

THE BULLETIN

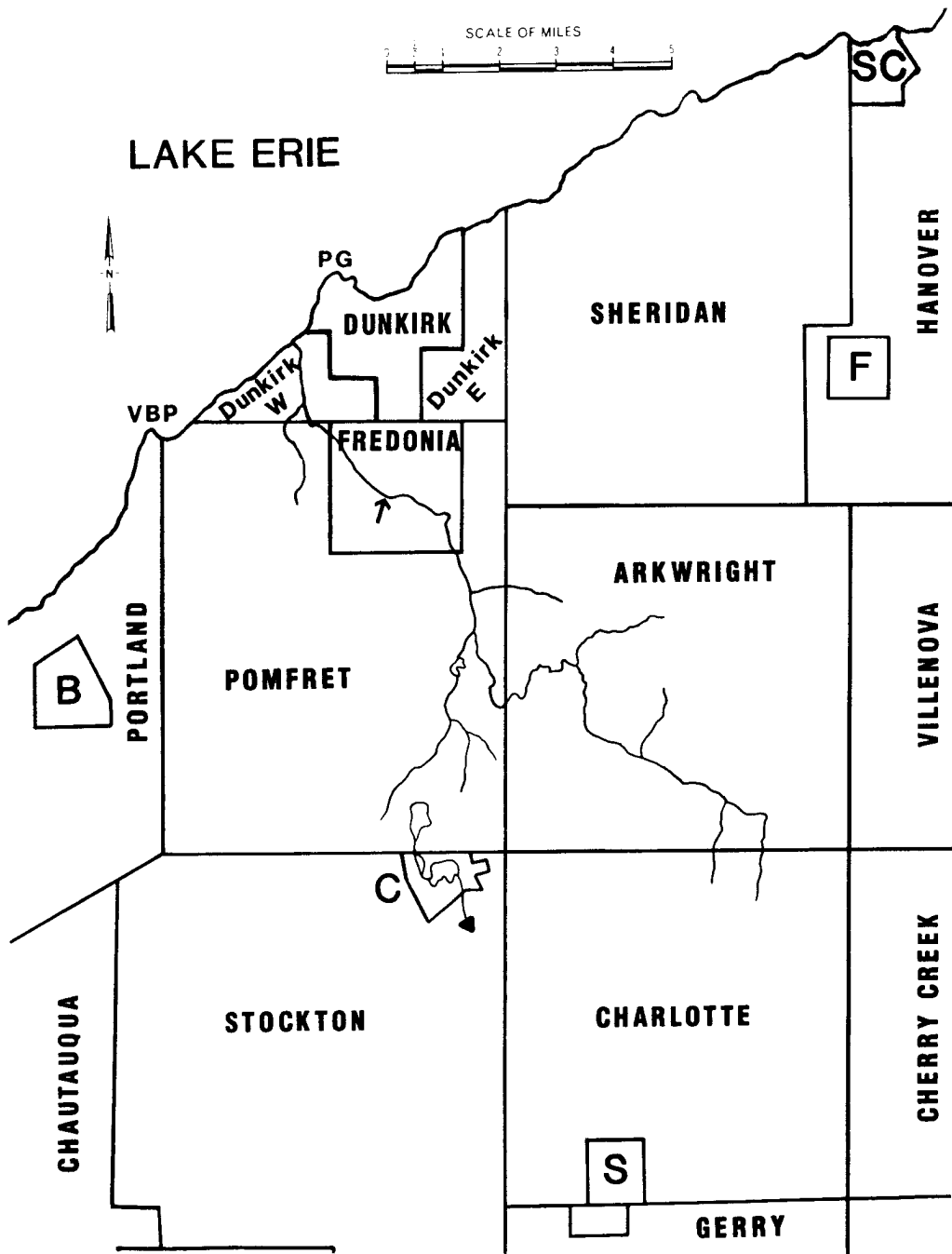
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The Bulletin

Journal of the New York State Archaeological Association



The Canadaway Creek Drainage Pattern and Location of the Mallory Site.

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Department of Anthropology, Buffalo State College
1300 Elmwood Avenue
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Editor	Charles F. Hayes III
Assistant Editors	Brian L. Nagel, Connie Cox Bodner
Graphic Artist	Patricia L. Miller

Address c/o
Research Division
Rochester Museum and Science Center
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The Canadaway Creek Anthropology Project: High Hopes Versus Low Budget (or What to Do Until the Archaeologist Comes)

Alvin H. Morrison, SUNY College at Fredonia

Starting in 1982, the CCAP has coupled SUNY-Fredonia college students and community residents in northern Chautauqua County in the study of local historical anthropology. The focus is the changing partnership of nature and humanity in the interrelationships of Canadaway Creek with its human communities through time. The Native American Epoch, the Era of Water Power, and Pollution-Floods-Controls-Diversions are the three variations on the theme, or, respectively, humans in, with, and against nature. The archaeological component of the CCAP is emphasized here, and this paper serves as general introduction to Lee Hunt's Mallory Site report, which, follows.

Over the past five years, "local historical anthropology" designed for public participation has won considerable popularity in the Fredonia area of northern Chautauqua County, in westernmost New York State. There, approximately 50 mi southwest of Buffalo, the Canadaway Creek drains a portion of the Lake Plain northward into Lake Erie, just west of the City of Dunkirk (Figures 1-3).

Archaeological research opportunities abound there and nearby in Chautauqua County's too-little-studied joint Lake Erie Plain/Allegheny River Valley region (Figure 2). But popularity and opportunity must confront the grimmer local facts of lacking both a long-term resident professional archaeologist and the funding to obtain one. My Canadaway Creek Anthropology Project has served well as a pilot study to prove our archaeological needs, but I am an historical ethnologist by specialty, not an archaeologist. In the long run, both specialties together could work wonders in Chautauqua County, if given the chance.

The name "Canadaway" is a white man's corruption of an Iroquoian place-name. Seneca anthropologist George Abrams tells me that it would be pronounced better as "CanaDAway." It certainly has nothing to do with the way to Canada on the Underground Railway, as some persons believe, because the name was traditional *before* Abolitionism, and Canada is too far distant by either water or land. Iroquoian linguist Wallace Chafe advises me that the vocabulary root for *hemlock* tree is contained in the original form of the place-name, which may be Erie as well as Seneca (Morrison 1983).

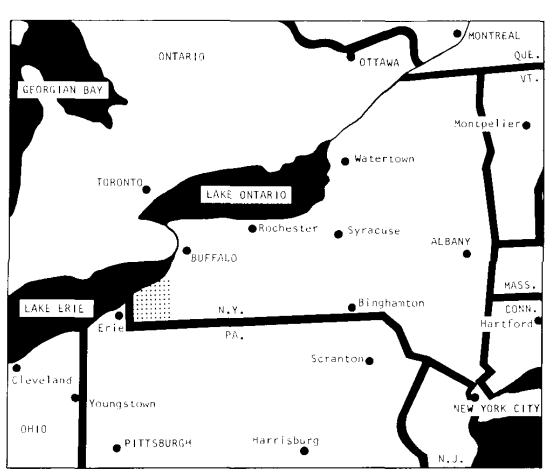


Figure 1. Chautauqua County, New York (stippled area), in regional context.

For reasons well beyond the scope of this paper, SUNY College at Fredonia did not offer an official anthropology major program until Fall 1976, and Fredonia still has the smallest anthropology faculty of all the SUNY liberal arts colleges. In 1980, upon news that we would have one untenured anthropology position retrenched, I was tapped to teach our classroom archaeology course thereafter. That summer, an Indian grave and artifacts were discovered in the ditch for the Mallorys' new sewer line. Then their next-door neighbor told me about his own collection of potsherds from his garden. Soon, other Fredonians told me of other places that artifacts had been found along Canadaway Creek. I decided then that Fredonia State College should have an archaeology field course to follow up on these interesting revelations.

Because I did not feel qualified to lead site archaeology, I set my goal at survey work, only attempting to find sites. Yet I am an odd combination of both diffidence and chutzpah. Whatever I did in archaeology I knew would be popular with campus and community alike. More retrenchments might be coming soon. I decided to play my archaeology to the hilt to enhance our anthropology program's image for better protection. Thus far, this plan seems to have worked, and we have

tripled (if not quadrupled) the number of anthropology majors at Fredonia. My strategic assumptions were these:

If it's a good idea to involve my students in my research interests, then it's a better idea also to involve my community members in the same research interests, so, the best way to involve both, most easily, is a local, bite size, down-home focus for our collective research concern.

Our research target is to study the relationships of Canadaway Creek to its human communities through time, both Indian and white, from Pleistocene to present. This is intended as an open-ended research endeavor in local historical anthropology with a cultural ecology focus, on our own non-spectacular home stream. I am attempting to operationalize anthropology at the local level, for community as well as campus benefit, using "native informants" as research participants wherever possible.

The Canadaway Creek Anthropology Project (CCAP) started officially in Spring 1982, with my own ethnohistorical and summary-preparatory contributions, while I sought donations of equipment, money, and equipment money grants to establish the archaeological component of the project. The Fredonia College Foundation arranged for a major donation of tools from True Temper Corporation's Shovel Plant in Dunkirk. Two \$500 mini-grants from the college and many private contributions bought or provided other tools and supplies through state contract purchasing channels and local merchants both. I personally designed and built our first sifters and later requested the BOCES carpentry course to make duplicates of my originals.

For four straight summers, 1983-1986, we offered a 3-week survey workshop each July. For the first three of these summers there was no money available to hire field instructors or other assistants. Therefore, I relied upon a few well-experienced amateur volunteers from the Chautauqua Archaeology Society to train the 16 to 24 students participating each summer. However, for July 1986, I insisted on a different, more formal and costly arrangement, hiring Lee Hunt as field supervisor and my daughter Ruth as equipment handler.

In 1983, 1984, and 1985, we sampled considerable creek-side territory, wherever landowner permission was granted, after liability insurance requirements were satisfied. When our survey seemed to be getting unproductive, and student morale dropped accordingly, we would return to probe further the extent of the Mallory Site. In 1986, we concentrated on sampling the Mallory Site only (after a training session on a former house site, now a lawn, where we investigated the "signals" of a dowsler with interesting results).

Using the three variations on the CCAP research theme of "The Changing Partnership of Nature and Humanity," I will summarize briefly our archaeological activities to date. The first variation on the theme is "Humans in Nature: The Native American Epoch."

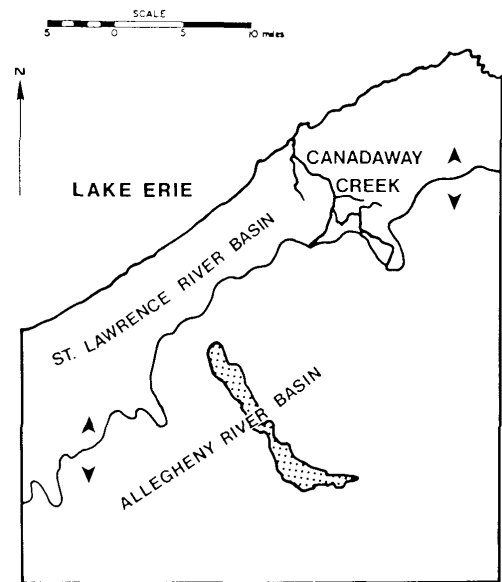


Figure 2. Chautauqua County, New York, drainages

The area of today's Canadaway Creek apparently was under ice and/or melt-water during Paleo-Indian times, but these big-game hunters were nearby, in the hill country just to the south, at the Johnson Site near present Cassadaga Village (see arrow by C in Figure 3). We can assume relatively constant Indian occupation of Canadaway Creek in post-glacial times, because projectile point specimens ranging from Early Archaic through Late Woodland Periods are contained in two private collections of artifacts found on working farms, one on the east side of the Creek's mouth, the other approximately five miles straight inland above Laona Falls (Figure 3:5).

