (These are different from the 40 institutions that have paid institutional memberships.) These repositories do not pay dues. Sissie asked how much this cost to do this; approximately $350 to 450. Bill Engelbrecht inquired as to whether NYSAA received anything in return, especially at either the library on Long Island or at the RMSC. This is unclear. Action: a letter will be sent to these institutions to inquire as to whether they would like to join NYSAA as an institutional member.

John "Jack" Holland Research and Scholarship Fund:

- Sue Maguire announced the creation of the fund. Funding priorities will be to researchers traveling to the Smithsonian to use Jack's reference collection and to research on lithic sources. She asked if NYSAA would like to contribute…
- Sherene Baugher asked for a NYSAA contribution to be revisited once the 501c3 situation was handled.

Meeting adjourned at 9:32 pm.

➢ Motion: Dolores Elliott, Seconded: Priscilla Johnson; unanimous of chapters present.

Meeting re-opened at the Banquet, Saturday at 8:05 pm for a vote on the acquisition of Directors/Officers Insurance.

- Ann Morton presented the rationale to purchase this insurance. Fred Stevens asked whether it would cover chapter trustees as well (question to be asked of our carrier).

➢ MOTION: Fred Stevens moved to purchase the insurance and to inquire as to trustee coverage. Seconded by Gary Keeton. Motion passed unanimous of chapters present:

Adirondack	Aye
Auringer-Seelye	Aye

Beachamp	Aye
Chenango	Aye
Finger Lakes	Aye
Houghton	Aye
Inc. Long Island	not present at the banquet
Brennan/Lower Hudson	absent
Metro	absent
Mid-Hudson	Aye
Morgan	Aye
Inc. Orange Cty.	Aye
Inc. Upper Susquehanna	Aye
Thousand Islands	Aye
Triple Cities	Aye
Van Epps-Hartley	Aye

Meeting adjourned at 8:25 pm.

Guidelines for Manuscript Submissions

General

The Bulletin is a journal devoted to the dissemination of scholarly articles relating to the archaeology of New York State and its environs. It is published annually by the New York State Archaeological Association.

Authors wishing to submit an article for publication should send two complete paper copies, including an abstract, text, list of references cited, illustrations, captions, tables, and full return mailing address (both regular mail and email) to Dr. Lisa Marie Anselmi, SUNY Buffalo State, 1300 Elmwood Avenue CLAS B107, Buffalo, NY 14222. The editors may reject or return an article to the author for revisions, on the basis of either content or style. Upon acceptance, authors will be asked to submit their article in electronic format—either Windows or Macintosh format to the editor. Most current word processing programs can be accommodated. Please read carefully the section on Figures, below, for requirements for electronic submission of images.

**Authors may request peer review of their article, along with the names of several suggested reviewers

Manuscript Organization

Please organize your manuscript as follows:

- Title, author, institutional or chapter affiliation
- Abstract - a single paragraph of 100 to 150 words
- Text
- Acknowledgements
- References cited
- Tables (with captions)
- Figures (with captions listed on a separate page)

Manuscripts should be written as clearly and succinctly as possible. They should be unjustified and double-spaced, on one side of 8 1/2" x 11" paper. Only one space should follow periods and pages should be numbered in the upper right hand corner. Endnotes are to be used instead of footnotes, but they should be used sparingly.

Headings

Primary headings should be flush left, bolded, and at the same font size as the text, with only the first letter of each word capitalized. Secondary headings should be flush left, unbolded, and at the same font size as the text, with only the first letter of each word capitalized. Tertiary headings should be flush left, in italics, and at the same font size as the text, with only the first letter of each word capitalized.

