THE BULLETIN

Number 63 March 1975

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The Bulletin

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Published by the New York State Archeological Association. Subscription by membership in N.Y.S.A.A. For membership information write William F. Ehlers, 8 Jackson Av., Middletown, N.Y. 10940. Back numbers may be obtained at \$1.50 each from Charles F. Hayes III, Rochester Museum and Science Center, 657 East Avenue, Rochester, New York 14607. Entire articles or excerpts may be reprinted upon notification to the Editor: three copies of publication issue in which reprints occur are requested. All manuscripts submitted are subject to editorial correction or excision where such correction or excision does not alter substance or intent. Printed by Braun-Brumfield, Inc. P.O. Box 1203, Ann Arbor, Michigan. 48106

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THE RIDDLE OF THE PREHISTORIC WALLS, RAMAPO, NEW YORK

Edward J. Lenik

Introduction

Legends abound in the Ramapo Mountains of New York and New Jersey. Tales of strange stone walls and stone mounds have lured generations of hikers through the region to gaze in awe and speculate on their origin. Tales are also told of the outlaw Claudius Smith and his escapades during the Revolutionary War. These stories have lured many people into the mountains in search of his reputed buried treasure.

In 1969, the North Jersey Highlands Historical Society, in cooperation with the New England Antiquities Research Association, began investigating the "Supposed Prehistoric Walls" in Ramapo, New York. This site is a massive complex of stone walls that meander over some 200 acres of ground along a hilltop overlooking the villages of Sloatsburg and Ramapo. Some sixteen massive stone mounds, basically conical in section and circular in diameter, are within the network of walls.

The investigation of this site was prompted by the discovery of a fascinating map of the area dated 1845. The map, in the possession of Mr. Pierson Mapes of the Ramapo Land Company, shows the layout of the strange stone walls and is entitled "Supposed Prehistoric Walls in the Wrightman Fields, Ramapo, New York." (Cover) The archeological problem was to determine the exact nature of the site, that is, who built the stone walls and stone mounds, when and why. The task was a formidable one and would encompass four years of work.

The Historical Record

The Ramapo Mountains east of Sloatsburg, New York, retain today much of the same rugged and picturesque beauty that they had two centuries ago. Over the years the area was traversed by Indians, settlers, slaves, soldiers, and just plain ordinary travelers. The Ramapo River, winding its way through the valley below, provided a natural river highway for travel, as well as a readily available supply of food and water.

An extensive documentary search was conducted in an attempt to learn the background of the area and to find clues pertaining to the site. The recorded history and archeology of the area is summarized below under four categories, namely, the Indians, the Revolutionary War, the colonial ironworks, and eyewitness accounts and maps.

It has been well established that Indians were inhabitants of, and frequent travelers through, the Ramapo valley and surrounding area. Some early archeological surveys and excavations were conducted in the region by Max Schrabisch. Schrabisch reports the discovery and excavation of three rockshelters located a short distance south of the Prehistoric Walls site. These rockshelters were located at Torne Mountain, along Torne Brook, and along the Ramapo River. (Schrabisch 1909). Schrabisch states that he recovered from his excavations cord marked and incised pottery, flint chips, projectile points, scrapers and animal bones. However, he makes no mention in his report of the existence of the Prehistoric Walls site.

One other point must be mentioned with reference to the aboriginal inhabitants of the area. Schrabisch also reports that an "ancient village" of the Tuscarora Indians was located on level ground between the Ramapo River and the foot of Hoghe Kop Mountain near present day Suffern, New York. The Tuscarora Indians reportedly passed through the Ramapo Pass in the year 1718 enroute from their native lands in North Carolina to the territory of the Iroquois.

Approximately two miles south of the Prehistoric Walls site stood an "Old Fort" that was occupied extensively during the entire Revolutionary War. This fort was located in the valley along the Ramapo River at a place called Sidman's Bridge. Fort Sidman, as it came to be known, guarded the entrance to the Ramapo Pass. It was walled in by nature with the point of the mountain on the east and the Ramapos' continuing on the west. Throughout the entire Revolutionary

COVER ILLUSTRATION: "Prehistoric Walls Map" of 1845. Courtesy of Pierson Mapes, Ramapo Land Co., Ramapo, New York.

War various colonial militia regiments were stationed at Fort Sidman. Their function was to guard Sidman's Bridge and the entrance into the valley from British military action. Torne Mountain, located just east of the fort, and rising 1,200 feet above the valley, served as a lookout post for the fort.

The garrison at Fort Sidman fluctuated throughout the years of the war, depending upon the season of the year, as well as the course of military events. No major military engagements occurred at the fort during the period of its occupancy from 1776 to 1782. (Bogert 1971:9-18)

Documentary records indicate that the "Old Fort" at Sidman's Bridge was a wooden blockhouse two stories high. Conditions were generally poor at this encampment throughout the entire Revolutionary War, and the militia regiments were frequently urged to make improvements. In fact, in 1782 the blockhouse was described as being in a bad state of disrepair with a great deal of work needed to make it useful and liveable. (Talasco 1973:15)

The background story of the Prehistoric Walls site would not be complete without mentioning the long history of ironmaking activity in the Ramapo Valley. In May 1795, Josiah G. Pierson began construction work on an ironworks along the Ramapo River near the present day village of Ramapo. Known as the "Ramapo Works" this ironworks consisted of a dam, sluiceways, blacksmith shop, rolling and slitting mill and nail manufacturing. (Ransom 1966:163). By 1798 the ironworks was in full operation. Business expanded rapidly and by 1806 the Ramapo Works had added a store, post office, forge, gristmill and sawmill.

Business continued to boom and by 1820 a cotton mill was established in the area. The village population grew and in 1835 it was recorded as being over 800. However, by 1855 the ironworks ceased to operate because the dam on the river, which supplied the power for the works, was broken.

In the northern section of Sloatsburg, also along the Ramapo River, two forges known as "Dater's Works" were established in 1800 (Ransom 1966:135). These forges produced bar iron, some of which was sold to the Ramapo Works. Through the ensuing years, Dater's forges changed owners several times. Finally, at sometime after 1854, they were abandoned. Charcoal was the principal fuel used in the operation of the Ramapo and Dater's Works. Both of these establishments employed woodcutters and charcoal burners to produce this needed fuel for their production activities. These woodcutters and colliers undoubtedly lived and worked in the nearby hills, very likely at the Prehistoric Walls site.

In studying the background of the Prehistoric Walls site we carefully examined all available maps pertaining to the area. Unfortunately, the author of the 1845 map of the "Supposed Prehistoric Walls" is not known. However, the strange configuration of stone walls and mounds sufficiently impressed the mapmaker to carefully record the site. The description "Supposed Prehistoric Walls" would seem to indicate some degree of skepticism on the part of this unknown draftsman or, at least, unsubstantiated tradition.

Maps of the area drawn by Robert Erskine, surveyor general of Washington's army during the Revolutionary War, were also examined for clues to the existence or nature of the site. Erskine, as is generally known, carefully recorded roads, bridges, homes, forts etc. on all his maps. However, there is no mention of the Prehistoric Walls site on any of his maps.

Two other maps pertaining to the site were found and examined. A map of Rockland County, drawn in 1854, labels the site as the "Wrightman Place." Unfortunately, it does not show any stone walls or mounds. The meaning of the term "Wrightman Place" is not clear, as the map does not indicate any house or place of business at the site. Finally, recent 20th century hiking trail maps of the area make note of the site by labeling it as "circle of rocks."

Only one published reference to the Prehistoric Walls site has been found. In a book entitled *THE RAMAPO PASS* by E. F. Pierson, there is a paragraph which reads as follows: (Pierson 1915:20-21)

Our attention has been called by Francis W. Doughty, a gentleman of antiquarian tastes, to primitive conditions to be seen today on the north side of the Ramapo Valley at the eastern end of the Old Writeman fields. Here at certain spots there is a singular arrangement of large stones hardly to be the work of the white man in clearing the land. Some of these cairns are isolated structures of curious shape and others are projections in the walls extending to Stony Brook Valley which leads into "Long Clove" and the regions about the Hudson River.



Fig. 2 Partial Survey of the Prehistoric Walls Site.

Through the years, several legends, rumors and theories have developed pertaining to the Prehistoric Walls site. They undoubtedly came into being partly as a result of the varied historical background of the area. These legends or theories are summarized as follows:

- 1. Indians built the stone walls and mounds.
- 2. The site is a fortification built by colonial militia stationed at Fort Sidman.
- 3. The walls and mounds were built by farmers in the process of clearing the land.
- 4. The walls are property lines, animal enclosures or corrals.
- 5. The stone walls and mounds were built by an early race of non-Indians as a religious-ceremonial complex.

We examined these theories with reference to the historical record, the site survey, and the archeological evidence uncovered to date.

Field Survey

An extensive field survey of the Prehistoric Wails site was conducted from 1969 through 1973. During this four year period numerous trips were made to the site in search of clues regarding the origin and function of the stone walls and mounds. The field work consisted of systematically walking the area and carefully photographing and recording physical details. The field survey parties varied in number from 2 to 10 persons as frequent trips were made to the site. Local historians and collectors were consulted and invited to the site to participate in the search. A major portion of the site was surveyed and mapped to permit comparison with the original 1845 map. In the course of this work, several new features were discovered and plotted. The results of this reconnaissance and mapping are shown in Fig. 2.