Near the creek's mouth, on what is now a west-side backwater (Figure 3:1, by the second k of "Dunkirk W"), we discovered an apparently unknown site that I call the "Fishing Camp," because of both its abundance of cutting tools and netsinkers and its peculiar topography. Only a few minute fragments of projectile points and even smaller potsherds were found here, and thus far have eluded typing and dating. But, given the small size and apparent specialty nature of this site, it certainly could have been used only seasonally from Archaic through Contact Periods.

Based upon the CCAP's 1986 fieldwork there, the Mallory Site (Figure 3:2), which Lee Hunt describes in greater detail, was named in 1980 when a sewer trench exposed a skeleton and artifacts. This Late Woodland site, high above the

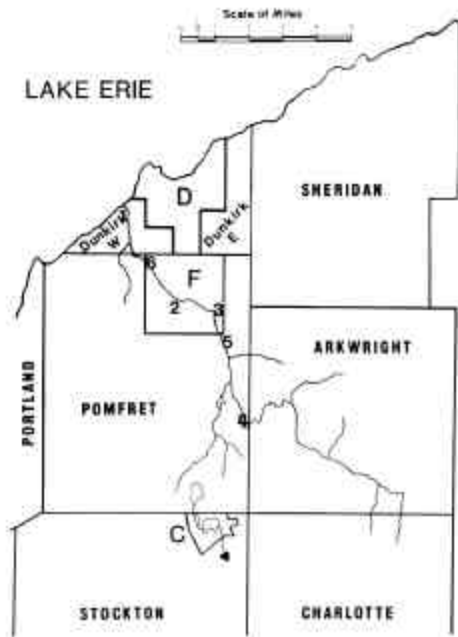


Figure 3. Canadaway Creek in local context. (Showing a part of Northern Chautauqua County, New York.)

Canadaway, must be several (possibly many) acres in size, whatever its usages may have been, if only half of the stories I have been told about it are even partly true. Skeletal remains apparently have been turning up for over a century in this same general area of Fredonia Village that I call the "Chestnut Street Highlands." However, all of these bones noted before the 1980 find (now at SUNY-Buffalo) seem to be lost today. Surely, the definitive study of the entire Mallory Site will be a long time coming, but Lee Hunt has made a brave start.

In the nineteenth century, the Fort Hill Site on the eastern edge of Fredonia Village (Figure 3:3) occasioned the most public interest. Indeed, today it is still sometimes referred to simply as "The Fredonia Site." Typical of the last century's attitudes, most whites thought that any Indian earthwork was a fortification. Yet Cyrus Thomas (1894:511) in his important "Report on the Mound Explorations of the Bureau of Ethnology," contradicted local authors by calling this "circular embankment" between the Canadaway and a bluff "in no wise suited for defense." Thomas, apparently using a field report from one of his field assistants, Henry L. Reynolds, reports the presence of "charred corn" and "fragments of human bones very much decayed" inside a "deep circular pit within the work." Whatever the so-called Fort Hill Site may have been, the CCAP's survey has not yet been able to locate it, although from the several old descriptions it seems impossible to miss. Current or recent landowners tell us of finding occasional single artifacts, but we have not yet found a thing, nor have we located any of the supposed previously found collections. As a point of honor, we plan to continue searching, however.

The second variation on our "Changing

Partnership of Nature and Humanity" research theme is "Humans with Nature: The Era of Water Power." Our goal here is an eventual census of the water-powered industrial sites on Canadaway Creek. An extremely useful manual of how to study such phenomena anthropologically is published by New York State Museum: *Mills on the Tsatsawassa*, authored by Phil Lord (1983) and illustrated by Marty Costello, a Fredonia graduate. We hope to follow in their footsteps by focusing on the former nineteenth-century mill-hamlets on the outskirts of Fredonia - namely, Shumla, Laona, and Cordova (Figure 3:4, 5, 6).

While we have done no field archaeology yet in Shumla and Laona, several of my students, my wife, and I have done documentary digging to the point that a tape-slide presentation is now almost completed. It will supplement an exhibit done by the community's Barker Library Historical Museum in a town-and-gown cooperative effort. Eventually we hope to learn such information as the geographical extent of the market for Shumla chairs and the pollution consequences as well as the economic influences, including affluent architecture, of the Laona tanneries.

When we did archaeological survey work at Cordova, we discovered a messy mystery, approximately 100 ft east of the east bank of the Creek. I call it the "Dam(n) Site." No known account, or map, or tradition indicates why a huge, thick, nineteenth-century marl-concrete wall should be just where it is. Too oddly shaped to seem to be part of any known building, it is low and L-shaped on the end that first appeared. Rising gradually to about twice the height, it disappeared into a tall banking, into which we started digging. We hypothesized that if the creek-bed was once 100 feet further east, this wall could well have been the side abutment of a dam. The earthen banking very soon turned into black smelly sludge, and our digging stopped immediately - because just upstream is a recently abandoned sewage treatment plant. So we all said "Damn!" whether it really was a dam or not. Further digging will be confined to archival materials, not fieldwork, regarding this site.

The third variation on our theme of "The Changing Partnership of Nature and Humanity" is "Humans against Nature: Pollution, Floods, Controls, Diversions." This variation is in potential constant tension with the other two.

All indications are that repeated attempts have been made to divert south-flowing Cassadaga Lake (by C in Figure 3) into north-flowing Canadaway Creek, by digging a ditch the half-

mile between them. Indeed, part of such a ditch still can be seen, with some large trees growing in it. Some documents are available giving limited information about such attempts being made in 1828 and 1855. For more recent tries (such as c. 1905, which some senior citizens tell us their parents mentioned), no documentation yet has been found.

Inasmuch as I have heard of similar diversions being attempted elsewhere in Chautauqua County, and in New England, one implication is that such activities may be merely a part of an earlier American generic "Canal Fever," as it was once known, meaning the popular obsession personified by such political leaders as Dewitt Clinton and Teddy Roosevelt. Certainly today's ecological interests were not the concerns of these earlier times. Topographical maps show a difference of 732 ft between the altitudes of Cassadaga Lake and Lake Erie - surely enough to have a disastrous effect on Fredonia, if drainage got out of control. We have not yet conceived of a simple but conclusive means of accurately assessing the date(s) of the ditch that remains to attest to such diversions.

In a series of reports called *Up The Creek*, I have attempted to summarize our research findings to date and/or to set the stage for our future research activities. Two of these reports are of particular interest (Morrison 1982, 1985).

Report No. 1 asks questions that cannot yet be answered but which have #1 priority: What really happened to the Canadaway Seneca Reservation? What actually caused the Seneca to swap it with the Holland Land Company? A 1797 treaty with the U.S. Government gave the Seneca a mile-wide strip of lakeshore land from Silver Creek to Dunkirk and two miles up the Canadaway to Fredonia. But in 1802, they swapped it and other lakeshore land for additional holdings on their Cattaraugus Creek Reservation. My students and I have not yet found any documented reason for this exchange, but we will continue to look for some sort of clarification. Indeed, I plan to use the Holland Land Company Documents, the microfilming of which is centered at Fredonia State College's Reed Library, to try to determine the original white settlement patterns in the area.

Report No. 5 discusses the probability, arrived at with the help of Brian Dunnigan of Old Fort Niagara, that a two-pound cannonball, found in a creekside garden a straight three quarters of a mile from Lake Erie, was French, lost while in transit along Lake Erie from Quebec to Louisiana, in the early 1750s. At that time, two-pounders were the common French field gun, and they and their ammunition traveled by bateaux and overland. The Allegheny-Ohio route was entered either from Westfield, New York, and Chautauqua Lake, or from Erie, Pennsylvania. In either case, bateaux must have put in regularly at creek mouths, at night and in storms, along the Chautauqua County lakeshore. The CCAP always welcomes such puzzlers as this cannonball conundrum from the public.

In conclusion, I truly believe that the potentiality and popularity of the Canadaway Creek Anthropology Project clearly demonstrate both the public need and the public desire for a long-term resident professional archaeologist in Chautauqua County, New York. Yet increasingly, I feel that my "nativistic movement" will fail to conjure up such a "culture hero" in the sober light of current (and projected future) New York State and SUNY budget realities. But there is still plenty of ethnohistorical research we can do to stay productive, until the archaeologist comes, if one ever does come, indeed. At Fredonia, we are not so bad off as to be idly waiting for Godot.

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Canadaway Creek Anthropology Project: Excavations at the Mallory Site

Eleazer D. Hunt, Frederick Houghton Chapter

The previous article has discussed the overall goals of the Canadaway Creek Anthropology Project (CCAP). This paper highlights one project that was undertaken by the CCAP. In the summer of 1986, the CCAP in conjunction with State University College at Fredonia began excavating at the Mallory Site, located on the outskirts of the village of Fredonia. Original identification indicated it was associated with the Owasco culture. This paper is comprised of two sections. First is the obligatory site report, detailing the methodology, artifacts, and results of the excavation. Second, the paper has been balanced with a detailed analysis of the lithic assemblage. This analysis suggests that there is evidence for the use of bipolar reduction to extract usable material, from small spherical chert cobbles procured from glacially deposited source materials located along the Canadaway Creek.

Introduction

The objectives of the Canadaway Creek Anthropology Project (CCAP) focus on the relationship of prehistoric and historic populations to Canadaway Creek. Excavations at the Mallory Site were conducted in order to gain better understanding of this relationship during the Late Woodland Period. What were the reasons for establishing a settlement on the Canadaway Creek, and more importantly, why at that particular locale?

I approached this project under the rubric of a traditional Late Woodland land-use model. The general model is that of Owasco and Iroquoian settlements located on well-drained, potentially defensible high ground, and populations utilizing the flora and fauna resources associated with the nearby stream. Thus, I was looking to analyze the flora and fauna affiliated with the Canadaway Creek, calculate dietary percentages, develop a subsistence-scheduling plan, and analyze the remaining artifacts and features. Unfortunately, due to the nature of the preservation, no organic remains were found, and only material artifacts were left to analyze.

The Mallory Site was officially identified in 1980 when construction of a sewer line uncovered a burial. Inspection of the artifacts associated with the burial, along with artifacts previously found by the landowner, suggested the site was associated with the Owasco culture.

Reference to prehistoric sites in close proximity were made during the mid-nineteenth century. Referring

to the area in question, Thomas and Reynolds reported in 1890-91 that "a mound 7 feet high was opened several years ago ... disclosing some skeletons, a pestle, a mortar, and some arrowheads" (Morrison 1982:8).

In 1983, the CCAP began an informal reconnaissance of the Chestnut Street Highlands in order to determine site location and limits of Mallory and any other sites that may exist in the area. Shovel tests were excavated along the bank above the creek on a transect several hundred yards in length. Several scattered finds were located, but the only concentration of material was centered at the Mallory Site. In 1986, it was decided to concentrate on excavating the Mallory Site and attempt to understand in more detail the relationship of the creek to this Owasco settlement.

The Mallory Site is located on the outskirts of the village of Fredonia, in northern Chautauqua County, New York (Figure 1). The village of Fredonia is situated on the lake plain of the Lake Erie Basin (Bennett 1986:1). The site is located on a high promontory that overlooks the Canadaway Creek. The change in elevation on the northeast side of the site from the top of the promontory to the creek bed ranges from 15 to 20 m (50 to 65 ft). The remaining sides of the promontory, away from the creek, are of a more gradual slope, providing easy access.

The geology of the promontory indicates that it was formed as part of the glacial Lake Warren beach strand (Figure 2). Lake Warren was a proglacial lake, formed in front of the ice sheet (Bennett 1986:1) as one of a series of beach strands that developed c. 12,500 B. P. (Johnson 1982:16).