Measurement Units

In order to avoid errors in translation, measurements may be in either English or metric units, as appropriate to the content of the article; however, for further clarification, one may wish to include conversions in parentheses. Commonly used units of measurement such as feet, yards, miles, meters, centimeters, kilometers, and hectares are abbreviated as follows (without periods):

inches	in	meters	m
feet	ft	centimeters	cm
yards	yd	kilometers	km
miles	mi	hectares	ha

In-Text Reference Citations

In-text reference citations should follow the simple *American Antiquity* style within parentheses immediately following the material to which the citation refers (for particulars, see *American Antiquity*, Volume 57, number 4, pp. 749-777). Simple citations should include author's last name and year of publication unseparated by a comma, and if appropriate, the page number(s) preceded by a colon (Smith 1978:222) or Smith (1978:222). Citations involving two authors should include both names; those involving three or more authors should use the first author's name followed by et al. (e.g., Brown et al. 1987). Where more than one publication is being referenced, they should be ordered alphabetically within the parentheses and separated by semi-colons (e.g., Barton 1986; Davis 1975; Wilson 1999). Where there are several references for the same author within a set of parentheses, these are separated by commas (e.g., Adams 1975, 1985; Brown 1988).

Quotations

Quotations of five lines or less should be included in the text; double quotation marks are used. The citation should follow the form indicated above for in-text reference citations, but should always include page number(s). Quotes of more than five lines should be inset in a block and double spaced without quotation marks. Citations, including page numbers, should follow in brackets.

Tables

If at all possible tables should be set up in the same word processing format as the text. They should be as simple as possible and include a short descriptive title above the table itself. Tables should be numbered consecutively as they will appear in text. All tables should be referenced in the text.

Figures

All photos and line drawings are designated as figures and numbered consecutively as they are referred to in the text. **Captions should be submitted on a separate page, not as part of the illustration.** A light pencil marking on the back of the photo or drawing should identify the particular illustration. Photos and drawings should be high quality images reproducible at sizes appropriate to the journal. Authors bear the responsibility for obtaining written permission for the reproduction of any materials protected by U.S. copyrights. Film-based photographic prints and original drawings are preferred, but figures may be submitted as digital image files *if they are suitable for publication*. Digital image files which do not meet the following specifications will be rejected. Photographs should be submitted as tiff or grayscale tiff or pdf files only, 8" x 10" or 5" x 7" at a minimum of 300ppi. Line art should be submitted as bitmap tiff or pdf files at a minimum of

1000ppi. **No other formats, such as jpg, doc, etc. will be accepted.** If the graphic was created in digital form, **submit individual files, not printouts, and do not include the images in a Word document**. Contributors may be required to provide photographic prints or hard copy drawings if digital image files are not useable for publication. Photocopies, laser prints, and inkjet prints are never acceptable. If there are any questions, please contact Gian Carlo Cervone at giancarlo@cervone.net **before** preparing any graphics for publication—**of late graphics submitted have been less and less suitable for publication, so discussion in advance can save a lot of time and reworking**.

References Cited

The list of references cited should include all references cited in the text (except personal communications), and conversely, only references cited in the text should be listed. **Authors bear the responsibility for double-checking the accuracy of each and every citation used**. The list should be alphabetized by the author's last name, then first name and middle initial. Multiple entries by the same author should be in chronological order with the earliest first. Do not use n.d. unless absolutely necessary—if the date is truly unknown. The format for references should follow the *American Antiquity* Style Guide (see *American Antiquity*, Volume 57, number 4, pp. 749-777). Examples of the most commonly needed formats are listed below:

1. Book with single author

Bradley, James W.
1987 *Evolution of the Onondaga Iroquois: Accommodating Change 1500-1655 A.D.* Syracuse University Press, Syracuse, New York.

2. Book with multiple authors

Burt, William H. and Richard P. Grossenheider
1976 *Peterson Field Guides: Mammals*. 3rd ed. Houghton Mifflin, Boston.

3. Edited book (author is editor)

Morris, William (editor)
1978 *The American Heritage Dictionary of the English Language*. Houghton Mifflin, Boston.