The Prehistoric Walls site is located on a high ridge or hilltop a short distance east of Sloatsburg, New York and north of the village of Ramapo, New York. The highest elevation on the site is 700 ft. above sea level as noted on the U.S. Geological Survey map of 1955, Sloatsburg quadrangle. Although it is a hilltop site, its general appearance is flat to gentle rolling. Along the westerly side of the site we found perpendicular ledges and cliffs rising from the lowlands of the Ramapo Pass below. Numerous outcrops of ledge and large glacial bounders are visible at the site. The area was undoubtedly scarred by glacial activity thousands of years ago, and some specimens of fossils have been recovered on the hilltop. Also, two small pieces of black flint were found on the surface at the northern end of the site. It is readily apparent that the area was cleared of trees in the past as the present trees are of only twenty to thirty years growth. Ten varieties of trees were noted at the site; white oak, white pine, hemlock, dogwood, gray birch, red maple, tulip, sassafras, chestnut oak, and burned out cedar stumps. The site is a favorite with local deer hunters.

Several sources of fresh water were noted at the site. The small swamp at the northern end was always wet and soggy despite several periods of drought which occurred during the survey. A very small brook drains this swamp and runs from east to west, going down the cliff. Also, a fast flowing brook runs along the southern edge of the site emptying into the Ramapo River below. In the course of the field survey, two small rockshelters were discovered adjacent to the site. The first, located along its northeast perimeter, consists of one large flat glacial boulder that is propped up on two other boulders. This shelter has an opening 7 ft. wide, 4 ft. in height, and 8 ft. deep. Its features were measured and photographed but no excavations were undertaken. The second rockshelter is located along the brook at the southern edge of the site. This shelter was formed by a natural split or cleft in the bedrock ledge. It measured some 4 ft. wide, 5 to 6 ft. in height and 6 ft. deep. The roof was formed by small boulders which had fallen across the split in the rock. This shelter was not excavated and no surface evidence of occupation was found.

The stone walls and stone mounds were extensively examined, surveyed and mapped. The walls and mounds were made of glacially transported boulders of varying sizes. They consisted of mostly foliated granitic gneisses with some granitic igneous rock (Hartman 1973). Also, an occasional quartz boulder was found in the walls and mounds.



The stone walls in the main section of the site were carefully laid up, varying in width from 6 to 10 ft. and in height from 1 to 4 ft. Large boulders were generally used to form the base of the walls, with smaller fieldstones placed on top. The stones were heavily patinated and there was no evidence that they had been deliberately worked in any manner. Some of these walls have openings or "gates" in them which measure 8 ft. wide.

The walls along the cliff at the western edge of the site were also well laid up, neat and vertical. They were made of fieldstones, but a significantly higher percentage of split and fractured rock was used in their construction. No evidence of tool marks was found in these walls. Their measurements also varied from 2 to 4.5 ft. in width, and 1 to 3.5 ft. in height. The walls followed the natural contours of the ground and cliff and frequently tied together sections of bedrock outcropping. It is readily apparent that the workmanship and placement of these walls along the cliff is different from those in the rest of the site.

The stone walls at the Prehistoric Walls site meander over the entire area. They do not follow any recognizable pattern as might be expected in the case of property lines. However, we did find one small section or area completely surrounded by walls and this has been labeled as an enclosure on Fig. 2. In general, our survey map compares favorably with the 1845 map.

Ten circular black "dots" appear on the 1845 map which we have interpreted as representing the stone mounds. However, our survey revealed the existence of 16 stone mounds. Eight of these stone mounds are in the center of the site and make a rough circular pattern around a small hill. The stone mounds are generally circular and vary in diameter from 43 to 45 ft., and in height from 3 to 4 ft. There are notable exceptions as one mound is 60 ft. in diameter and another is 8 ft. in height at its center. The stone mounds have very noticeable depressions or deep indentations in the stonework at the top. Many of these depressions look rectangular in shape, giving the appearance of a collapsed cellar hole or some type of dwelling.

Eight additional stone mounds were found in a cluster along the western edge of the site. These are generally smaller stone piles varying in diameter from 20 to 43 ft. and height from 3 to 4 ft. These mounds do not have any depressions on their tops. Thus it would appear that they are from a different period of construction.

Two additional features were discovered and recorded in the course of our field survey. We found a stone fireplace constructed next to a large glacial boulder, and a stone-filled depression. (See Figure 2 for location.) The stone filled depression appeared to be that of a well and the prospects of excavating this feature were exciting. Both the stone fireplace and the suspected well were excavated, the results of which are presented below.

Finally, the 1845 map indicates several roads leading into the Prehistoric Walls site. These roads were located in our survey and mapped. They measured 8 ft. wide and were well constructed. In fact, they were lined with stone along their edges at several locations.

Archeological Excavations

In 1973, archeological excavations were undertaken at the Prehistoric Walls site in an attempt to learn its temporal and cultural placement as well as its function. Three features were excavated at the site, namely, the suspected well, the stone fireplace, and a section of one stone mound. These features seemed to offer the best possibility of definitive material being found.

The stone filled depression, or suspected well, was excavated first. This feature is located along the eastern edge of the site, 100 ft. off the old road and 40 ft. east of the stone wall. The area was carefully cleared of surface leaves and brush and a 10 ft. by 10 ft. square was laid out around the depression. Excavation proceeded with great care and the soil was removed by trowel and sifted. All stones encountered were left exactly in place as found with the exception of a few which appeared to have tumbled into the center of the depression.

Two soil layers or zones were encountered in the excavation of the stone filled depression. The top layer consisted of black topsoil and organic material which covered many of the stones and partly filled-in the depression. This soil layer was generally thin throughout the square in the depression itself where it had undoubtedly washed in. Stratum 1 was carefully removed and the position of the stones was plotted on our square sheet (Fig. 3). Two artifacts were recovered from stratum 1 in the center of the depression; these were two .22 caliber brass cartridges.

The second soil layer or stratum 2 consisted of a fine grained tan/brown soil. This stratum was encountered at the edges of our 10 ft. square, in the bottom of the depression, and probably continued underneath the stones themselves. Stratum 2 appeared to be the natural sub soil and no artifacts were recovered from this layer.

As the excavation of the depression was completed, it was found to be rectangular in shape, measuring 4 ft. long by 2 ft., 3 in. wide. It was not very deep, going down a maximum of 2 ft., 2 in. below the present ground level and terminating in bedrock. The depression appeared to be man-made as many of the stones seemed to be definitely placed in position to give the hole its rectangular shape. Other stones around the rectangular hole were simply piled up, and a few had tumbled into the depression and were removed in the course of the excavation. Unfortunately, the excavation of the stone-filled depression did not provide us with any answers except in a negative way; that is, this feature was NOT a well. Our original questions remain; who built it and why? A great: deal of work went into placing these stones in the depression.

We turned our attention next to the stone fireplace which was located just west of the center of the site. This feature was also man-made, as the stones were placed in position adjacent to a large boulder to form a fireplace (Fig. 4). The fireplace hearth was excavated as well as the area in front of it measuring 5 ft. long by 4 ft. wide. A thin 1 in. layer of organic material consisting of decaying leaves, small roots and black topsoil was removed first. This was all the soil cover that existed in the 5 ft. by 4 ft. area immediately in front of the fireplace. We encountered bedrock directly beneath this soil layer. In the hearth of the stone fireplace we encountered a heavy concentration of charcoal immediately below the topsoil layer. This charcoal went down to a depth of 1 ft. in the hearth and once again terminating in bedrock. Unfortunately, no artifacts were recovered from this excavation.

Finally, we directed our efforts to one of the mysterious stone mounds. We selected for excavation a stone mound which measured 45 ft. in diameter at ground level and 3 ft. high in its center. It contained two depressions on its top (see Fig. 2 for location). One of these depressions, which appeared to be circular, had previously been excavated by Mr. George Geils, a collector of Indian artifacts. Mr. Geils, of Midland Park, New Jersey, reported that he dug into the center of the depression and removed some 3 ft. of stone. He stated that he found a thin layer of soil at the bottom of the depression from which he recovered a small piece of wood. Geils further reported that he found no evidence of fire or cultural material in his excavation. (Geils 1972)

We laid out a north-south base line through the center of this stone mound, having decided to excavate the southeast quadrant of the mound because it contained the second depression in the stone pile which presumably was undisturbed. (Fig. 5) The method of excavation was some what unusual. We began by removing the stones from this section of the mound one by one. We carefully examined each cobble and boulder for evidence of tool marks as we removed them from the mound. None were found. This stone layer was designated as stratum 1.

The stones in the pile consisted of small cobbles, as well as large boulders weighing several hundred pounds. We removed these stones, many with a great deal of effort, and placed them on a "new" pile nearby. As we removed the stones we found some leafmold and charcoal scattered throughout the pile. As we took this section of the mound apart, it appeared that many of the stones were laid in position or fitted into the mound. It is not clear whether this was a deliberate act of the boulders or caused by natural settling of the stone pile through the years. At the bottom of the stone pile we found the original ground level: a thin black layer of topsoil, organic material and some scattered charcoal. A few stones were found imbedded into the ground in, apparently, their original position. It was clear that the stone mound was created by placing the cobbles and boulders on top of the original ground surface.