Researchers have identified three phases of the Lake Warren development. Each phase produced a strandline at successively lower elevations (Calkin and Feenstra 1985:159-160). The Mallory Site is associated with highest strand, Lake Warren I, at roughly 680 ft (207 m) above sea level (Johnson 1982:17). Rebounding of the land surface has raised the current elevation of the Lake Warren beach strand to 740 ft (225 m) above sea level.

The matrix of the Lake Warren beach strand is associated with gravel and coarse sand deposits (Calkin and Feenstra 1985:159-160). The Canadaway Creek has bisected the strand line, eroding through the lacustrine sediments, exposing and also eroding the underlying bedrock of Upper Devonian Dunkirk Shale (Bennett 1986: 1). The result is a long-standing sand

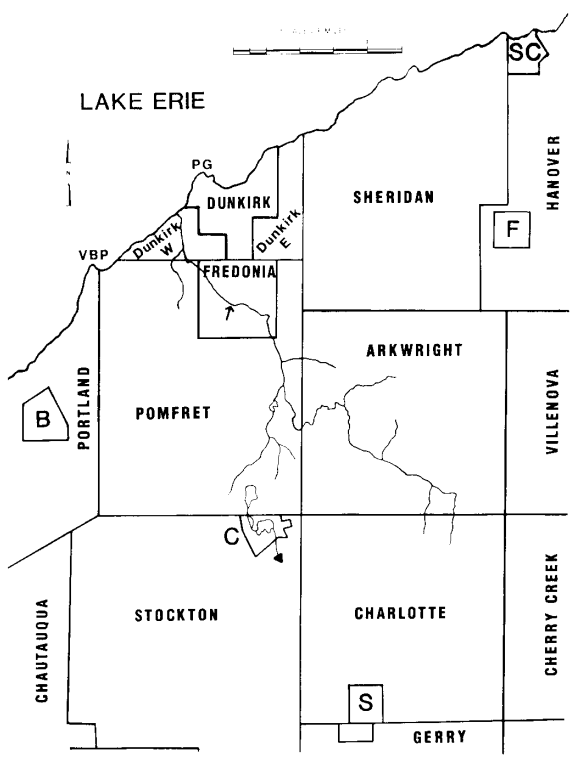


Figure 1. The town and village boundaries, the Canadaway Creek drainage pattern, and the location of the Mallory Site, denoted by the arrow.

and gravel terrace, truncated by the Canadaway Creek, that has excellent percolation and drainage characteristics and provides an excellent source of water and good fertile soil. These proglacial strandlines are prominent features of the Lake Erie Plain and provide natural transportation routes (Bennett 1986:2). From an archaeological perspective, the one drawback of these beach strands is the poor preservation of plant and animal remains.

Methodology

Investigation of the site was considerably limited due to the presence of two contemporary house structures, sheds, one garage, and a formal garden (Figure 3). For these reasons, the procedure followed at the Mallory Site was to divide the work into two phases, shovel testing and excavation. To facilitate the determination of site boundaries, artifact densities, and spatial distributions, an arbitrary grid system was created, and shovel testing was conducted at known grid points.

Using a convenient metal pipe, a datum was established in an area equidistant from all obstructions. A

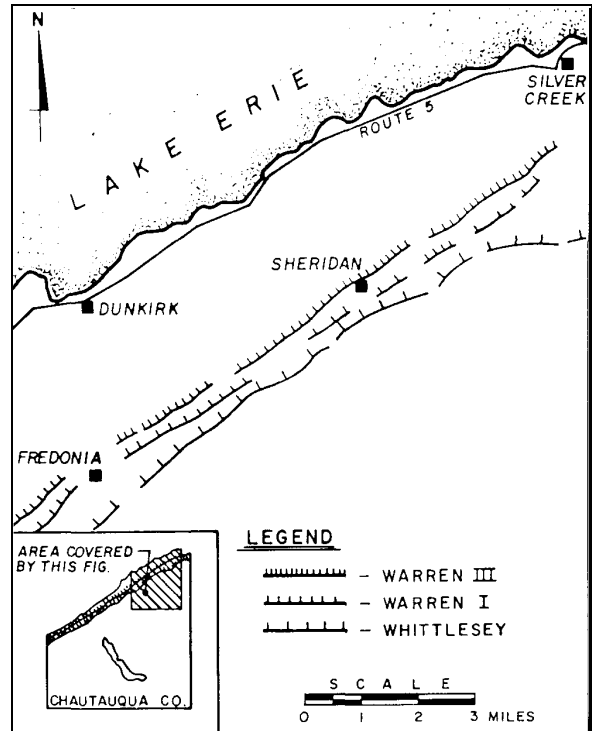


Figure 2. The glacial beach strands forming distinct ridges that parallel the current Lake Erie beach. The village of Fredonia is situated on the Warren I beach strand. Also shown is the relationship of several other villages to these strand lines (after Johnson 1982).

grid system, 8 m on a side and oriented to magnetic north, was laid out using stakes at each quadrant corner. In all, 35 shovel tests were excavated. The results provided us with a clear indication of part of the site boundary and density, but not of distribution. Ten shovel tests contained artifacts, with 8 clustered in a pattern running from the southwest to the northeast (Figure 4). This clustering correlates to the highest elevation of the existing ground surface. Densities are highest toward the northeast, closest to the creek. To the southwest, density drops off quite quickly. The shovel tests were interpreted as indicating the southwest limits of the site.

The excavations were oriented using the existing shovel-test grid system. Each 8-m square was subdivided into 16 2 - m units (Figure 5). Each unit within the grid was consecutively numbered beginning in the northwest corner. The closest available unit to a completed shovel test was selected for excavation. The ratio of artifacts recovered from shovel tests to those recovered from excavation units averaged 1:14. Excavation was conducted using 10-cm arbitrary levels.



Figure 3. The Mallory Site.

The decision to use arbitrary levels was based on three factors. First, the shovel tests indicated that the A horizon was quite disturbed and showed evidence of plowing and mixing of historic and prehistoric material. Second, the shovel tests also demonstrated that no natural levels were discernible and that the interface between A and B horizons was often difficult to ascertain. Third, the matrix of coarse sand and gravel was uniform throughout the shovel test profiles. All material was screened using 1/4-in mesh, and artifacts were collected and recorded by level; any discernible features within each level were identified and separately collected.

Analysis

Excavation was completed in 6 units, resulting in the recovery of over 2,000 artifacts and the identification of 14 features. Analysis of recovered and observed data was broken down into several categories: features, pottery, and lithics.

Features

Fourteen features were identified within the 6 excavation units. Four types of features were defined: post molds, middens, hearths, and plow scars. The most numerous were hearths with 8 recorded (Figure 6). All hearths shared the similar characteristics of charcoal stains, fire-cracked rock, broken pottery, and flakes. In several cases some of the flakes exhibited potlidding. The fire-cracked rock was either scattered around the feature or in some semblance of a circular pattern.

One midden was identified, formed in a small depression and contained a high concentration of pottery and chert. The chert had evidence of being pot-lidded. There was no fire-cracked rock associated with this feature. The interesting observation is that several rays of the feature extended out into the surrounding soil. This may indicate smearing or tossing during occupation or the operation of post-depositional forces of water transport, animal burrows, or tree roots (Butzer 1982).

Three post molds were identified; however, it is impossible to determine if they are Owasco in origin or historic due to the fact that the site had once been a grape arbor.

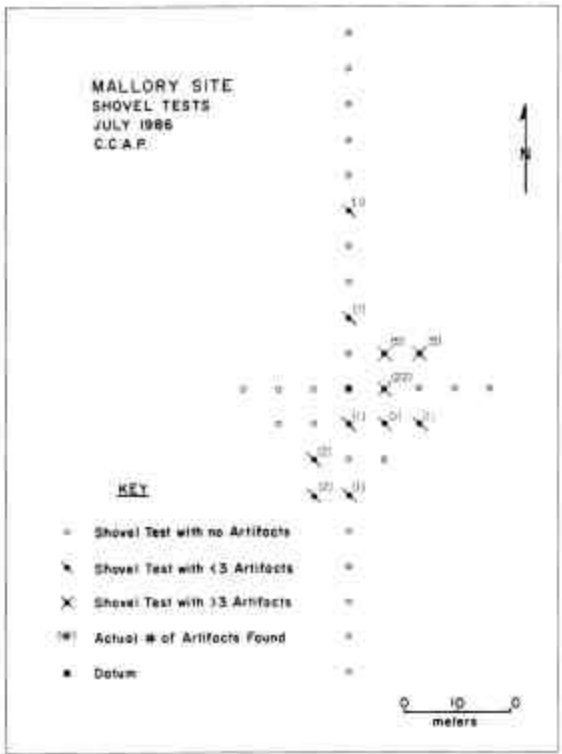


Figure 4. Plan of shovel test pattern. Interval is 8 m. The numbers next to each test reflect the total number of artifacts recovered.

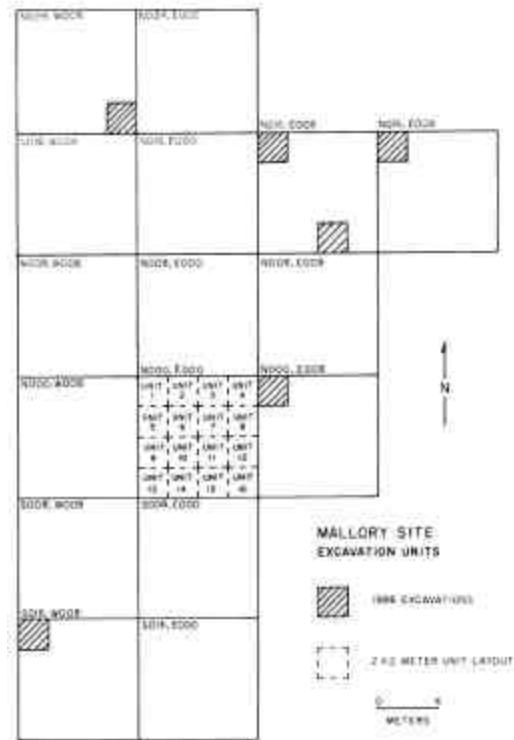


Figure 5. Details of the methodology and relationship of the excavation units. The shovel tests form the corners of each 8-m square, and the northwest corner of each grid was used as the reference point. These 8-in squares were then subdivided into 16 2 m x 2 m excavation units. Within each grid these were numbered consecutively from 1 to 16, beginning in the northwest corner. Thus, units may have the same grid reference but differing unit numbers.

Pottery

Pottery analysis was conducted in order to assess the relative age of the Mallory Site and to see how well Mallory pottery fits into the classic ceramic typologies (Guthe 1958; MacNeish 1952; Parker 1920; Ritchie and Funk 1973; Ritchie and MacNeish 1949; Wright 1966). A problem I encountered might be termed the "-ish" and "-oid" syndrome. For example, the sherd depicted in Figure 7 appears to be Neutral-Wenro "-ish," but also Transverse Linear Impression "-ish." In other words, I did not feel comfortable placing these rim sherds into definite categories with any kind of confirmed assurance.

Of the approximately 682 pottery fragments recovered, 31 pieces are rim sherds. Of these rim sherds, 22 are decorated and can be compared against the Late Woodland pottery typology. The other 9 sherds are all cordmarked undecorated rims and constitute four different categories of rim form.

Eleven distinct rim designs are identified. Of the 11, 5 can be categorized with specific types used by the Owasco culture. Furthermore, four of the five are identified with central

New York sites and range in date from A.D. 900 to A.D. 1300. The remaining 6 rim sherds appear to be pottery types produced in the late prehistoric or Iroquois period. However, these classifications are less reliable, since these rims may fit more than one type. The major problem was the low sample size available for comparison. Pot types were assigned in most cases on the basis of one specimen. Figure 8 shows several examples of the rim forms recovered during excavation.