4. Translated book

van den Bogaert, Harmen Meyndertz
1988 *A Journey into Mohawk and Oneida Country 1634-35*. Translated and edited by Charles Gehring and William Starna. Syracuse University Press, Syracuse.

5. Reprinted book

Hale, Horatio E., editor
1963 *The Iroquois Book of Rites*. Reprinted with an Introduction by William N. Fenton, University of Toronto Press, Toronto. Originally published 1883, D.G. Brinton, Philadelphia.

6. Multivolume set

Thwaites, Reuben G., editor
1959 *The Jesuit Relations and Allied Documents: Travel and Explorations of the Jesuit Missionaries in New France, 1610-1791*. 73 vols. Reprinted, Pageant, New York. Originally published 1896-1901, Burrows Brothers, Cleveland.

7. Titled volume in a series

Wray, Charles F., Martha L. Sempowski, and Lorraine P. Saunders
1991 *Tram and Cameron: Two Early Contact Era Sites*. Charles F. Wray Series in Seneca Archaeology, Vol. II, edited by Charles F. Hayes III. Research Records No. 21. Rochester Museum & Science Center, Rochester, New York.

8. Article in an edited book

Wade, Mason
1988 French Indian Policies. In *History of Indian-White Relations*, edited by Wilcomb E. Washburn. Handbook of North American Indians, Vol. 4, William G. Sturtevant, general editor, pp. 20-28. Smithsonian Institution, Washington, D.C.

9. Article in a journal

Murray, Jean E.
1938 The Early Fur Trade in New France and New Netherland. *Canadian Historical Review* XIX:367.

10. Article in edited volume in a series

Noble, William C.
1992 Neutral Iroquois Smoking Pipes. In *Proceedings of the 1989 Smoking Pipe Conference*, edited by Charles F. Hayes III, Connie C. Bodner, and Martha L. Sempowski, pp. 41-49. Research Records No. 22. Rochester Museum & Science Center, Rochester, New York.

11. Presented paper

Ceci, Lynn
1985 Shell Bead Evidence from Archaeological Sites in the Seneca Region of New York State. Paper presented at the Annual Conference on Iroquois Research, Rensselaerville, New York.

12. Dissertation or thesis

Drooker, Penelope B.
1996 *The View from Madisonville: Continuity and Change in Late Prehistoric Protohistoric Western Fort Ancient Interaction Patterns*. Ph.D. dissertation, State University of New York, Albany. University Microfilms, Ann Arbor, Michigan.

13. Manuscript in press

Brown, William T.

2000 Early Days in Livingston County. New Horizons Press. In Press.

14. Unpublished manuscript

Wray, Charles F.

1978 Field notes: Fugle Site. MS on file, Rochester Museum & Science Center, Rochester, New York.

15. Web pages and electronic documents

Sharp, John

2008 *Washington District of Columbia Biographies: Louis Deblois*. Electronic document, http://genealogytrails.com/washdc/bio_deblois_1.html, accessed July 15, 2009.

Past and Present NYSAA Award Recipients

The Achievement Award

- Charles M. Knoll (1958)
- Louis A. Brennan (1960)
- William A. Ritchie (1962)
- Donald M. Lenig (1963)
- Thomas Grassmann O.F.M. (1970)

Paul L. Weinman (1971)

- Robert E. Funk (1977, 1994)

Peter P. Pratt (1980)

- Herbert C. Kraft (1989)

Lorraine P. Saunders (1999)
Martha L. Sempowski (1999)
William E. Engelbrecht (2004)
Edward J. Kaeser (2006)
Edward Lenik (2012)

Fellows of the Association

Timothy J. Abel
Sherene Baugher
Monte Bennett
James W. Bradley

- Louis A. Brennan
- William S. Cornwell
- Gordon DeAngelo

Dolores N. Elliott
William E. Engelbrecht
Lois M. Feister
Stuart J. Fiedel

- Charles L. Fisher
- Robert E. Funk
- Thomas Grassmann O.F.M.
- Alfred K. Guthe
- Gilbert W. Hagerty