We removed the layer of topsoil and organic material which varied in thickness from 1 to 3 in. One artifact was recovered from this soil layer which was designated as stratum 2. This artifact was a brass shotgun shell. The head of this shell was marked as follows: "12 EXTRA RANGE 12; SR & Co." It would appear that this shotgun shell was in the original ground level prior to the creation of the mound. However, there is the possibility that this artifact is intrusive in stratum 2. It may have been discarded on top of the stone pile and worked its way down through the pile into the ground below.

Below stratum 2 (topsoil) we found a fine-grained tan/brown soil layer approximately 3 in. thick. As we went along we removed many of the field stones that were imbedded in the ground. Finally, below stratum 3 (tan/brown soil) we encountered a tan/orange colored subsoil. No additional artifacts were recovered.

It is interesting to note that our partial excavation of the stone mound gave us some first hand evidence as to how it was built. It took six individuals four hours to remove a small section of the stone pile. It was backbreaking work. Furthermore, it was apparent that our newly created stone pile or mound differed in appearance considerably from the one we were taking apart. The new mound looked "haphazard" in appearance as the stones were simply thrown on the pile. By comparison, the mound we were excavating looked neat and orderly. The difference was due perhaps to natural settling through the years.

Unfortunately, the partial excavation of the stone mound failed to give us any direct evidence as to who built the stone piles and why. Once again, we have negative evidence which indicates that this mound was not a collapsed foundation or structure, nor was it a charcoal pit or kiln, nor was it a burial site.

Site Comparisons

Stone walls are common throughout the eastern United States, particularly in the Northeast. The hills and valleys of this region are crisscrossed with countless miles of these stone walls. Therefore, the analysis of the Prehistoric Walls site would not be complete without a search for comparisons at similar sites elsewhere. A preliminary review of the literature indicates that there are many similar sites throughout the United States that are equally mysterious and baffling to archeologists and historians. Parallels can also be found in western European countries. Mysterious stone walls have been reported in Illinois, California, Tennessee and West Virginia. Others undoubtedly exist, but a brief description of only these sites is presented here.

Nine "pre-Columbian" stone wall sites have been reported in southern Illinois, stretching across its southern tip, between the Mississippi and Ohio Rivers. These stone walls are constructed of "loose stones of moderate size" that are laid up dry, that is, without mortar. It is claimed that these walls were originally 6 ft. high and 6 ft. wide. The major feature of these nine sites is that each is located on top of a high projecting bluff. (Coleman 1970:68) The high bluffs at these nine sites in Illinois can be approached from the rear over gently sloping ground. The stone walls are reportedly built across these approaches. Also, stone cairns and stone-lined pits were found behind the entrance gateways of all sites. Unfortunately, the origin of these structures is unknown, although there is some speculation that they were built by Indians.

Three similarities are apparent between the southern Illinois sites and the Prehistoric Walls site. First, their manner of construction is identical; they were laid up dry. Secondly, they are located on a high bluff. Finally, one "stone-lined pit" was also found at the Prehistoric Walls site which may be similar to those in Illinois. However, there are some basic differences. The Illinois bluff sites were walled in *ONLY* on their approach side. This seems to suggest that these sites were used as fortifications. The Prehistoric Walls site is only partly enclosed on its approach sides and stone walls are placed along sections of the cliff. Furthermore, the stone walls in Ramapo, New York are low in height and thus not very useful for defensive purposes. Near Manchester, Tennessee, between the forks of the Duck River, is a site known as "The Old Stone Fort."

This site consists of stone walls which encircle a high plateau area of 50 acres. The walls vary from 16 to 18 ft. thick at their base to about 4 ft. on top, with earth frequently used as fill. The walls are not continuous but are constructed where the bluffs of the plateau are not steep. They average 4 to 5 ft. in height, but may have been higher at one time. This site has an entrance complex on its north wall with two "conical stone pillars." (Faulkner 1968:57)

The Old Stone Fort was excavated in 1928 by P. E. Cox, Tennessee State Archeologist, and again in 1966 by Dr. Alfred K. Guthe of the University of Tennessee. Cox dug five trenches through the wall to determine their method of construction. He reports finding stone hearths in the base of the south and east wall which contained charred human and animal bones plus two corncobs. However, the whereabouts of these artifacts is unknown at this time. Als o, the 1966 excavations failed to find, and thus verify, Cox's stone hearth discovery.

Only seven projectile points were found in the 1966 excavations at the Old Stone Fort, but these were not associated with the stone walls. They are reported to be of the Adena type dating to Early Woodland times. No firepits, pottery, burials or structures were found, indicating the site was never permanently occupied as a habitation.

The excavations by Guthe did yield charcoal from various places in the wall bases. These yielded radiocarbon dates ranging from AD 30 to AD 430. This suggests that the Old Stone Fort took several generations to build. The conclusion at this point is that the Old Stone Fort was not defensive in nature, but a ceremonial or sacred area built by Amerindians related to the Hopewell culture. (Faulkner 1966:58)

There are a few slight similarities between the Old Stone Fort and the Prehistoric Walls site. Both sites were built on a high bluff adjacent to a river. Also, as previously stated, we found two flint chips at the Prehistoric Walls site and a stone fireplace similar to that reported by Cox. However, the similarity stops there, as the construction and size of the Tennessee walls differ radically from those at Ramapo, New York.

Another reported site is the Mount Carbon Stone Walls. This site is located on a flat, steep-sided hilltop above the Great Kanawha River 30 mi. east of Charleston, West Virginia. This site, designated 46 FA-1, contains six stone walls that vary in height from 3 to 5 ft. and from 15 to 30 ft. wide at the base. They are not built-up walls, but instead are made of "loose" slabs of stone piled up irregularly to form a ridge. (Inghram, Olafson and McMichael 1961:2-6) Also in the site area are a number of small rock cairns or mounds measuring 5 ft. in diameter and 6 in. high.

The Mount Carbon stone wall site was excavated in 1958 by James H. Kellar. Kellar reports that he excavated three stone cairns or mounds and ran a test trench through one of the walls, all with negative results. However, test pits in flint workshop areas nearby did produce some Indian artifacts. (Kellar 1961:14-18). The late Edward V. McMichael, West Virginia archeologist, believed the walls were built by Indians of the late Adena culture who lived in the river valley below and who also built burial mounds. McMichael further believed that the Mount Carbon walls were built for ceremonial purposes. (McMichael 1961:33-34). Except for the fact that it is a hilltop site, there is little similarity between the Mount Carbon Stone Walls and the Ramapo Prehistoric Walls.

Additional stone wall sites have been reported around Oakland and Berkeley, California. These walls meander through the hills and range in length from 20 to 60 ft. They are 2 to 5 ft. in height and about 4 ft. thick at ground level. It has been variously suggested that these California walls were built by Indians, were defensive in nature, and were used as sheep pens or corrals. (Morrill 1973:33)

Stone mounds or piles are also in existence in many places in the United States and western Europe. In the United States, several were found to be *earth* mounds capped with stone that served as burial sites. One such stone-capped mound was excavated on Twenty-Mile Creek in West Virginia, and contained two skeletons with copper and stone artifacts. (Hale 1898). Furthermore, stone mounds have been found and excavated in various places in Scandinavia. For example, stone tumili were used as burial mounds on the Baltic Island of Gotland and were dated to the Bronze Age or 1500 B.C.

In the general vicinity of the Prehistoric Walls site, other stone piles or mounds have been located in Rockland and Westchester Counties in New York. Tradition labels these sites as "Indian Graves." We investigated one site in Nyack, New York, which consists of small oval shaped stone piles measuring 6 ft. by 5 ft. wide and 1.5 ft high. The Nyack Mounds were on a gentle sloping hillside that was farmed at an earlier time, and the conclusion was that the stone piles were probably the result of land clearing activities. (Lenik 1972)

Summary and Interpretations

Four years of study has gone into the attempt to unravel the mystery of the Prehistoric Walls site. Unfortunately, countless hours of documentary research, field survey work, and archeological excavations has failed to produce definitive answers. However, as a result of all this work, we can definitely eliminate most of the previous rumors or theories concerning the site. We can also offer some interpretations, rather than conclusions, that have some basis



Fig. 4. Plan of stone fireplace at Prehistoric Walls site, Ramapo, New York.



Fig. 5. Excavation of Stone Mound.

in fact. A summary of the existing evidence as it relates to previous theories or legends is as follows:

Theory #1: The Prehistoric Walls were fortifications built by colonial troops during the Revolutionary War.

Facts: The walls do not enclose the hilltop. They are low in height and meander over the site and thus would be of no value as defenses. There is no evidence that the colonial militia stationed at Fort Sidman during the Revolution built these walls. Various regiments came and went to the fort during the entire war and records indicate that they had enough to do just keeping the blockhouse in shape. Historical documents of the period, including maps, do not mention the stone walls and mounds. Therefore, theory #1 is rejected as having no basis in fact.

Theory #2: The walls were built by Indians.