Table 1 is a graphic representation of the recovered rim sherds, showing rim and collar decoration, profile, associated type classification, associated culture, a site that exemplifies this form, the region of the New York State with which the form is associated, and the relative date. The numbers on the left side of the table serve two purposes. First, they indicate the relative age of the sherd, with 1 being the oldest (A.D. 900) and 11 being the youngest (A.D. 1350). This is a general guide for ordering as several dates for pottery types are the same. And with the case of #6, there is a discrepancy in the date, based on which typology can be assigned to the sherd. Thus the ordering



Figure 6. Typical hearth feature.



Figure 7. Interior and exterior views of rim sherd. Neutral-Wenro or Transverse Linear?



Figure 8. Several of the rim forms recovered during excavations. Note the variety of designs.

Table 1 .Mallory Site Ceramics.

Rim and Collar Decoration	Rim Profile + Number of Specimens Recovered	Pottery Types	Associated Culture	Sites used for Comparative Analysis	Region of N.Y. Comparative Site Located	Associated Dates (± 20 years)
		Ontario Oblique	Middle Owasco	Bates	Central	AD 1190
		Owasco Herringbone	Early Owasco	McCullough	Western	AD 1380
			Early Iroquois	Westfield		
		Neutral Wenro	Early Iroquois	Ripley	Western	AD 1350
		Transverse Linear Impressions		McCullough		
		Owasco Corded Horizontal	Early Iroquois	Westheimer	Eastern	AD 1100
		Middle Port Criss-Cross	Early Iroquois	Middle Port	North	AD 1350
		Kipp Island Criss-Cross		Kipp Island	Central	
		Castle Creek Punctuate	Middle/Late Owasco	Sackett Castle Creek Bell Philhower	Central	AD 1300
		Ontario Oblique	Early Iroquois	Westfield McCullough	Western	AD 1350
		Owasco Herringbone	Mature Owasco	Sackett	Central	AD 1300
		Carpenter Brook Cord on Cord	Early Owasco	Roundtop		AD 1070
		Untypes Linear Punctuate	Neutral-Wenro	Maxon-Derby	Central	AD 1100
		Uren Corded Style	Owasco	Uren	Ontario	
		Point Peninsula Corded	Middle/Late Point Peninsula	—	Central	AD 900
		Kipp Island Criss-Cross	Late Point Peninsula	Kipp Island	Central	AD 1000
		Ontario Horizontal	Early Iroquois	Burning Spring	Western	AD 1350
		Westfield Interrupted Linear	Late Owasco	Silver Heels		AD 1250
		Owasco Corded Oblique	Middle Owasco	Sackett	Central	AD 1130

- 1 Ritchie and MacNeish (1949:102, object M).
- 2 Ritchie and MacNeish (1949:105, objects G, H, and K).
- 3 Ritchie and MacNeish (1949:209, object 23; 108, object 8).
- 4 Ritchie and MacNeish (1949:42), and Ritchie and Funk (1973:123).
- 5 Ritchie and Funk (1973:223, object 23)
- 6 Ritchie and Funk (1973:242, object 4) and Guthe (1958:80)
- 7 Guthe (1958:42, objects a and b; pp. 56,97)

- 8 Guthe (1958:44) and Ritchie and Funk (1973:123, object 26; 90 object l).
- 9 Ritchie and MacNeish (1949:110; 133, objects e - g; 105, object f).
- 10 MacNeish (1952:107, object 2) and Ritchie and MacNeish (1949:105, objects g, h, and k).
- 11 Parker (1920:294, objects 3 and 5) and Guthe (1958:44, objects a and b).

is meant to be a general guide. Second, each number serves as a way of footnoting the references, plates, and rim sherds used to assign the sherds into types. These footnotes are listed below the table.

This table suggests that the pottery from Mallory, regardless of typological problems, is similar to that of Late Owasco/ Early Iroquoian cultures. Typological analysis of pottery indicates that considerable interregional variability exists. The Mallory pottery types are not exclusively western, but rather a mixture with types from central New York. Comparatively the sample shows the largest number of pottery types from central New York.

Parentetically, is a possible heterogeneous distribution due to methodological and typological problems or, as it has been suggested by Engelbrecht (1984), is there a movement of individuals and associated pottery traits at this time?

The pottery types are characteristic of the Late Woodland Period. The pottery has evidence of concoidal bases and cord-marking, but also appears to have definite collar ornamentation with incised lines (Guthe 1958:22). The types of pottery that are associated with late Owasco sites and appear to be evident at Mallory are Castle Creek Punctate, Owasco Herringbone, Owasco Corded Horizontal, and Owasco Corded Oblique (Ritchie and MacNeish 1949:107-118).

Pottery types produced in the late prehistoric or Iroquois period that may be associated with Mallory include Westfield Cord-marked, Ontario Horizontal, Uren Corded, Westfield Interrupted Linear, and Ontario Oblique (Guthe 1958:33). However, these classifications are less reliable than the ones made for the late Owasco culture. The reason is that of those typed as being from the late prehistoric period they could fit into more than one category. For example, Ontario Horizontal and Westfield Interrupted Linear could be applied to the same sherd (See Table 1, #7).

In general, the pottery appears to have associations with the mid to late Owasco culture, but the results of analysis were inconclusive and not very heuristic. The primary factor that must be considered is the limited sample size available for analysis.

Lithics

Excavation yielded 794 lithic artifacts of various categories. We recovered 6 projectile points of which 2 are complete and 4 are incomplete (Figure 9). Visual comparison indicated that the points are Madison in form. The lengths of 2 points measured between 24 and 27 mm (15/16 and 1 1/16 in), with equal thickness of 5 mm (3/16 in). With regard to the 4 broken points, we were able to establish the thicknesses on all 4; they range from 5 to 6 mm (3/16 to 1/4 in). The base width for each of 5 of the points measures 19 mm (3/4 in). Based on the simple comparative analysis and measurements given by Ritchie (1971), these points fit into the category of Madison projectile points (Moerman 1986:7-8).



Figure 9. The top two rows show the projectile points, and the bottom two rows represent the common types of lithics. From the bottom left and moving clockwise, pictured are a biface, core, drill, and a heavily utilized flake.

The lithic assemblage contains drills, scrapers, knives, and the seemingly ubiquitous lithic Swiss Army knife, exhibiting signs of use for sawing, cutting, scraping, and punching.

Analysis of the flakes recovered suggests that all phases of tool manufacture were occurring at the site. Decortication, reduction, and thinning flakes have been identified. Table 2 provides a complete breakdown of flake types by excavation levels and features. Of the total number of lithics recovered, those flakes that are classified as debitage constitute 85 percent of the assemblage. Conversely, those lithics identified as utilized flakes total only 4 per cent of the assemblage. This means that of the lithics recovered, the majority are waste or by-products of the manufacturing process.

Visual inspection of the debitage indicated a mixture of thinning and reduction flakes. Fifty-three per cent of the debitage consists of broken flakes (e.g. proximal or distal ends). The majority of the reduction flakes appear to be composed of low-grade cherts, are cortex remnants, and exhibit fractures

Table 2. Lithics from the Mallory Site.

Level	Utilized					Debitage					Cores	Unifaces
	Whole	Distal	Prox.	Other	Uncertain	Whole	Distal	Prox.	Other	Uncertain		
One	4	0	0	0	0	26	25	11	7	1	2	0
Two	3	2	0	0	0	52	41	22	1	15	10	0
Three	2	4	0	0	1	81	52	25	16	13	9	0
Four	5	0	0	0	0	89	38	16	13	6	2	0
Feature B	0	0	1	0	0	2	0	0	0	0	0	0
Feature C	0	0	0	0	0	0	2	0	0	0	0	0
Feature D	0	0	0	0	0	0	0	1	0	0	1	0
Four/Five	0	0	0	0	0	2	3	0	0	0	0	0
Five	2	0	0	0	0	29	6	4	5	1	0	0
Feature F	0	0	0	0	0	5	3	0	3	0	1	0
Feature J	0	0	0	0	0	1	2	0	0	0	0	0
Five/Six	0	0	0	0	0	2	1	1	0	0	0	0
Six	0	0	0	0	0	6	3	1	3	0	0	0
Feature K	0	0	0	0	0	0	1	0	0	0	0	0
Feature D	1	0	1	0	0	7	5	1	0	3	0	0
Feature L	0	2	0	2	0	0	0	0	0	0	0	0
Seven	1	0	0	0	0	4	1	1	1	0	0	0
Feature M	0	0	0	0	0	1	1	0	0	1	0	0
Eight	1	0	0	0	0	2	2	3	2	0	0	0
Nine	0	0	0	0	0	0	0	0	1	0	0	0
Total	19	8	2	2	1	310	186	86	52	40	25	0

Level	Projectile					Other Bifaces					Cores	Unifaces
	Whole	Distal	Prox.	Other	Uncertain	Whole	Distal	Prox.	Other	Uncertain		
One	0	1	0	0	0	1	0	0	0	0	2	0
Two	0	0	1	1	0	0	0	0	0	0	10	0
Three	1	0	0	0	0	0	0	0	1	0	9	0
Four	0	0	0	0	0	0	0	0	2	0	2	0
Feature B	0	0	0	0	0	0	0	0	0	0	0	0
Feature C	0	0	0	0	0	0	0	0	0	0	0	0
Feature D	0	0	0	0	0	0	0	0	0	0	1	0
Four/Five	0	0	0	0	0	0	0	0	0	0	0	0
Five	0	0	0	0	0	0	0	0	0	0	0	0
Feature F	0	0	0	0	0	0	0	0	0	0	1	0
Feature J	0	0	0	0	0	0	0	0	0	0	0	0
Five/Six	1	0	0	0	0	0	0	0	0	0	0	0
Six	0	0	0	0	0	0	0	0	0	0	0	0
Feature K	0	0	0	0	0	0	0	0	0	0	0	0
Feature D	0	0	0	0	0	0	0	0	0	0	0	0
Feature L	0	0	0	0	0	0	0	0	0	0	0	0
Seven	0	0	0	0	0	0	0	0	0	0	0	0
Feature M	0	0	0	0	0	0	0	0	0	0	0	0
Eight	0	0	0	0	0	0	0	0	0	1	0	0
Nine	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	1	1	0	1	0	0	3	1	25	0

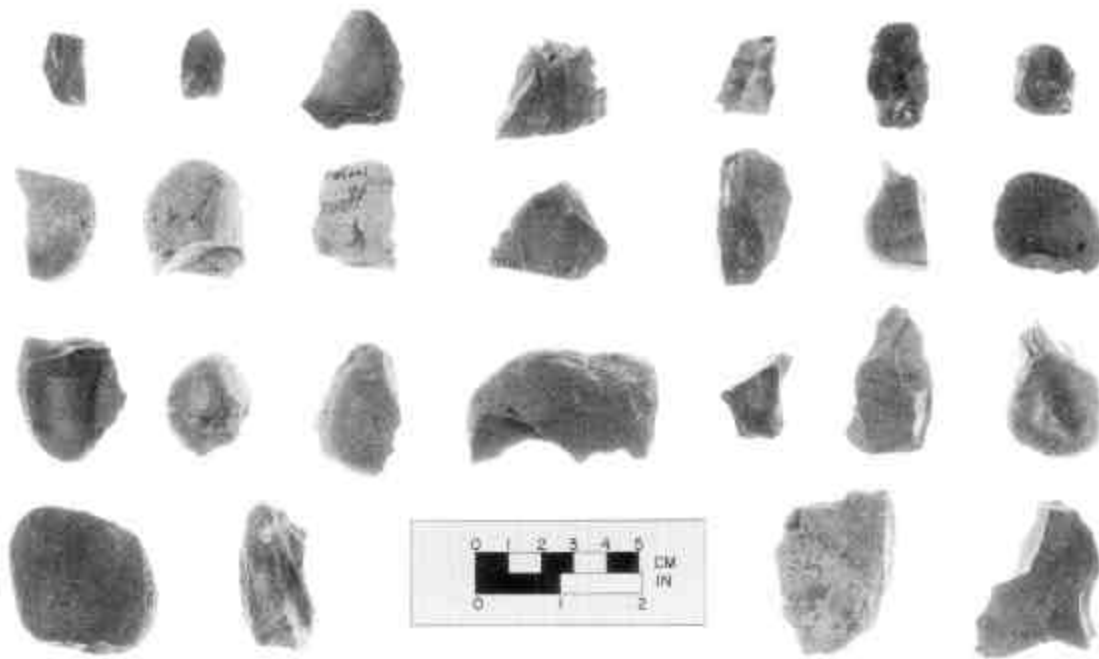


Figure 10. The 25 cores recovered during excavation. Note the generally small size, cortex remnants, angularity of scarring, waterworn characteristics, and spherical characteristics.

that were blocky or angular in nature. Lastly, in many cases the classic morphological signs associated with flakes are missing or difficult to discern. In other words the debitage shows characteristics that I have not previously seen in assemblages from western New York.