Charles F. Hayes III
Franklin J. Hesse

- John D. Holland
- Richard E. Hosbach

Paul R. Huey

- R. Arthur Johnson

Edward J. Kaeser

- Herbert C. Kraft
- Roy Latham

Lucianne Lavin

- Donald J. Lenig

Wayne Lenig
Edward J. Lenik

- Julius Lopez

Jonathan Lothrop
Ellis E. McDowell-Loudan

- Richard L. McCarthy

Mary Ann Niemczycki

- James F. Pendergast

Peter P. Pratt
Christine Rieth
Robert Ricklis

- William A. Ritchie

Bruce E. Rippeteau

- Donald A. Rumrill
- Bert Salwen

Lorraine P. Saunders

- Harold Secor

Martha L. Sempowski
Dean R. Snow
David R. Starbuck
David W. Steadman

- Audrey J. Sublett

James A. Tuck

- Stanley G. Vanderlaan

Paul L. Weinman
Thomas P. Weinman

- Marian E. White
- Theodore Whitney

Anthony Wonderley

- Charles F. Wray
- Gordon K. Wright

Joseph Zarzynski

Theodore Whitney Commendation

- Gordon C. DeAngelo (1998)

Charles F. Hayes III (1999)
Carolyn O. Weatherwax (2010)
William E. Engelbrecht (2010)
Ralph S. Solecki (2010)
Nan Rothschild (2012)
Diana Wall (2012)
Anne-Marie Cantwell (2012)
Louise Basa (2014)
A. Gregory Sohrweide (2015)
Paul Huey (2016)
Lois Feister | Lois Miner Huey (2016)
George Hamell (2016)

- known deceased

Certificate of Merit

Tim Abel
Thomas Amorosi
Roger Ashton

- Fred Assmus

Charles A. Bello
Monte Bennett
Daniel M. Barber

- Malcolm Booth

James W. Bradley

- Ralph Brown

Art Carver
Leonard Cohan

- William Davis

Barbara DeAngelo

- Gordon De Angelo

Robert DeOrio
Harold R. Decker

- Elizabeth M. Dumont

Lewis Dumont

- William F. Ehlers

Dolores N. Elliott
Garry A. Elliot
Lois M. Feister
John Ferguson

- Robert E. Funk

Joan H. Geismar

- Stanford J. Gibson
- Gwyneth Gillette
- Robert J. Gorall

R. Michael Gramly
George R. Hamell
Gerald Hayes
Elaine Herold
Franklin J. Hesse

- Richard E. Hosbach

Paul R. Huey
Vicky B. Jayne
Barry Kass
Jordan Kerber

- Dale Knapp

Albert D. La France

- Kingston Larner
- John R. Lee CSB

Edward J. Lenik
William D. Lipe
Kelly Lounsberry
Adrian O. Mandzy

- John H. McCashion

Ellis E. McDowell-Loudan
Dawn McMahon
Jay McMahon
Ann Morton
Brian L. Nagel

- Robert Navias

Annette Nohe

- Alton J. Parker

Marie-Lorraine Pipes
Douglas Pippin
Marjorie K. Pratt
Peter P. Pratt
Louis Raymond
Beulah Rice

- William H. Rice

Saul Ritterman
Lucy Sanders
William Sandy
Barbara Sciully
William E. Scott

- Harold Secor

Annette Silver
A. Gregory Sohrweide

- William Mead Stapler

David W. Steadman
Fred Stevens
Marilyn C. Stewart
Kevin Storms
Tyree Tanner
Donald Thompson
Neal L. Trubowitz
Justin A. Tubiolo
George Van Sickle
Charles E. Vandrei
James P. Walsh
George R. Walters
Alvin Wanzer

- Beth Wellman
- Henry P. Wemple

Daryl Wonderly
Roberta Wingerson

- Stanley H. Wisniewski

Susan Avery Young