Facts: Indian encampments along the Ramapo River are well known and several rockshelters have been found adjacent to the Prehistoric Walls site. However, no relationship between these campsites and the walls has been established. Also, no Indian artifacts have been found in association with the walls, mounds, or other features, although two worked flint chips were found on the surface at the north end of the site. Thus, there is no evidence that the walls and mounds were built by Indians.

Theory #3: The stone walls and mounds were built by an early race of non-Indians as a religious or ceremonial complex.

Facts: Although the stone mounds resemble European bronze age burial mounds, no evidence of an early non-Indian culture was found. The partial excavation of one stone mound at the site indicates that they were not used as burials and were not a type of collapsed structures.

Theory #4: The stone walls indicate property lines.

Facts: The walls meander all over the site, frequently ending abruptly for no apparent reason. They also follow the contours of some sections of the cliff but they do not completely enclose the site. Theory #4 is therefore rejected.

Theory #5: The walls and mounds were built by farmers as a result of land clearing for planting or pasture.

Facts: The 1845 map refers to the site as the "Wrightman Fields" and the 1854 map calls it the "Wrightman Place." The term "fields" seems to indicate some type of farming activity. However, no farm structures (houses, barns, etc.) were found at the site. Also, we have been unable to determine, "who was Wrightman?" Our field survey showed that the site was not suitable for planting crops because the area is generally too barren and rocky. However, Mr. Gardner Watts of Suffern, New York, reports that he found an "old plowshare near the rock circles." (Watts 1972). Several openings or gateways were found in the walls in the course of our reconnaissance. The wall openings were consistently 8 ft. wide and manmade. These openings or gates would certainly permit the passage of animals or wagons through the site.

The terms "Summary and Interpretations" has been used advisedly in this section of the report. Although we have laid to rest several of the theories and rumors regarding the site, very little can be said in the way of firm conclusions. The two principal questions about the site remain, namely: "Who built the walls and mounds, and why?" These cannot be answered unequivocally at this time. However, on the basis of the meager evidence at hand, it would appear that the Prehistoric Walls and stone mounds were built by farmers. Their purpose was to clear the land to make it more suitable for pasturage for either cattle or sheep. The walls at the site varied in height from 1 to 4 ft. This, seemingly, would make them unsuitable for fencing in animals. However, they may have been topped with "cross and rail" wood fencing which was a common fencing practice in New England (Sloan 1955:27). The wood, of course, has long since disappeared, leaving us only the mute and mysterious stone walls to ponder. Furthermore, the building of stone walls, and the piling of boulders into heaps in the fields, was a common farming practice in the northeast based on a stone masonry tradition brought over from England. The early farmers in this area built stone walls and stone piles because they were accustomed to doing so in their homeland.

Acknowledgements

Many people, with many talents, participated in the effort to unravel the mystery of the Prehistoric Walls. I am particularly grateful to Mr. Mead Stapler of Riverdale, New Jersey who handled the task of surveying and mapping the site. Mead's deep interest and desire to find the answers has been a source of guidance and inspiration at every step of the way. Special thanks are also due to Mrs. Catherine McCormick of Spring Valley, New York, and Mr. Gardner Watts of Suffern for their invaluable help in historical research. Thanks are also due to the many people who gave countless hours of hard labor freely in excavating and surveying the site. Foremost in this respect were Frank Lenik, Laura Lee, George and Joann Cotz. Finally, I wish to thank Mr. Pierson Mapes, owner of the property, for providing us with a copy of the 1845 map and for granting us permission to work on the site.

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THE EGLI AND LORD SITES: THE HISTORIC COMPONENT- "UNADILLA" 1753-1778

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Preface

In the late 1950's, the author investigated a trench which was being dug for a water main on the Henry Egli property in Sidney, New York. At that time, a few kaolin pipe fragments, brass sherds and flint chips were observed in the upper portion of the trench. In 1968, the river bank (near where the water main trench had been dug) was inspected. At this time, several flint chips, some fire-cracked rock, and what appeared to be a possible midden were observed on the surface. With the permission of the landowner, testing of this area was begun. A trench paralleling the river bank was established to determine whether evidence of subsurface occupation existed.

Shortly after this work was completed, Howard Chamberlain (member, Upper Susquehanna Chapter) informed the author that topsoil was being removed from Mr. Egli's meadow adjacent to the riverbank. Investigation revealed several features, which were then excavated in an effort to salvage them before the bulldozers destroyed them completely.

Before this work was finished, Mr. Norm Davies, a: local contractor working for Mr. Egli, informed the author that a building was going to be erected on this site. Mr. Egli granted permission again for excavation on his property, in the area of the proposed building. Four days were spent salvaging this area.

In July, 1970, testing was begun on the Lord Site (directly across the river from the Egli Site) by the Upper Susquehanna Chapter, NYSAA. Permission to do this work was granted by chapter member Ms. Mary Kirby Lord (owner). In April of 1971, a short distance from these test trenches, salvage work was conducted on another part of the Lord Site where construction was underway for a new sewage treatment plant for the village of Sidney.

Introduction

In 1968, 1970, and 1971 archaeological excavations (primarily salvage) were conducted on the Egli Site and on the Lord Site. They are located in the township of Unadilla, Otsego County, New York, three quarters of a mile above the original confluence of the Unadilla and Susquehanna Rivers and on the north bank of the Susquehanna, 1000 ft. above sea level. (see map, Fig. 1). The Lord Site is on the south bank of the Susquehanna, directly opposite the Egli Site. This site is in the village of Sidney, New York, Delaware County (see map, Fig. 1).

Both the Lord and Egli Sites are multi-component sites. The most recent component is an 18th Revolutionary period Indian settlement; the remaining components are prehistoric (most notably the Late Woodland Owasco, with some evidence of Middle Woodland, Early Woodland, and Archaic). This report deals with the historic component, the Indian village of Unadilla. The prehistoric components will be considered in a separate report.



Fig. 1. Topographic Map of the Junction of the Unadilla River with the Susquehanna River, showing the location of the Egli Site (1) and the Lord Site (2). The top of the map is north. (After United States Dept. of the Interior Geological Survey, Sidney Quadrangle, New York, 7.5 Minute series (topographic)).

Description of Excavations

Egli, Area I: In the spring of 1968, the writer decided to test a small portion of land on the Henry Egli property after finding several fire-cracked rocks, flint chips, and what appeared to be a midden area or dump. This dump was located on a precipitous bank on the south edge of the site and dropped off to the edge of the Susquehanna River 20 ft. below. The topsoil here was very black in color and the testing of it disclosed several artifacts, primarily of historic origin, though a few were prehistoric. These artifacts, although not in situ due to soil creep on the steep embankment from which they were recovered, nonetheless indicated a potentially important area.

Shortly thereafter, a second test was conducted at the top of the bank in the dump area and in about 2 ft, from the bank's edge. A trench ZO ft. long and 5 ft. wide was established, running east-west, with a connecting trench at the east end 5 ft. long by 5 ft. wide extending in a northerly direction. The whole of this trench formed an "L" shape. Prior to the establishment of the test trench, the area was covered with a hedgerow which had recently been cut. Due to the existence of the hedgerow and its close proximity to the steep riverbank, plowing had not disturbed this area, and for this reason, it was selected for excavation.

This test trench provided the following information: The soil deposition included Zone I which was comprised of the duff underlain by loam, dark brown to black in color and averaging 10 to 13 in. in depth. Zone II was a clay-rich silt, light yellow-tan in color and extending downward several feet, at which point it became integrated with leached oxides and gray-green clays which rested upon cobbles at the river's edge. It should be noted that the depth of the test trench did not exceed 2 ft. below surface, and that most of the preceding information was derived from exposed areas in the side of the bank, resulting from erosion by the river.

Within Zone I and at its junction with Zone II no cultural stratigraphy was visible. However, several artifacts were recovered from it, both of historic and prehistoric origin. The distribution of historic artifacts tended to be within the upper half of Zone I, whereas the prehistoric artifacts tended to be within the lower half of Zone I and at its junction with Zone II; but mixing did occur.

Egli Area II: At the close of work in the previously described test trench, attention was directed to the western slope of the site, since topsoil was being removed from there by power machinery for a nearby highway improvement project. The first salvage work on the site was conducted in this area. The removal of topsoil (Zone I) resulted in the exposure of 6 features and a second dump area. Five of the features were prehistoric and contained Owasco artifacts such as Levanna points and fragments, scrapers, pottery and refuse bone remains. These features were round to oval in outline, basin-shaped in cross-section, ranged from 13 to 24 in. in depth, and had been utilized as cooking and refuse pits. One feature, a hearth, was of historic origin; round in outline, it measured 3 ft., 4 in. in diameter and 15 in. in depth, and had straight sides and a flat bottom. It was laminated with ash and fire-burned earth, black to red in color. Historical artifacts recovered were as follows: a large wrought iron hoe; two fragments of salt-glazed ware (part of a small cup or saucer); a kaolin pipe bowl fragment with a heart-shaped cartouche and the letters "R.T."; a small, clear, flat glass window pane fragment with wood fibers adhering to its edges; a whetstone; a copper teapot lid; four small, white, seed beads; a red glass bead; a rectangular shell bead; brass sherds; a stone fish effigy; and a small red slate pendant.

The second dump, some of which had been removed during the taking of topsoil, proved to be of historic origin. The portion remaining was very black in color and contained refuse bone remains, an opalescent bead, and some copper fragments. A cross-section was cut, which resulted in the discovery that underlying the historic dump were several prehistoric artifact-bearing zones separated by layers of silt.