In order to understand the debitage, I decided to look at the 25 cores recovered from the site. The majority of cores appeared to be pebble in form, with many exhibiting a well developed cortex (Figure 10). More detailed, quantified analysis demonstrated that 56 per cent of the cores were pebble in form, 20 per cent appeared to be from tabular forms, and 24 per cent were uncertain. Twenty-two of the cores had varying percentages of cortex remaining on their surfaces. The quality of the cores was clearly weighted towards low-grade forms of Onondaga chert, comprising 56 per cent, while 36 per cent were of high-quality Onondaga chert.

As a group, the cores were small. The average length is 35 MM (1 3/8 in), and the average width 27 mm (1 1/16 in). The cores appear to have begun their use-life as small spheres less than 4 cm in length and are comprised of mostly low grade chert from the Onondaga formation.

Detailed morphological analysis of the cores produced the most startling information. Several of the cores clearly showed evidence of bipolar reduction. The bipolar reduction technique "consists of holding an oblong pebble core, the size of an egg or smaller,

vertically on a flattish, stationary anvil and striking the core on the proximal or top end with a hammerstone" (Honea 1965:260). Bipolar reduction creates a rebound of energy often producing secondary flaking or producing a secondary bulb of percussion on the flake being removed (Honea 1965: 260-261). The features that are most clearly visible are the two striking platforms at the opposite ends of the core. Figure 11 highlights several kinds of characteristics that occur with bipolar reduction.

Cotterell and Kamminga have produced the most recent work on bipolar reduction. The most striking feature of the bipolar reduction is the compression flakes that are produced. "A compression flake is initiated by microscopic wedging and the fracture path is controlled by compression ... The compression flakes that are recognized more easily occur when a bipolar core splits into two or three pieces of roughly equal size. Such pieces, though often chunky and extensively damaged in their initiation area by hammer impact, are still flakes by our definition. These compression flakes are sometimes misidentified as bipolar cores because they are chunky, lack prominent conchoidal features, and tend to retain distinctive fracture damage from hammer impact" (Cotterell and Kamminga 1987:685).

In Figure 11, specimen a shows crushing of the basal end,

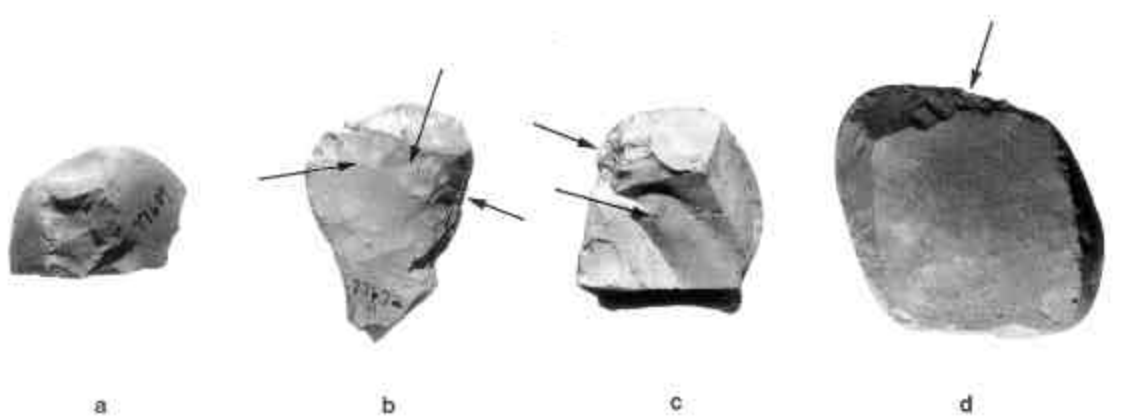


Figure 11, A close-up of several of the cores, showing battered cortex, stepping, and wedging of the core edge.

perhaps from several successive blows. Specimen b is a discarded remnant showing bi-directional reduction from both bipolar and free-hand reduction. The right hand arrow indicates excessive crushing. The left hand arrow indicates a slight bulbar scar produced during bipolar reduction, associated with a sheared surface across the center of the core. The top arrow indicates the secondary, free-hand flake that was removed. Specimen c is of a lower quality chert with respect to homogeneity. This is a fossiliferous chert, and thus may account for the fracturing that occurred. The top left arrow points to crushing, or shatter, caused by the collapse of the material. The bottom left arrow points to a central flake scar, suggesting a weakness in the structure of the material, which may have caused breakdown in the shearing effect of the reduction technique, and thus collapse and associated shatter of the core. Specimen d is an example of the clean shearing often associated with bipolar reduction. The face is devoid of ripples and bulbar scar. The arrow indicates the evidence for both shatter and flake scarring. This specimen is of a higher quality with respect to homogeneity and thus may account for the extremely clean shearing.

In total, the cores exhibited many of the characteristics of bipolar techniques as identified by Binford and Quimby. The basal ends have flake scars that end with abrupt hinge fractures, the zone is battered or bruised, and "the dominating flake scars on the cleavage faces do not originate from the basal zone" (Binford and Quimby 1963:291).

In light of this information, all flakes contained within the assemblage were reexamined for evidence of originating from pebble cores that were reduced using bipolar techniques. Re examination of the flakes indicated that 28 per cent had some cortex remnant on the dorsal surface and 16 per cent were clearly from pebble cores. Unfortunately, 82 per cent of the flakes were unclassifiable as to whether they originated from pebble cores or other forms or cores.

The characteristics of flakes produced during bipolar reduction has been discussed by Honea (1965),

Joslin-Jeske and Lurie (1983), Kobayashi (1975), and to some extent by Binford and Quimby (1963). A variety of observable characteristics can occur. These include double bulbs of percussion, shatter, faceted striking platforms, negative bulbs of percussion, or additional ripples on the ventral surface. It is evident that both bipolar and direction percussion techniques were carried out at the Mallory Site. It is impossible to accurately distinguish all flakes produced by either method. The experimental work of Joslin-Jeske and Lurie have clearly demonstrated this limitation. However, it is apparent that some flakes are angular, truncated, and exhibit some of the criteria above, although quantitative analysis is not yet available.

Supporting evidence is also available in the form of two hammerstones recovered during excavation (Figure 12) and a third from the landowner's collection. The one provided by the landowner shows extremely heavy pitting in the center of both sides of the stone, enough pitting to form a concavity. The other two have light to moderate pitting at the center of each flat side. There appears to be no pitting or sign of using the edge or margin of the stone for striking. All three stones are of a high quality quartzite or gneiss, well smoothed and waterworn. If these were used as hammerstones, then given the nature of the abrasions, they could not have been used for direct percussion reduction. The large flat expanse on each side of the stone would not have provided a small enough area of contact for direct percussion (Holland 1988, personal communication). The implication is that of using the face of the hammerstone when accuracy is not necessarily needed, a situation that occurs in the use of bipolar reduction techniques.

The elements of bipolar reduction techniques are seen in the Mallory Site assemblage. What percentage of lithic manufacture at the site was carried out by this technique is unclear, and at this point the question is most probably unanswerable. The next question is that of "why?" Why is bipolar reduction occurring at the Mallory Site? A cursory review of archaeo-

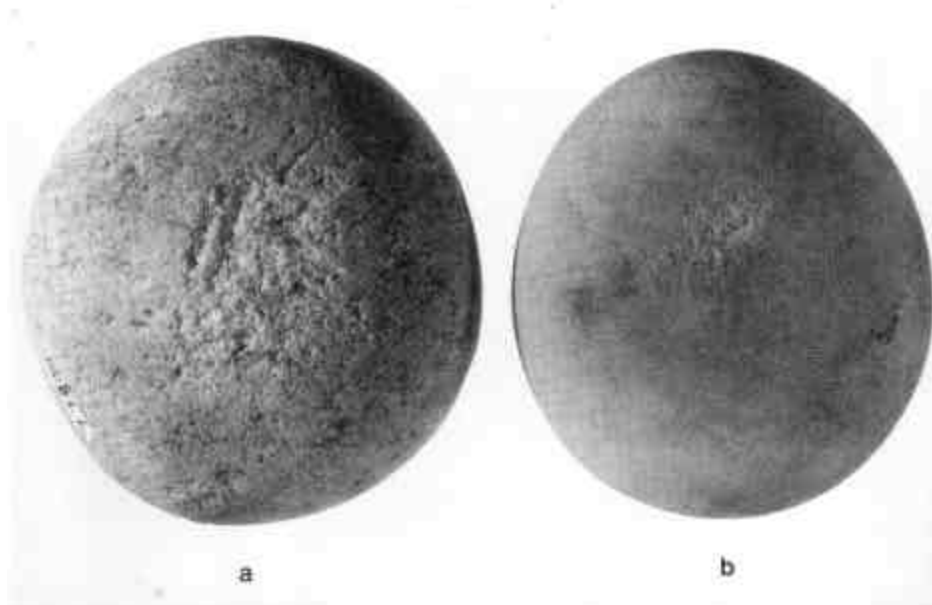


Figure 12. Two hammerstones recovered during excavation, showing pitting and scarring of flat surface. Shown 7/8 actual size. Both are metamorphic quartzite with Specimen b a finer grained, denser stone than Specimen a.

logical site reports for western New York and the Owasco culture has revealed no other reference to bipolar reduction in evidence. Ritchie (1944, 1969) does provide evidence for hammerstones and anvil stones that are pitted on their faces, but he does not equate this with bipolar reduction techniques. Ritchie also notes a pebble lithic industry for the Hilltop Workshop Component of the Canandaigua Focus of the Owasco culture. He writes, "The raw material found indicates a pebble industry and such pebbles, or more accurately rolled masses of tabular chert, occurred in plenitude in a bank of glacial gravel near Ouleout Creek and in the bed of that stream, several miles away" (Ritchie 1944:94).

Bipolar reduction techniques may have been used due to the nature of local, available chert sources. Again the majority of cores are representative of pebble cherts. Geologically, Chautauqua County has no exposed beds of Onondaga chert. The county consists of Upper Devonian shales, sandstones, and Pleistocene-deposited glacial till, that has subsequently sorted through erosion and pro-glacial-lake formation. The dominant source for lithics in western New York is the Onondaga Escarpment, and sites such as Diver's Lake Quarry, lie 50 statute miles to the north. Subsequently, all naturally occurring cherts found within Chautauqua County are in the form of glacial drift pebble chert or

portions of tabular formations. Also included in these deposits are cherts exhibiting characteristics of those found in Canada (Holland 1988, personal communication).

Just as Ritchie noted for the Hilltop Workshop Component, pebble chert is readily available in the Canadaway Creek, in particular eroding out of the Lake Warren beach strand. A survey of the creek bed below the Mallory Site confirmed this fact. There is an abundance of materials for lithic manufacture and other needs right at the Mallory Site. In less than half an hour, three individuals recovered 20 chert-bearing rocks. Also recovered and observed was an excellent variety of anvil and hammerstones composed of quartzite, gneiss, or quartz. The matrix also contained a plethora of materials for netsinkers.

Returning again to the excavated cores, 14 of the cores were definitely pebble in form, and the size of the cores as a group was less than 4 cm in length. Any of the cores, spherical or spheroid, would be difficult to initiate reduction using hand-held percussion techniques (Cowan 1988, personal communication). The knapper could not get a good angle to strike off a flake, and the size of the cores would make it difficult to hold and maintain control. If bipolar reduction techniques were utilized, there would be several advantages. First, with regards

to those cores that are spherical, bipolar reduction would facilitate the bisecting of the core and provide a good purchase to then follow with direction percussion techniques. Secondly, it can eliminate possible hand bashing (White 1968:661). Thirdly, shatter often associated can produce usable tools (White 1968:661; Hayden 1980:4). Finally, with pebbles that have a well-developed cortex and the quality of the chert is not readily apparent, bipolar reduction is quick way to assess the material under the cortex. Hayden in recapitulating Bordes, suggests that the reason bipolar reduction was used in many places of the world has to do with "... the low inertia of small pebbles, or ... with surface characteristics of the material, e.g., where the surface may be covered with small incipient cones produced by stream rolling which create a `soft exterior zone thereby dampening impacts in the same fashion that a thick, soft cortex will" (Hayden 1980:4-5).

The high percentage of debitage found at the site, along with decortication flakes and cores suggests that pebble chert was being reduced on site. It is also important to note that those cores identified as tabular in origin could in fact have come from the creek bed, having weathered out of larger pieces of limestone in the form of glacial drift (Holland 1988, personal communication). If this is indeed the case, then the number of cores to have potentially been obtained from the creek rises 76 per cent.

Conclusions and Implications

The land-use model with which I originally began this project could not be used because the evidence recovered does not fit the model. The greatest limitation was the state of preservation found at the Mallory Site. Certainly, elements of the traditional land-use model are apparent at Mallory. The proximity of the creek, soil type, parent material, and topography are most evident. But there were no remains that could definitely tie the site to the potential resources available from Canadaway Creek. None of the lithics, or any of the remaining assemblage, suggested specific resource harvesting (e.g., fishing). However, as can sometimes occur, reinspection of the site produced the first netsinker, lying on the surface of the garden: the first evidence for net usage at the site. The general construct of the assemblage, based on the pottery and projectile point types, indicates that the Mallory Site is associated with the Late Owasco/Early Iroquois cultures. Based on the temporal range and quantity of pottery, evidence of burials, and number of hearths, the Mallory Site appears to be a village.

In answer to the questions of why establish a settlement on the Canadaway and why in this particular locale, it is apparent archaeologically that a secure and

abundant supply of pebble and glacial drift tabular chert for lithic manufacture is available. This may have been one of the reasons for selecting this location. A second reason lies with the newly discovered netsinker. The netsinker provides some evidence that fish may have been taken out of the Canadaway Creek. This may indicate that food resources may have played a role in deciding to establish a settlement at that locale.

There are several implications based on our findings. First, the findings may demonstrate that the lure of the Onondaga Escarpment for lithic material may not have been felt in Chautauqua County, or at least not by the inhabitants of the Mallory Site. Second, glacially deposited pebble cherts modified using a combination of direct percussion and bipolar techniques may have more than adequately met the lithic needs of the Late Woodland inhabitants in Chautauqua County. Third, archaeological assemblages from southwestern New York may exhibit greater variation in lithic technology than previously identified.

I consider the research preliminary, highlighting perhaps a yet unrecognized lithic technique for the Owasco culture. I am in the process of reanalyzing the current assemblage of lithics and in the future, plan to return to the Mallory Site to test newly formed hypotheses regarding Owasco settlements and lithic technology.

The Canadaway Creek has proved to have had a powerful affect on prehistoric and historic populations. It has provided necessary resources and conditions that appear to encourage habitation during the Late Woodland Period, as it continues to do with contemporary habitation and most likely future habitation.

Acknowledgments

In conducting and completing a project of this size I am grateful to many people. I would like to thank first the students of the CCAP 1986 field school for all the tedious (their word) work they conducted; second, Ron Feinen, Lynn Moerman, and Pete Calanni, for the extra time and energy they contributed towards the analysis of the pottery and lithics; third, all the members of the Chautauqua Archaeology Society, for all their enthusiasm and volunteerism; fourth, Derek Tackitt and Charlotte Morse of the Instructional Resource Center at SUNY Fredonia, for all their expert photographic and illustration work; fifth, John Holland, who guided me through the morass of literature and provided first hand analysis of bipolar reduction technology. John assisted in much of the identification of the lithic tools and types of chert. Lastly, I thank the Doms and Morans, who allowed us to inundate their respective lawns for the duration of the field school.

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The Rogers Farm Site: A Seventeenth-Century Cayuga Site

Adrian Mandzy, Lewis Henry Morgan Chapter

For many years the location of the French Jesuit mission site of St. Rene has remained a mystery. According to The Jesuit Relations and Allied Documents, St. Rene was one of three mission sites that served the Cayuga Iroquois in the latter half of the seventeenth century. This reference locates the mission of St. Rene on the east side of the Cayuga River, but no historic Cayuga artifacts have been found in this area. Substantial quantities of Cayuga Contact material, however, have been recovered from the west side of the river, bringing the location of St. Rene under speculation. Although most of the artifacts from the Rogers Farm Site were recovered over 50 years ago, no comprehensive study was ever made of this material. After an intensive study of the artifacts, a proposed date for the occupation was generated by using Jesuit Christianization rings. To strengthen the proposed ring dates, artifacts of European manufacture were compared to parallel artifact examples taken from historically dated sites. The theory that the Rogers Farm Site is the location of the mission of St. Rene gains support, since the artifacts recovered date to the mission's period of operation.

As the discipline of archaeology has continued to grow in the last half-century, new studies have given greater understanding of past events. In regards to Cayuga Contact archaeology, however, no major studies or publications have appeared since Skinner's (1921) work, *Notes on Iroquois Archaeology*. Cayuga sites that were identified and dated at the turn of the twentieth century have continued to provide the only basis for the published archaeological material. As a result, the historic Cayuga are not presently included in most current studies of Iroquoia. In an effort to reverse this almost 70-year trend, a previously known site has been reexamined in light of the 60 years of intervening scholarship.

The Rogers Farm Site¹ is a Cayuga site of the Contact Period in Savannah, Wayne County. The site was first identified in the 1890s and was subsequently excavated by a number of individuals, the results of which have never been published. Nevertheless, the site has been assigned a number of dates of occupation. In order to resolve this chronological debate, a survey of materials recovered is necessary. Despite the substantial number of artifacts recovered and the past descriptive artifact-type studies that have been

1. Not to be confused with the prehistoric Rogers Site in the Bristol Valley, Ontario County.

conducted on the Rogers Farm Site material, no comprehensive study has ever been made of the site as a whole. Dates for the site's occupation have been assigned on the basis of speculation rather than scientific research. Only upon completion of a detailed study of the total artifact assemblage can one propose a date of occupation, and hence, determine the validity of identifying it as the site of the chapel of St. Rend (c. 1668-1684). After an extensive study of the artifacts by the author, specifically Jesuit Christianization rings (Mandzy 1986:58), a proposed date for occupation was generated. To strengthen the proposed ring dates, artifacts of European manufacture were compared to artifact assemblages from sites already historically dated. The material studied has come from the Rochester Museum and Science Center's collection and the private collection of Harold Secor of Savannah, New York.

According to Thwaite's *The Jesuit Relations and Allied Documents*, three missions served the Cayuga: St. Joseph, St. Stephen, and St. Rend (JR 52:179). Further studies have suggested that St. Joseph was the primary mission to the Cayuga, while St. Stephen and St. Rend were secondary chapels (Stewart 1942). The locations of this mission and the chapel of St. Stephen are known from a reference in the *Relations* and are generally accepted as being substantiated by the artifacts recovered there (Follett n.d., Stewart 1942). This same reference locates the chapel of St. Rene on the east side of the Cayuga River, two French leagues (or 6.94 miles) (Engelbrecht n.d.) north of St. Stephen. Unfortunately, no substantial quantities of Cayuga Contact material have ever been found on the east side of the river. Substantial quantities of Contact material, however, have been recovered approximately 7 mi north on the west side of the river at the Rogers Farm Site, raising the possibility that St. Rend is incorrectly located in the *Relations*.²

The Rogers Farm Site occupies a point of land where Cayuga Lake is joined by Crusoe Creek and the Seneca River (Figure 1).³ The site consists of a small village settlement, a large cemetery, and a smaller, family-size cemetery. A third cemetery may have existed, but because of construction in the

2. The location of St. Rene has been postulated by a number of different scholars over the years. General John S. Clark located the mission on Fort Hill, while Harrison Follett placed St. Rene in a number of different places, including Bluff Point and Howland Island. Alexander Stewart first proposed that the Rogers Farm was the site of the Chapel of St. Rene, but he presented no direct proof for his theory.

3. For a more detailed discussion of this area, see Mandzy 1987 or Secor 1987.

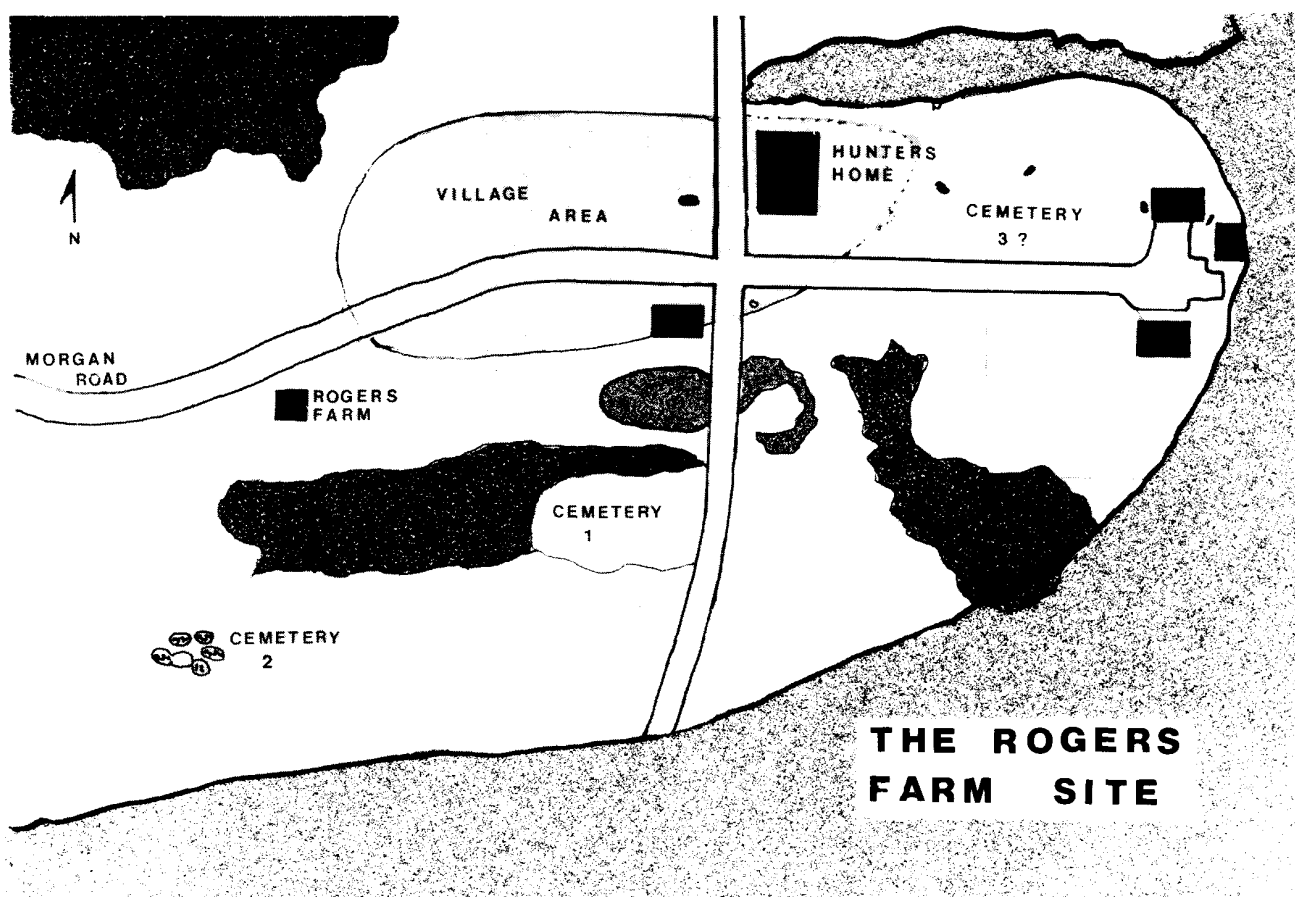


Figure 1. The Rogers Farm Site.

immediate area, there is little direct evidence for this. No systematic scientific excavations have been carried out on the site, no evidence of a palisade has been found, and the exact dimensions of the settlement are impossible to establish. It appears, however, on the basis of the concentration of surface artifacts that the village is located primarily north of Morgan Road on the Rogers property and continues onto the Hunter's Home property, in a celt-like shape (Figure 1). The majority of surface artifacts come from this area.