Egli Area III: While work was still being conducted at the Area II location, it became known that a building was to be erected on the tract of ground between Area II and Area I. This tract of land (Area III) was situated on what was likely to be the most important part of the site. The salvage work at this section of the site provided the most important data.

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In preparation for the construction of the new building, a bulldozer was employed to remove the topsoil (Zone I) for the laying of a concrete footing. After the topsoil was removed by the bulldozer, the rest of Zone I was removed by volunteers hoeing while a grid system of 10 ft. squares encompassing a total area of 4900 square feet was set up. The squares were assigned numbers according to the EONO system. The artifacts found during this process were considered "surface" finds and bagged accordingly. This process resulted in the exposure of 137 post molds, 29 historic post molds, 32 prehistoric features, 10 historic features, and 13 non-diagnostic features, a total of 166 post molds and 55 features, all of which were intrusive into Zone II. (See map, Fig. 2.)

Since there was no vertical separation of historic and prehistoric components on this area of the site, a problem existed in interpretation. However, the presence of artifacts in situ within features extending into Zone II made possible a definite distinction between the historic and prehistoric components. Those features which contained only historic artifacts or only prehistoric artifacts were easily assigned to the component to which they belonged. Of those features which contained artifacts of both components, the vertical distribution and the quantitative analyses were of primary importance in determining the correct cultural affiliation. It was observed that where historic artifacts were found in features which were defined as prehistoric, they occurred in the topmost portion of the features, while the prehistoric artifacts were distributed throughout in most cases. (In some cases prehistoric artifacts were found to be clustered at the bases of these features.) Quantitatively speaking, the historic artifacts were very few in number in comparison with the prehistoric artifacts. In features defined as historic which contained prehistoric artifacts, the vertical distribution of historic and prehistoric artifacts occurred at random, and a quantitative analysis indicated that the historic artifacts were in preponderance as compared to the prehistoric artifacts. This should be expected. Since the historic component represented the last group to occupy the site, the features dug by them disturbed the prehistoric cultural materials. As a result of this disturbance, some of the prehistoric materials became mixed with the historic fill. There were, however, several features that contained no diagnostic material and were, therefore, defined as non-diagnostic features. Mapping of features and post molds was followed immediately by their excavation.

It is of interest to note that at the onset, this stage of work at the Egli Site, a limit of two days was given to complete the necessary work but, due to inclement weather, two additional days of excavation were made available. Continuing the salvage work in the rain necessitated construction of a light-weight shelter of wood covered with black polyethylene plastic which was moved from feature to feature as they were dug. The salvage work in this area was done in a total of four days. After the fourth day, work came to a halt as a backhoe was being employed to dig a trench for the footing of the new building which today marks the site.

Lord Area I: In the middle of July, 1970, the Upper Susquehanna Chapter, NYSAA, established two test trenches (area I) on the Lord Site. These trenches were situated between the Susquehanna River on the north and the Ontario and Western Railroad bed, now removed, on the south. This area had long been known by local people to have been a site often referred to as the Fort Grounds or the Burial Knoll. The first trench was 40 ft. long and 10 ft. wide; it was oriented on an east-west axis and attained a depth of 9 ft. Adjacent to test trench I and 30 ft. north of it, was located test trench II, 30 ft. long, 10 ft. wide, and also on an east-west axis.

In both test trenches, it was observed that no natural or cultural stratigraphy existed. Artifacts of both historic and prehistoric origin were mixed. This led to the conclusion that the earth in these areas had been redeposited during a surface clearing operation resulting from the removal of gravel years before. In addition to this disappointment, the dig was menaced by unknown potholers who, during the chapter's absence, dug large holes into the trench walls and generally destroyed any information that could have been recorded.

Artifacts found during this work were of particular interest since both the historic and prehistoric material was analogous to that found at the Egli Site. This correlation provided a temporal link between the two sites.

Apart from the chapter's work, William Kaiser of Unadilla, a local collector, was digging nearby and close to the O & W Railroad bed (area II). Mr. Kaiser, digging at random, unearthed several important historic and prehistoric artifacts. The significance of these artifacts lay in



Fig. 2. Area III of Salvage Excavation at the Egli Site, 1968, showing historic and prehistoric post molds, hearths, and other features. Drawn by F. J. Hesse and E. J. Stevens, State University College of Oneonta, New York - 1973.

the fact that they again reaffirmed the cultural continuity between the Egli and Lord Sites.

Lord Area II: During April 10 and 18, 1971, another excavation was conducted at the Lord Site. In response to the news of the construction of a sewage treatment plant for the village of Sidney near the Lord Site and the knowledge that the O & W Railroad bed was to be removed, a salvage dig was planned. Interest in this area was based on the fact that Kaiser, while conducting his dig, had partially undermined the railroad bed, exposing a buried occupation zone and had recovered several artifacts from the same location. Also, as mentioned before, local history stated this to be the place of the so-called "burial knoll."

When construction of the sewage treatment plant began, bulldozers were used to facilitate the removal of the O & W Railroad bed. As the dozers scraped along the length of the bed in a transverse fashion, they revealed a black midden zone (comparable to Zone I, Egli) containing historic and prehistoric artifacts.

At this point, permission was granted by Russell Clark, project engineer for Jones - Lewis Construction Co., to conduct some excavation work at this location. Two vertical profiles were established, one paralleling the railroad bed near its base, the other (see map, fig. 3) at right angles to and on top of the bed. These profiles provided enough data to interpret the original topography.

The railroad bed had been constructed on a natural rise of ground which originally was a continuation of the existing flood terrace. This terrace paralleled the Susquehanna River to the southwest and continued to increase in height as it approached the Lord Site where it dropped off sharply at the northeast end. When the railroad was constructed, the sides of the natural knoll were champhered, leaving the center undisturbed. The champhered portion of the knoll, containing Zone I, artifacts and Zone II, was redeposited upon the original surface and projected out toward the river to create the desired grade for the railroad bed. A post-excavation examination of a historic reference revealed that:

.., there existed at Sidney an Indian relic known as the Knoll. It was level on top, some fifteen feet high, and across the top measured about ten rods. A portion of it was irreverently carted away by the builders of the Ontario and Western Railroad, for use in rearing an embankment. Bones and other remains were found there... (Halsey, 1901:26)

The interpretation of the vertical profile derived from the cross-section of the railroad bed seems to confirm the historic account.

Correlation of Historic Accounts and Archaeological Evidence

In 1753, the Rev. Gideon Hawley, while en route to the Indian village of Oghwaga to act as a missionary there, passed Unadilla. He mentioned passing". . a considerable village, some families of which were of the Houssautunnuk Indians...(Halsey, 1901:60)

In 1769, Richard Smith, a later missionary to Oghwaga, noted the following:

...we arrived at a small village of Mohiccons consisting of 2 houses on the right hand [north - the Egli Site] and 3 on the left [south - the Lord Site], a mile above Unadella. f Unadella here refers to the confluence of the Unadilla River with the Susquehanna.] Here we went on shore and perceived the Huts to be wretched and filled with Women and Children. They have Cows and Hogs & a little Land cleared with a Garden fenced in & Indian corn planted very slovenly. (Halsey, 1906:62-63)

In 1778, the burning of Unadilla was recorded by Col. William Butler of the American Colonial Army. Butler, under orders of General Washington, left Fort Defiance in the Schoharie Valley in October, 1778, to penetrate the region of the Susquehanna headwaters to destroy Indian villages in that area. (Eyres, 1954) The village of Unadilla was a specific target of the colonial farces since it was being used as a base of operations for Brant and his raiders (Hesse, 1971). (Brant was a Mohawk chief allied with the British cause during the American Revolution.)



Fig. 3. Area II of the Salvage Excavation at the Lord Site, 1971, showing the vertical cross section of the Ontario and Western Railroad bed, exposing the original configuration of Zone I (the artifact-bearing zone) and the original surface (junction of overburden and Zone I). Drawn by E. J. Stevens, State University College, Oneonta, New York - 1973.

Butler recorded the following in October, 1778:

October 10. This day we burned all the houses in the Unadilla settlement that were on the south side of the Susquehanna, except Glagford's. We also burned a saw and grist mill, the latter the only one in the country.

October 11. This day I ordered the troops to rest and clean their arms, and prepared a raft to transport some men on the Susquehanna to burn the other part of the Unadilla settlement. Lieut. Long, with one private, crossed in the raft and burned all the houses. (Halsey, 1901:236)

Twenty-nine post molds attributed to the historic component were defined at the Egli Site (See map, Fig. 2). Of those post molds measured, the dimensions were approximately 7 in. in 9 in. (with some variations) and in cross-section they tapered toward the base, terminating in flat bottoms. Their somewhat rectangular shape suggests the use of hewn timbers set in an upright position in the ground. All 29 post molds exhibited evidence of having been burned, their contents being comprised of carbonized wood. This evidence substantiates the historic record regarding the destruction of Unadilla by fire. Attempts to define a historic house pattern have not been successful, as the placement of the historic post molds does not form complete lines.