The main cemetery of the Rogers Farm Site is located southwest of the village. The cemetery was found to contain some 35 burials containing the remains of approximately 50 individuals. Of these 50, 10 were definitely identified as being under the age of 12, while one burial housed the remains of 8 individuals and may have possibly served as an ossuary, possibly suggesting a captured Huron population among the Cayuga (Stewart 1934). Although most artifacts from the excavations have survived, the field notes are very sparse, and only a handful of skulls were retained from the excavations.

The second cemetery was located 150 ft west of the main cemetery, farther away from the village, and

consisted of only six burials: three were single adult burials, one was a single child burial, and one was a double infant burial. The remaining burial exhibited no skeletal remains.

Although there has been no direct proof for a third cemetery, its existence has been postulated on the basis of frequent locations of individual historic graves (Seeley 1950:4). Verification is difficult, however, since the Contact Period cemetery overlays a prehistoric cemetery, and the entire area has been extensively developed by the present owners.

While the first collections of artifacts were made as early as the 1880s, it was not until 1935 that formal excavations were conducted on the Rogers Farm by the Rochester Museum of Arts and Sciences (now the Rochester Museum and Science Center). Some time after the Museum's excavations, but before November 1942, Harry Schoff excavated at the site. Unfortunately, no information is available about his findings. In the late 1940s, Arthur Seeley studied the prehistoric occupations of the peninsula in question and plotted the locations of individual artifacts (Seeley 1950:4). The most recent collec-

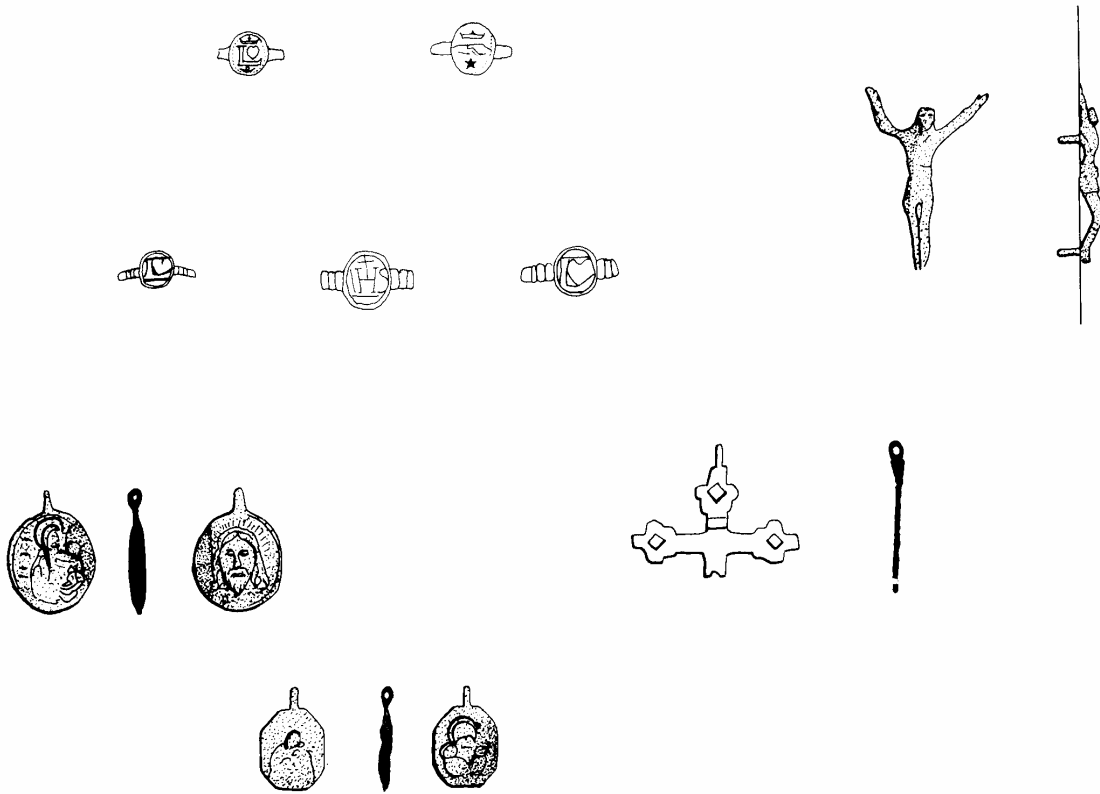


Figure 2. Jesuit Christianization rings, medals, and crucifixes from the Rogers Farm Site.

tions from the Rogers Farm Site were made by Harold Secor, who surface collected in the immediate area and who had in more recent years had excavated a small cemetery for the landowner.⁴ At the present time Harold Secor and Robert Gorall continue to surface collect in the area.

The present author attempted to use the Jesuit rings from the site to propose a date of occupation for the site. To verify this ring date, the site was cross-dated using other artifactual materials from the site. The site produced only five Jesuit Christianization rings from which a site date could be determined (Figure 2). Three of these rings came from a single burial in the main cemetery, while the remaining two rings were recovered from the surface of the village site. The surface rings both date to the same period and were stamp embossed in relief (Wood 1974). Both rings are finely crafted and have smooth, unscribed bands, which typify a later ring style of the

4. In 1983, Harold Secor's collection was acquired for the Rochester Museum and Science Center.

same design. The "L-heart" motif ring recovered (6137/215)⁵ is an example of one of the two earliest Christianization motifs yet identified; the other design is the Jesus-IHS motif. The motif of the second well-worn recovered ring is the Clasp Hand or *Fede* variety (Harold Secor's personal collection). Both ring motifs resemble each other in that they are enclosed by rope-like borders and are flanked by crowns on top and stars, or what I term "little *do-dads*" on the bottom. The similarities in the secondary decoration of these two ring types suggest a common method and period of manufacture. The "L-heart" ring can date to as early as the late 1640s, but the Clasp Hand ring probably does not predate 1655. Even though these traditional motifs are encountered as late as the 1690s, based on previous studies of Jesuit Christianization rings, well-crafted ring types, such as the one shown here (Figure 2), usually disappear by the late 1670s (Mandzy 1986).

5. Artifacts are illustrated by their artifact number; an AR followed by five digits means that the artifact was recovered during the Rochester Museum excavations, while four digits followed by a slash and the number 215 means that the artifact is part of the collection acquired for the Museum.

The other three recovered rings are from a later date, even though they also carry the early motifs of the "L-heart" and the Jesus-IHS (AR 29023A, AR 29023B, and AR 29023C). These rings show a change in the process of manufacture, being rather crudely engraved instead of finely embossed. The designs are engraved both on the bezel as well as on the ring band itself. Even though isolated examples of these ring types have been found well into the eighteenth century, such as at Ft. Michilimackinac (1715-1763) (Stone 1974:130), the majority of these rings appear on Iroquois sites no earlier than 1660 and are infrequent after the 1690s. Based exclusively on the presence of the five rings, a working date of 1660-1680 for the site is proposed.

Jesuit Christianization rings are not the only religious artifacts that have been recovered. Others recovered from the site included two crucifixes and religious medals. One crucifix depicts a brass figure of Christ crucified, suspended on a wooden cross (AR 28978). Fragments of the wooden cross have survived, just as on a parallel example from the Seneca Boughton Hill Site of 1670-1687 (332/103). The other crucifix was recovered from the small cemetery and is incomplete (AR 28983). This crucifix, which is missing its bottom half, was originally stamped out of a single sheet of flat brass and was pierced with a number of strategically placed holes, possibly to facilitate the attachment of the corpus (figure of Christ crucified). This parallels an example from Fleming, New York, pictured in Beauchamp's *Metallic Ornaments of the New York State Indians* (Beauchamp 1903: Plate 20; 108). The published example exhibits a Jesus-IHS motif on the top part of the vertical cross-bar, but the exact parallel measurements of the two crosses suggest an industrial process of manufacture.

Two heavily encrusted religious medals have been recovered from the large cemetery of the Rogers Farm Site. One medal is circular in shape and bears a discernible image of the Madonna on one side and the bust of Christ on the reverse (AR 29027). The other medal bears no identifiable image and is only recognizable by its octagonal shape (AR 28977). These medals can date as early as the 1680s or as late as the 1760s (Wray 1973:21). A representative arms collection has been recovered from the site. Of these artifacts, only the one complete gunlock provided a datable artifact type (6070/211, Figure 3a). This piece was classified as a Type VC lock by Jan Puype during the course of his 1984 study of the firearms in the Rochester Museum's collections and is dated in use from about 1655 to 1670. Thirty-seven other Type VC gun locks were recovered from various Seneca sites, all occurring on sites in use from 1650 to 1687 (Puype 1984:50).

A unique thrusting blade weapon was recovered from the main cemetery (AR 28998) (Figure 4). The edges of the stiletto show no discernable cutting edges, which suggests the weapon was used solely to puncture holes. Although there are no identifiable markings on the piece, the weapon is clearly European, possibly of Spanish,

German, or Italian origin, and probably dates to the sixteenth century (William Fagan, personal communication). This item, like so many other antiquated European arms, was relegated to military surplus for use in the colonies (Peterson 1956, Hume 1983:25, 304). While no other such weapon has been noted in the archaeological record, the recovery of archaic European plate and chain mail armor from the Susquehannock Strickler Town Site (1650-1675) (Witthoft 1953:6) and other bladed European weapons from mid-seventeenth century Seneca sites suggests that the stiletto entered Cayuga material culture circa 1650.

A total of 16 knives has been found on the Rogers Farm Site; 15 of these came from the main cemetery, while one knife base was found on the surface of the village area (Figure 5). Fifteen of the knives are of the rat-tail design while the remaining knife is a folding-clasp knife (AR 29016z and AR 28980) similar to one found on the Oneida Sullivan Site of 1660-1677 (Bennett 1984: Plate 9). Of the rat-tail design knives, four knives still retain their bone handles. Two knife handles are undecorated and may be Cayuga-made replacements for the original handles (AR 29008). Of the two decorated handles, one depicts a herringbone design (AR 29017), while another one displays a diamond and circle design (AR 28995). Both of these designs are fairly common and appear about the same time as the earliest Jesuit rings (1645/1650) and remain in use well into the end of the seventeenth century based on the iron trade knife study conducted by Gilbert Hagerty on Oneida sites (Hagerty 1963: 93-114).

A *Busycon*-type shell gorget was recovered from the village area (6000/215). This artifact measures approximately 3 3/4 in. in diameter and is perforated with eight drilled holes, five of which are in a straight line. The decoration consists of chert- and iron-drilled holes which form two birds in the center of the gorget. Two rows of iron-drilled holes surround the inside edge of the piece. This artifact was found in 1890 and was sent to Dr. Frederic W. Putnam at the Harvard Peabody Museum for identification. He dated the artifact to the early Contact Period of 1620-1650.

The three pipes recovered from the site came from the main cemetery. Of these, two are of native manufacture (AR 28976, AR 28991), while the third is of European make (AR 29045). Both native pipes are highly ornamental and bear a high-quality finish similar to pipes on the Seneca sites of Dann and Boughton Hill (Wray 1966:35-45). The European pipe is white clay and has a BB stamp at the stem-bowl junction (AR 29045) (Figure 3b). According to John McCashion, this BB stamp is the familiar EB stamped pipe, except that this example is poorly finished. Since no bore measurement was taken of the pipe, it can only be estimated that this pipe was struck at some time in the late 1650s to early 1660s (John McCashion, personal communication).

At the time this study was conducted, a total of 2457 European glass beads were available for analysis. The most com

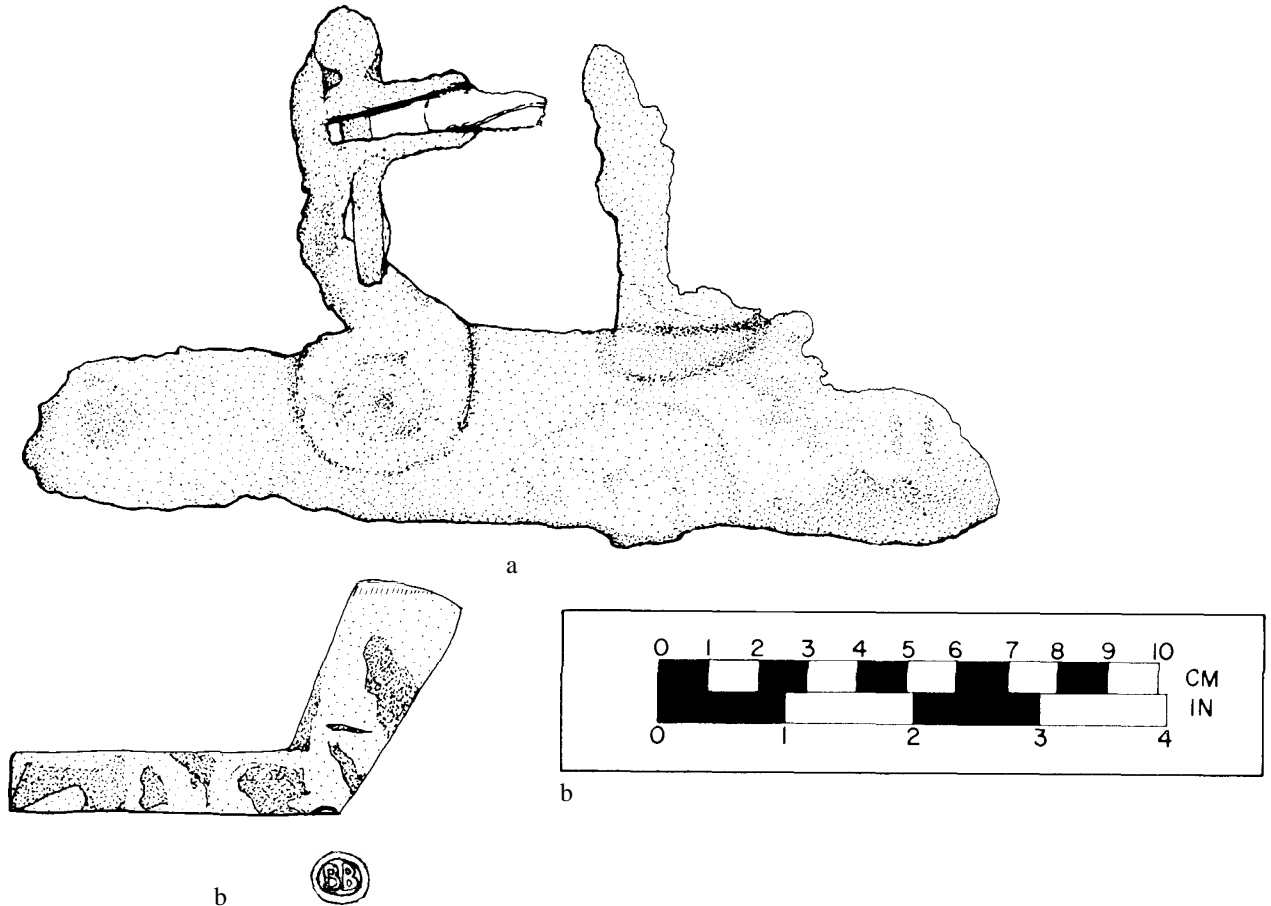


Figure 3. Rogers Farm Site artifacts. a) Type V-C gun lock; b) white claypipe with BB stamp.

mon bead types recovered are red rounds (28%), black rounds (20%), and red tubes (19%). Also present in smaller quantities are black tubes (12%), black tubes with four red stripes (6%, Kidd type Ib3), gold tubes (2%), black tubes with red in white stripes (2%, Kidd type Ibb2), red ovals (less than 1%, Kidd type IIa3), and Union Blue tubes (less than 1%, Kidd type Ia20). Based on the percentages of bead types encountered, it appears that the assemblage was deposited as early as the 1660s. Wire-wound beads, which traditionally appear on Iroquois sites by the mid-1680s, are not found at the Rogers Farm Site (Pratt 1961; Peter Pratt, personal communication)

The general presence of other European trade artifacts seems to strengthen the above-proposed occupational date for the site. Although the chronological dates of occurrence for these artifacts are not as well developed as for artifacts previously discussed, they nevertheless provide general dates of occurrence that

concur with the ring date previously presented. The time periods of the utilization of these artifacts are based upon the descriptions and dates presented by Wray (1973) for Seneca artifacts, and most are probably valid for the Cayuga. Since the exact nature of these artifact types does not presently allow more precise dating, the artifacts are only listed and are not further described. These artifacts come from all cemeteries and the village site and include the following: iron trade axes, brass kettles and spoons, musket parts, lead musket balls, bone and wood effigy combs, bone cootie combs, a pewter cup and mug, purple and white wampum, shell ear plugs, an iron saw, brass spring beads, tubular glass and brass beads, mirror boxes, iron fish hooks, antler powder measure, lead shot, iron fire starter, native and European gun flints, iron drill, iron spear points, perforated and unperforated triangular brass points, brass and iron wire bracelets, jews harps, hawk bell, duck-

AR 28998

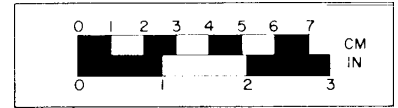
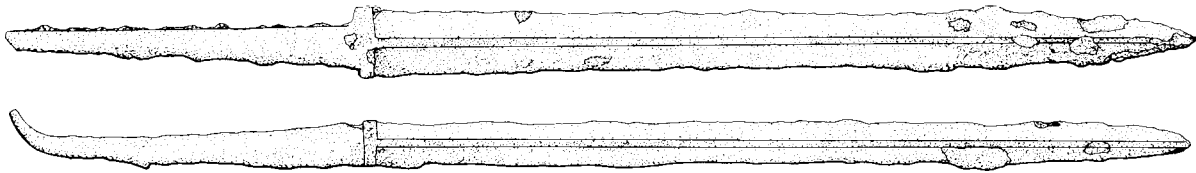


Figure 4. Stiletto from the Rogers Farm Site.

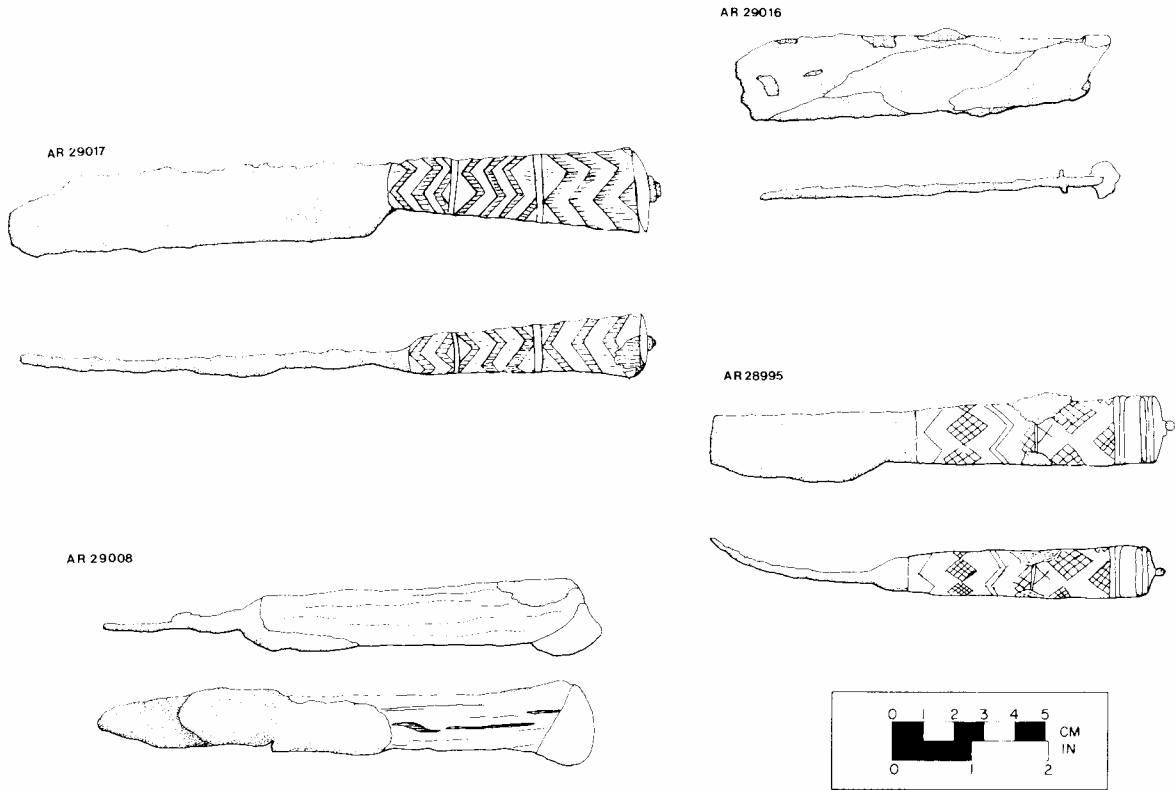


Figure 5. Knives from the Rogers Farm Site.

billed shell pendants, shell crescent pendants, shell runtees, iron hide scrapers, wood ladles, and woven organic remains. Based upon the total artifact assemblage, it seems certain that the site dates to the latter half of the of the seventeenth century, but a more precise date of occupation may be proposed. The end date of occupation for the site, based on the presence of medals, crosses, the bead sequence and, additionally, the absence of red slate and catlinite, supports the proposed ring date of c. 1680-1685. The site may have been occupied as early as 1655 but probably was not in use until the mid-1660s. This is based on the presence of the shell gorget, the EB pipe, and the stiletto. Thus, a site occupation date of 1660/1665 to 1680/1685 may be postulated. The chapel of St. Rene is explicitly mentioned in *The Jesuit Relations and Allied Documents* during the record year of 1669 and again in the year 1672 (JR 52:179 and JR 56:51). From contemporary historical works we know that the Jesuits set up their permanent missions to the Cayuga in 1668 and withdrew them by 1682 or 1684. Comparing the date of the site's occupation to that of the mission's, it is most probable that the Rogers Farm Site is indeed the location of the chapel of St. Rene of the Cayuga.

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