Although archaeological evidence does not provide us with a complete house pattern, it may be of interest to consult the historic records for descriptions of the type of structure in question. The following information was recorded in the diary of Richard Smith on June 3, 1769:

The Habitations here are placed straggling without any order on the Banks. They are composed of clumsy hewn Timbers & hewn Boards or Planks. You first enter an inclosed Shed or Portus which serves as a Wood house or Ketchin and then the Body of the Edifice consisting of an Entry thro upon the Ground of about 8 feet wide on each side whereof is a Row of Stalls or Births resembling those of Horse Stables, raised a Foot from the Earth, 3 or 4 on either side according to the Size of the House, Floored and inclosed round, except the Front, and covered on the Top. Each Stall contains an entire Family so that 6 or more families sometimes reside together.... The fire is made in the Middle of the Entry and a Hole is left in the Roof for the Smoke to escape for there is neither chimney nor window; consequently, the place looks dark and dismal. The House is open as a Barn, save the Top of the Stalls which serve to contain their lumber by way of a Garret. Beams are fixed Lengthways across the house, and on one of these, over the Fire, they hang their wooden Pot Hooks & cook their Food.

Furniture they have little; the Beds are dirty Blankets. The stalls are about 8 feet long & 5 deep and the whole House perhaps from 30 to 50 Feet in length by 20 wide, filled too often with Squalor & Nastiness. Almost every House has a Room at the End opposite to the Ketchin serving as a larder for Provision; there are no cellars, The Roofs are no other than Sheets of Bark fastened crossways and inside to Poles by way of Rafters. Upon the Outside are split Logs which keep the Roof on; they are Pitch Roofs and it is about 8 Feet from the Ground to the Eves of the House.... (Halsey, 1906:65-66)

Ten years later (August, 1779) Lieutenant Beatty, an officer in the Clinton-Sullivan Expedition, wrote the following in his diary:

Saturday 14... This town was one of the neatest of the Indians living on the Susquehanna. It was built on the east side of the river, with good log houses, with stone chimneys and glass windows. (Halsey, 1901:276)

The preceding descriptions refer to houses at Oghwaga, approximately 22 mi. below Unadilla. Since these two settlements were contemporary and were in relatively close proximity, it is likely that the structures at Unadilla were similar to those at Oghwaga.



PLATE 1. Artifacts from the Egli and Lord Sites. Fig. 1, glass window pane fragments; 2, glass bottle rim with folded lip; 3, rim of wine glass; 4, glass stemware fragment with opaque white spirals; 5, large iron hoe; 6, glass liquor bottle fragment, inside basal section; 7, glass window fragment, reworked for side scraper; 8,9, glass liquor bottle fragments with reworked edges (see arrows); 10, glass liquor bottle fragment, outside basal section. Egli: 1-5, 7, 8. Lord: 6, 9, 10.



PLATE 2. Artifacts from the Egli and Lord Sites. Fig. 1, iron chain; 2, 3, tacks; 4, clenched nail; 5, brass sherds; 6, iron file fragment; 7, iron rattail knife fragment; 8, iron awl; 9, 10, iron ceiling hooks; 11, T-head nail; 12-14, rosehead nails; 15, iron awl; 16, headless nail; 17, 18, L-head nails; 19, thick clenched spike. Egli: 1-4, 6-14, 16-19. Lord: 5, 15.

Archaeological evidence tends to support this theory of a similarity in structures. As previously noted, the configuration of the historic post molds at the Egli Site suggests the use of hewn timbers. Window pane fragments (See Pl. 1, Fig. 1) occurred both in situ and at random. The hewn boards or planks observed by Richard Smith may have been attached to the hewn beams by nails. 118 wrought nails (some of which were clenched) were recovered at Egli. Of these nails, three types may be defined (rosehead, L-head, and T-head) which represent nail types commonly in use during the eighteenth century. (See Pl. 2, Figs. 4, 11-14, 16-19.)

This evidence parallels the historic accounts cited in regard to the hewn timbers, window glass, and hewn boards or planks which would necessarily have been affixed with the wrought nails found.

In addition to providing a specific date (which is the earliest recorded date found for Unadilla by the writer) Hawley's journal includes mention of a certain trader named Winedecker who was distributing trade goods, including rum, to the Indians in the Upper Susquehanna. Hawley mentioned that upon entering the Susquehanna his party was "joined by a trader named Winedecker and a companion who had come down from Otsego Lake with a boatload of goods, including rum, and were bound for Oghwaga and the intermediate Indian villages ..." (Halsey, 1901:59)

Fifteen glass liquor bottle fragments were recovered from the Egli Site, 11 fragments from the Lord Site. These basal fragments are translucent dark green-black in ϖ lor (See Pl. 1, Figs. 6, 10). They have deep concavities in the bottom, displaying open pontil scars. (Hume, 1970:66-67 for range of bottle morphology, 1750-1772)

Four coins were recovered in situ at the Egli Site, from features 17 and 19. Three of these were British coppers (half pennies), two being George II coins dated 1732 and 1747, and one George III dated 1775. (Hume, 1970:156-159) The fourth coin (date illegible) bore the inscriptions AUCTORI CONNEC: on the obverse side and +INDE:+ +ET-LIB: on the reverse side. One badly worn British copper (date illegible) was excavated at the Lord Site; (See Pl. 3, Figs. 1-5) two additional coins (origin and date unknown) were reported to have been found by bulldozer operators and removed from the site. It should be noted that of those coins with legible dates, all bore dates prior to the burning of the site in 1778.

Many kaolin pipe fragments were recovered: 50 stem fragments and 14 bowl fragments from the Egli Site, and 51 stem fragments and 47 bowl fragments from the Lord Site. Of the bowl fragments recovered from both sites, ten were marked. Of those marked from the Egli, one bowl fragment bore the letters "RT" within a heart-shaped cartouche on the right side of the bowl accompanied by a fleur-de-lis and a star. The second bore the letters "R TIPPET" within a circle. Of those marked from the Lord Site, one bore the mark "R TIPPPET" on the right side of the bowl (not within a circle); two bore the incised letters "RT" on the back. Three basic motifs may be recognized from these fragments:

- 1. The heart-shaped cartouche with the "RT" enclosed
- 2. "R TIP PET" plain
- 3. Incised "RT" on the back with R TIP-PET enclosed within a circle (See Pl. 3, Figs. 9-11).

An additional marked bowl fragment from the Lord Site displayed the letters - "EB" (?) on the heel, and rouletting. The TIPPET pipes apparently had a long time span, being produced both in the 18th and 17th centuries (personal correspondence with Gordon DeAngelo, 6/18/72).

Two iron axes were found. One axe, from the Egli Site, was a post-excavation discovery, the result of a workman digging to level a walkway near one of the buildings adjacent to the dig area. It is a long bladed, short polled, wrought axe (length: 6 3/16 in.; bit: 2 3/4 in. across; poll: 2 in. through). The Lord axe bears a heart-shaped cartouche with the initials "SB" in the center. It retains part of the original wood handle within the eye of the poll. This axe measures 5 3/8 in. in length, 2 1/2 in. across the bit, and 1 3/16 in. through the poll (See Pl. 4, Figs. 9, 10). A sketch of this axe was sent to Mr. Gordon DeAngelo who made the following comments: "The style is typical of the Revolution (and earlier) and the slight upswept flare to the top of the bit suggests English origin or English 'inspired'."

Several glass, pewter, and brass buttons of the period were found, one of which, a faceted glass button cast with a brass eye and boss pressed into the back, was identified as belonging to the period 1726-76 (See Hume, 1970:91, type 13; also see Pl. 3, Fig. 31).



PLATE 3. Artifacts from the Egli and Lord Sites. Figs. 1-3, 5, British coppers: 1, George II; 1732; 2, George II, 1747; 3, George III, 1775; 5, date illegible; Fig. 4, copper AUCTORI CONNEC: obverse, INDE:+ +ET-LIB: date illegible; 6, red slate pendant; 7, catlinite bead fragment; 8, shell bead; 9-11, R Tippet Kaolin pipe bowl fragments; 12-14, opalescent beads; 15, red on blue on white ground glass bead; 16, 17, red translucent beads; 18, faceted blue bead; 19, white seed beads; 20, white tube bead; 21, 22, perforated brass thimbles; 23, iron buckle; 24 brass spiral; 25, cut and punched brass; 26, brass projectile point; 27, embossed pewter strip; 28, brass button; 29, 30, pewter buttons; 31, faceted clear glass button; 32, opaque black glass button; 33, iron fish hook; 34, brass bell with clapper. Egli: 1-4, 6-10, 14-19, 24-31, 33. Lord: 5, 11-13, 20-23, 32.



PLATE 4. Artifacts from the Egli and Lord Sites. Figs. 1-5, gun flints; 6, flint for fire-starter kit; 7, muzzle end of musket barrel (note rupture at bottom); 8, pistol barrel; 9, iron axe; 10 hatchet with SB cartouche and portion of original wooden handle; 11, 12, musket balls; 13, lead spillage; 14, 15, lead sprues; 16, 17, cut lead or pewter fragments; 18, rim of pewter plate; 19, pewter spoon (?) handle fragment.Egli: 4, 5, 7, 9, 11, 13-19. Lord: 1-3, 6, 8, 10, 12.



PLATE 5. Ceramics from the Egli and Lord Sites. Figs. 1-8, earthenware: 1, redware rim-sherd, interior red glazed; 2, pottery bottle rim, yellow-brown glaze on orange body; 3, redware with red glaze; 4, redware with yellow slip; 5, yellow combware; 6, rimsherd of lid, redware, with turned, scalloped design; 7, yellowware basal fragment; 8, redware with green slip on red ground; 9, stoneware, yellow speckles on gray ground; 10, stoneware, gray ground; 11, handle fragment, white; 12, handle fragment, white glazed; 13, rim fragment, blue on white ground; 14, hand decorated, brown and red floral design on white ground; 15, porcelain rimsherd, blue on gray-white ground; 16, small bowl or cup, white salt-glazed. Egli: 1, 7-16. Lord: 2-6.



PLATE 6. Artifacts from the Egli and Lord Sites. Fig. 1, bone handled pistol grip knife; 2, incised bone handled fork; 3, bone handled pistol grip fork; 4, incised bone handled fork; 5, iron fork, handle missing; 6, rolled brass harpoon; 7, iron knife blade; 8, incised brass bracelet fragment; 9, brass jew's-harp; 10, bone handled folding pocket knife; 11, lead turtle effigy; 12, incised stone fish effigy; 13, brass ring; 14, brass silk pins; 15, 16, brass jangles. Egli: 1-4, 6, 8-10, 12-16. Lord: 5, 7, 11.

In addition to the coins, liquor bottle fragments, nails, TIPPET pipes, axes, and buttons, a number of other important artifacts reflecting the period should be mentioned. From both sites, ceramic types including salt-glazed ware, creamware (both decorated and undecorated), slipware, redware, combware, yellowware, stoneware, and porcelain were recovered. (See Pl. 5, Figs. 1-16) Glass beads of the opalescent, red oval, blue faceted, red and blue stripes on white ground, and white seed types, as well as a rectangular shell bead, and an elongated rectangular catlinite bead fragment were found. (See Pl. 3, Figs. 7, 8, 12-20) Finds were: straight tined forks with decorated bone handles; a bone handled pistol grip knife; a brass ring; bone handled pocket knives; a decorated brass bracelet fragment; jews harps; (See Pl. 6, Figs. 1-5, 13, 10, 8, 9). copper silk pins (Pl. 6, Fig. 14); a copper pot lid (Pl. 7, Fig. 3); blown glass stemware fragments (Pl. 1, Figs. 3, 4.); gun flints; musket balls (Pl. 4, Figs. 1-6, 11, 12); a wrought iron chain (Pl. 2, Fig. 1); iron kettle fragments (Pl. 7, Figs. 1, 2); an iron file and awls (Pl. 2, Figs. 6, 8, 15); a buckle; and perforated brass thimbles (Pl. 3, Figs. 21-23). Of interest was the discovery of a ruptured gun barrel, found in feature 19 on the Egli Site. Approximately 8 in. from the muzzle is a ripped out aperture which appears to be the result of an explosion. A pistol barrel was found at the Lord Site, as well as a trigger (Pl. 4, Figs. 7, 8).

In the lower meadow area west of the Egli Site and near the river, a small hearth was located which contained carbonized wood embers interspersed with many small droplets of lead. In a more reddened area within this hearth lay a "puddle" of solidified lead (Pl. 4, Fig. 13). The casting of lead shot was apparently carried out here, and the loss of molten lead during the casting process is apparent. Pewter may have been melted to provide for shot; a pewter plate fragment (Pl. 4, Fig. 18) mentioned previously, exhibits a very ragged edge where it was torn, possibly to render the plate a more manageable size for the melting pot. Lead sprues also attest to casting of shot, as a few of these were also recovered (Pl. 4, Figs. 14, 15).

Several artifacts reflect native manufacture. Artifacts made from iron and brass include: a fishhook (Pl. 3, Fig. 33); a conical, barbed harpoon (Pl. 6, Fig. 6); a punched ornament (Pl. 3, Fig. 25); a conical and crimped jangle (Pl. 6, Figs. 15, 16); and a projectile point (Pl. 3, Fig. 26). Two glass liquor bottle fragments and a window pane fragment, their edges exhibiting unifacial chipping, were utilized as side and end scrapers (Pl. 1, Figs. 7-9). Native-made artifacts from stone were a small, red slate pendant (Pl. 3, Fig. 6) and a small, bluish colored fish effigy (Pl. 6, Fig. 12). This effigy is partially ground to conform to the general shape of a fish and is incised on both sides forming eyes, tail and pectoral fins.

A second effigy found several years ago at the Lord Site by Mrs. Grace Cook, then a resident of the present village of Unadilla, is in the form of a turtle and is made of lead (Pl. 6, Fig. 11).

FEATURES: At the Egli Site (within area III) ten historic features were defined. (See map, Fig. 2) Features 74, 65, and 21 were straight walled and flat bottomed and may have been used as storage pits. Features 5, 11, 19, 61, 66, 70, and 71 were refuse and cooking pits, round to oval in outline and basin shaped in cross section. Features 17, 19, and 21 contained the preponderance of historic artifacts recovered in situ and seemed to represent an important area of activity.

REFUSE BONE REMAINS: Only when refuse bone remains were found in situ in features defined as historic were they considered as representative of the historic component. This greatly reduced the quantity of refuse bone and results in a rather restricted representation of fauna used for subsistence. 458 refuse bone remains were collected indicating the consumption of terrestrial fauna, mainly deer and smaller mammals such as woodchuck and beaver; and from the historic accounts, hogs and cows may be added (Halsey, 1901:143). A few bird bones were found in addition to evidence of aquatic fauna such as fish, turtle, and river mussel.

Certain flora were used as attested to by the presence of carbonized butternuts and hazel nut fragments. Historic accounts provide information as to the growing of corn (Halsey, 1901: 143).

Subsistence of the historic aborigines at Unadilla was based upon such activities as hunting, fishing, food collecting, and gardening. Undoubtedly some food was obtained through contact with the English as well. It is hoped that a more complete and detailed account of the faunal remains will be forthcoming, after an analysis is done on the total refuse bone remains.



PLATE 7. Metal Artifacts from the Egli Site. Fig. 1, leg from iron kettle; 2, iron kettle rimsherd; 3, copper (tea?) pot lid.

Conclusion

The archaeological work at both the Egli and Lord sites was conducted under less than ideal conditions. In the past, major portions of both sites had been extensively disturbed due to construction projects. As a result, the salvage work represented by this report was restricted to the remaining small and, for the most part, undisturbed, sections. Moreover, the limitation of time and help necessitated establishing priorities regarding the most important data that could be collected, since it was obvious that collection of all data would be impossible under the existing circumstances. Had there been no attempt at salvage, the remaining archaeological record would have been forever lost.

As the preceding report demonstrates, the writer has relied heavily on historical as well as archaeological data. The correlation of these sources provides a much clearer cultural interpretation of Unadilla than could have been expected from using either of these sources in dependently of the other. There should be little doubt that, based upon the archaeological and historical data, the Egli and Lord sites do, in fact, represent the eighteenth century historic Indian village of Unadilla.

Acknowledgements

Credit and thanks are due to the many volunteer workers who assisted me in the excavations, including the following people: members of the Upper Susquehanna Chapter, NYSAA: Betsy Black, Dr. Constantine Zariphes, Mrs. Nancy Heldman and other S.U.C.O. faculty wives, Marion Lloyd, Earl Higgins, Mr. and Mrs. Howard Hoagland, Professor Jack Havens, Ron and Gary Egli, Ward Coe, Mr. and Mrs. Cal Behnke, Dave Plummer, Jim and Jerry Hall, Jackie Hesse, Howard Chamberlain, Dave Price and Ed Hesse, Jr., who also cut grid stakes; and especially to Evelyn Price whose untiring effort continued--rain or shine.

Other special assistance was provided by Mr. and Mrs. George Terwilliger, Mrs. Alta Buker, Mr. Jarvis Wade, Mr. John VanCott, and Dr. Lawrence Heldman.

For providing assistance with the artifact inventory, my appreciation goes to Pam Augustine, Clark Rogers, Donna Bliss, and Cathy Joyce. And thanks to Dr. Philo Wilson, State University College at Oneonta, Geology Department, for providing me with laboratory facilities for the work to be done.

Arrangements for facilities for cartographic work were made for me by Prof. Ken Reinhardt, S.U.C.O., and assistance in this work was provided by Eric Stevens, cartographer. Thanks also to Ron Embling, Director of S.U.C.O. Graphic Arts, and Charles Winters, S.U.C.O. photographer, for providing assistance in preparing the plates for publication.

Special appreciation to K. V. Campbell and to Gordon DeAngelo for assisting me with certain aspects of the historic research; and to Mr. and Mrs. Henry Egli and Ms. Mary Kirby Lord, landowners, who kindly permitted me to conduct the excavations on their properties. My gratitude is also extended to Phyllis Grande who typed the final report.

I am particularly indebted to my wife, Jackie, for editing and typing the original report and to Dr. Robert Funk for his helpful suggestions and his continued interest and support.

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THE BOEHM ROCKSHELTER

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We discovered the Boehm Rockshelter (Cox 39) during the fall of 1972, while driving on the Lime Kiln Road, 1/2 mile NNW of Climax, Greene, Co., N.Y. The overhang, part of a 25 ft. high outcrop of Eastern Onondaga limestone, was less than 10 yds. west of the road on the property of Edward Boehm of Climax, 3 mi. west of the Hudson River.

Although not a large rockshelter (we excavated 180 sq. ft.), it yielded a rough cultural stratigraphy with representative projectile point forms of nearly all known Hudson River types (Ritchie, 1971). Before excavation, the overhang was roughly 7 ft. high at the rear wall and 10 ft. at the east-facing front. The floor, approximately 5 ft. above the road, was somewhat of an half-oval in shape, dipping slightly to the south. The overhang projects out 4 ft. at the north end, 4 ft. at the south end, and 7 ft. at the middle. The occupied area was approximately 40 ft. long. Dr. Robert E. Funk (State Archeologist), and Mr. Philip Weinman briefly aided in the excavations.

The bulk of the deposit was stratum I, a gray-brown fill of earth, rock rubble, and cultural debris. At its base was a large, trench-like feature (Feature I) which intruded into the subsoil. At the southern terminus and outer margin of the talus, where the feature was not present, stratum I was 30 in. thick. Stratum II was a culturally sterile, heavy, yellowish-brown clayey soil that was tested to 55 in. below datum.

During the excavation of the 5 ft. squares, the projectile points seemed to be in a rough vertical stratigraphy that fits the sequence of point types in the Hudson Valley as suggested by Funk (1965; n.d.). However, to our chagrin, the lower levels appeared completely disturbed by the large feature. Nevertheless, the vertical distribution of point types by absolute depth (as shown in Table I) is of some interest.

Using point types (all from Ritchie, 1971) as markers for "cultural" divisions, the Middle Woodland (approx. 500-800 A.D. - Ritchie, 1965) is represented in superior levels by Lavanna and Jacks Reef Pentagonal types. Below these we found a mixture of points (Orient Fishtail, Susquehanna, Genesee, and Snook Kill) representing (by point type relationship) Transitional back to Late Archaic times of the "Hudson Orient" phase (approx. 1000-700 B.C. - Funk, n.d.); Frost Island phase (approx. 1250 B.C. - Ritchie, 1965); "Battenkill" phase (approx. 1700 B.C. - Funk, n.d.); and the Snook Kill phase (approx. 1600-1500 B.C. - Ritchie, 1965).

The earlier occupation by River phase people (approx. 1950-1750 B.C. - Ritchie, 1965; Weinman, Weinman, and Funk, 1967) is shown by vertically deeper Normanskill and related narrow side-notched points.

The Sylvan Lake complex (approx. 2200 B.C. - Funk, 1965) is represented by Lamoka, Wading River, and untyped expanded-stemmed and lobate-stemmed forms, generally in lower levels than the River phase material.

The unearthing of 17 Vosburg complex (approx. 3000-2500 B.C. - Funk, n.d.) types (Vosburg, Brewerton Side-Notched, Brewerton Eared-Notched, Beekman Triangle) below most of the stemmed points seemed to corroborate sequence data from other Hudson Valley sites. At, or slightly below, the Vosburg complex material, we found 4 Otter Creek points attributed to the Vergennes phase (approx. 3000 B.C. - Ritchie, 1965, Funk, n.d.), again, seeming to follow the proposed sequence for the Hudson Valley.

Then came the feature. Between the vertical depths of 42-50 in., we found Lamoka and Vosburg, points, and a 8rewerton Side-Notched point. This put supposedly later points at least 10 in. below the supposed oldest points (Otter Creek).

The feature (trough-like) was 38 ft. long and lay 31 to 50 in. below surface at the back wall, pinching out vertically and horizontally at both ends of the shelter. In the center, the cross-section extended out slightly more than 6 ft. at a half-bowl outline.

The occurrence of the three points in the trough's fill suggests to us that people of the Sylvan Lake tradition (at the latest) had dug into older deposits to construct a large fire trough that may

8 9 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Inches deep 2 1 Levanna Jack Reef 1 Pentagonal 1 Long Bay (?) 2 Orient Fishtail 1 1 Susquehanna 2 1 Genesee 1 Snook Kill 1 1 Normanskill 3 2 Untyped narrow, side-notched 1 1 $\mathbf{2}$ Wading River 1 2 2 3 Lamoka 1 1 1 Untyped expanded -stemmed 1 2 1 1 Untyped lobate -stemmed 1 1 1 Vosburg 1 1 1 1 1 1 5 Brewerton Side-Notched 3 1 Brewerton Corner-Notched l Brewerton Eared-Notched 1 1 Beekman Triangle 1 Otter Creek 1 * 1 1 1 Untyped broad expanded stemmed spear 1

TABLE I BOEHM ROCKSHELTER (Projectile points)

Feature I (depth in inches) Lamoka 42, Vosburg 43, Brewerton Side-Notched 43.

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TABLE II BOEHM ROCKSHELTER (worked stone)

<u>Feature I (depth in inches)</u> Ovate knives 30, 36, 46; Corner-removed knife 31; narrow trianguloid knife 40; flake knife 39; slate bannerstone (?) 32.



PLATE 1. Boehm Rockshelter Artifacts. 1. Deowongo Incised rim; 2. Oak Hill Corded rim; 3,4, 5. Levanna; 6, 7. thumbnail scrapers; 8. drill tip; 9. utilized quartz crystal; 10. whelk bead; 11. ovate knife; 12, 19. bone awls; 13, 14. Orient Fishtail; 15. Susquehanna; 16, 17, 25 (?). Genesee; 18. Snook Kill knife; 20. antler flaker; 21, 22. Normanskill; 23, 24, 27. untyped expanded -stemmed; 26. untyped stemmed spear; 28. untyped lobate-stemmed; 29, 30, 33, 36. Wading River; 34, 35. Lamoka; 31. combination gouge- anvil stone; 32. ulo; 37, 38, 39, 40, 41, 46, 47, 48, 49, 50. Vosburg; 42(?), 51, 52. Brewerton Side-Notched; 43. Brewerton Corner-Notched; 44, 45, 53. Otter Creek; 54. untyped broad expanded-stemmed spear.

have been used for drying meat. This hypothesis is based chiefly on the trench fill, which was a greasy, black soil, cluttered with deer bone, charcoal, fire-cracked rock, and flint chippage. Large soil and charcoal samples were taken which, after a few days of storage, had to be removed from the authors' father's house due to a strong, offensive odor that was very similar to rancid fat. This could represent the drippings from venison slices that were being dried over coals.

Our only explanation for the many Laurentian and Sylvan Lake points stratigraphically above the feature is that the grease and fire-bed were subsequently-perhaps deliberately-covered with the original excavated dirt, the points being part of this fill. The seeming correct sequence of points in superior levels would then be an almost unbelievable coincidence.

Except for 2 stemmed points of Fort Ann flint and 2 stemmed points of Granville slate, most projectile point flints fell within a range that could pass for dark Eastern Onondaga flint, Normanskill flint, or, in some instances, Kalkberg flint. Unlike other rockshelters excavated by the authors in the Eastern Onondaga limestone formations, the flint nodules were too high up on the overhang at Boehm to be accessible by the occupants. The flint from nearby blocks, however, could be quarried, but for our purposes, its grayish-black color (as opposed to the more common light bluish-black) makes it difficult to identify in chipped specimens. The 4 stemmed points of Fort Ann flint and Granville slate (both materials from near southern Lake Champlain) suggest considerable mobility of the Sylvan Lake people.

Notable worked stone implements were: 2 splintered quartz crystals found within the Middle Woodland levels -not an uncommon occurrence; a 3 mm long, double-ended quarts crystal which was heavily worn at one end (function unknown) from the Late Archaic levels; a red sand stone gouge, with radiating scars on the upper side. Ritchie suggests (Ritchie and Funk, n.d.) that the scars result from chipping against the anvilstone (in this case gouge- anvil stone)-a trait common to River phase assemblages.

The pottery remains were exclusively between 6-9 in. below datum but with no conclusive vertical separation of types. Deowongo Incised of the Late Woodland Chance horizon (Ritchie, 1969) was represented by 5 rim and 9 body sherds. The Oak Hill horizon (Ritchie, 1969) evidence showed with 1 rim and 19 sherds of a probable Oak Hill Corded pot. Four rimsherds of what seems to be a Middle Woodland pot with plain, pinched lip and smoothed-over cord surface were also present.

Three antler flakers at 5 in., a fourth at 23 in., and bone awls at 21 and 26 in. make up the worked bone tool group. A single drilled whelk column bead was discovered at 11 in. This was polished, 17 mm in diameter, 6 mm thick, and with a 2 mm wide hole drilled from both sides.

Charcoal, fire-cracked rock, and deer bone were present throughout the occupation levels, testifying to use of the shelter as a hunting base. Sturgeon plates were found in the upper (Middle Woodland?) levels, while scatterings of fresh-water clam shells, and turkey bones were found in the lower and middle levels.

Although the site was small and situated well back in the country it produced more projectile points (71) than any other New York rockshelter except the Sylvan Lake, Tiorati, and Hanotak sites (Funk, n.d.). The great misfortune was the lack of clear soil and vertical trait stratigraphy that could have seriated the temporal relationships of the many visitors to this hunting station.

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