

Archaic Giant's Grave: Exploring Site Distribution Within a Unique Micro-environment on the Alleghany Plateau, 4000-1500 BC

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Abstract

CRM investigations in southwestern New York State have resulted in the identification of several short-term Late Archaic occupations on and around a glacial landform known as Giant's Grave. A landscape perspective offers clues as to the nature of this cluster of sites and others like them. Although Giant's Grave offers a number of subsistence-related opportunities, when the peculiar nature of the landform itself is considered it is apparent that more than availability of resources encouraged occupation here. In particular, glacial kames appear to be sacred places in the landscape. This small area is used as a case study to interpret other such sites in the region. By exploring the consequences of this occupation within the larger regional conception of the Late Archaic, aspects of prehistoric ritual activity can be added to our knowledge of this time period in central and western New York

Introduction

The prehistoric Archaic Period within the southern tier of New York State is poorly understood. In particular, much of what is known about the period is based on

data from outside Allegany County, especially from areas in the upper Delaware and Susquehanna valleys (Dent 1991; Funk 1991; 1993; Nicholas 1988). This dearth of knowledge is due as much to the scarcity of systematic survey as it is the near absence of detailed project syntheses among consulting firms.

Between 1999 and 2002, the SUNY Buffalo Archaeological Survey and the Buffalo office of Panamerican Consultants, Inc. conducted cultural resource investigations on and around a topographic dome feature in the Town of Amity, Allegany County New York (e.g., Salisbury 2002; Schieppati et al. 1999). Figure 1 depicts the study area on the 1965 USGS Belmont, NY 7.5' Quad map. Local residents have long



Figure 1. Location of study area in relation to Genesee River.
1965 USGS Belmont, NY 7.5' Quadrangle.

associated this glacial mound, known as Giant's Grave, with Native American occupation. The combined UB and Panamerican projects comprised a total of 95 acres. Three Late Archaic sites and one other campsite, all located on the south side of Giant's Grave, were identified over the course of the investigations. In addition, a broad, diffuse scatter of prehistoric artifacts was identified on top of the mound, and isolated single-item findspots were identified throughout the surrounding terrain. This paper discusses the significance of these Late Archaic sites in terms of the prehistory of the region and

explores the importance of this landform and its unique environment for prehistoric subsistence and ritual-related activities. A landscape approach is used to examine human activity in the wider context of the interaction between people and their environment. Because landscape is a social construction, landscape is differentiated from simple regional analysis through focus on the dialectic between humans and the land, and is employed to examine large temporal and geographic ranges (Thurston 1999:662). The use of a landscape analysis of Giant's Grave allows us to interpret the significance of glacial landforms for the people that utilized them while encompassing both subsistence and ritual-related activities.

Background

The combined study area is within the glaciated Allegheny Plateau section of the Appalachian Uplands physiographic province. The topography is rolling, characterized by steep-walled valleys and wide ridge tops smoothed by glacial scouring. Despite this variation, Giant's Grave dominates the landscape of the study area and its immediate vicinity. The west end of the mound, in particular, rises well above the surrounding terrain. Elevations above mean sea level range from 1,380 feet at the base of Giant's Grave to approximately 1,460 feet at its highest point. Giant's Grave is contained in soils of the Chenango Series, which are typically deep, well drained, and acidic with gravel inclusions. These soils are characteristic of glacial features such as kames or moraines where outwash gravel was deposited (Pearson and Cline 1956:41).



Figure 2. Giant's Grave from north.

Along the south side of the knoll, a small spring-fed stream forms a wetland. Thick grasses surround this water source. At some point, a beaver built a dam near the western end of the mound, and a small pond formed (Figure 3). However, the primary drainage for the immediate area is the Genesee River, which lies approximately 1,000 feet to the west. Based on historic map analysis, the natural drainage patterns of the area have remained relatively intact throughout the historic period (Salisbury 2002:10).

At the time of the field investigations, Giant's Grave was covered with a Red Pine plantation that was initiated during the historic period (Figure 4). Black Locust was found along the northern and western boundaries of the mound, and a second growth hardwood forest occurs to the south. All of this vegetation was the result of historic land-use, including agriculture. Prior to Euro-American settlement within the region, a Northern Hardwood Deciduous Forest dominated the landscape (Miller 1986). The well-drained soils found on top of Giant's Grave would have supported mast-bearing trees like oak, chestnut, and hickory. Not only did fatty nuts play an important role in prehistoric subsistence, but these trees would also have attracted a number of game animals, including white-tail deer, squirrel, and turkey (Ritchie and Funk 1973:41).



Figure 3. Wetland area adjacent to south side of Giant's Grave.



Figure 4. Red Pine plantation covering Giant's Grave.

Giant's Grave has a general southwest-northeast orientation and is oblong in shape, covering approximately twelve and a half acres. The top of the western end of the mound rises roughly 100 feet above the wetland area to the south. A discernible gentle slope extends upward from east to west across the long axis of the mound; there is a steep slope down the south side of the mound and a moderate slope on the north. A substantial gravel quarry is also located on the northwest slope (Figure 5). The quarry would have removed or destroyed most, if not all, evidence of prehistoric cultural activity at this location. Although there is no evidence thus far of prehistoric burials at Giant's Grave, research within the Northeast has increasingly revealed gravelly soils to be among the preferred locations.

Recent Investigations

The archaeological sites were identified along the sheltered southern terrace of Giant's Grave and on top of a small bluff just to the south (Figure 6). All four locations overlook the low-lying stream and marshy area. There is also easy access to Giant's Grave, which forms a natural mound that may have had significance beyond mere subsistence, including the possibility of ritual-related activities. The prehistoric use of Giant's Grave proper is represented by a light scatter of lithic artifacts across the knoll (Salisbury 2002). Local collectors, in particular, have long known about this location.



Figure 5. Gravel pit on northwest side of Giant's Grave.

Three of the sites, known as PCI/GVS-1, 2, and 3, were identified during Phase I investigation of the area by Panamerican Consultants in 1999 (Schieppati et al. 1999). Notably, this Phase I work circumscribed Giant's Grave. Phase II investigations were later conducted at sites 1 and 2 (Hayward et al. 2001) while a project redesign placed the third site, PCI/GVS-3, outside of the immediate impact area. No further work was deemed necessary at site 3 unless future impacts were proposed at the location. Due to a subsequent project that did include Giant's Grave, PCI/GVS-3 was investigated in 2002 as part of Phase I work conducted by SUNY Buffalo. SUNY Buffalo also identified a fourth site, known as Genesee Valley OEC, or UB 3609.

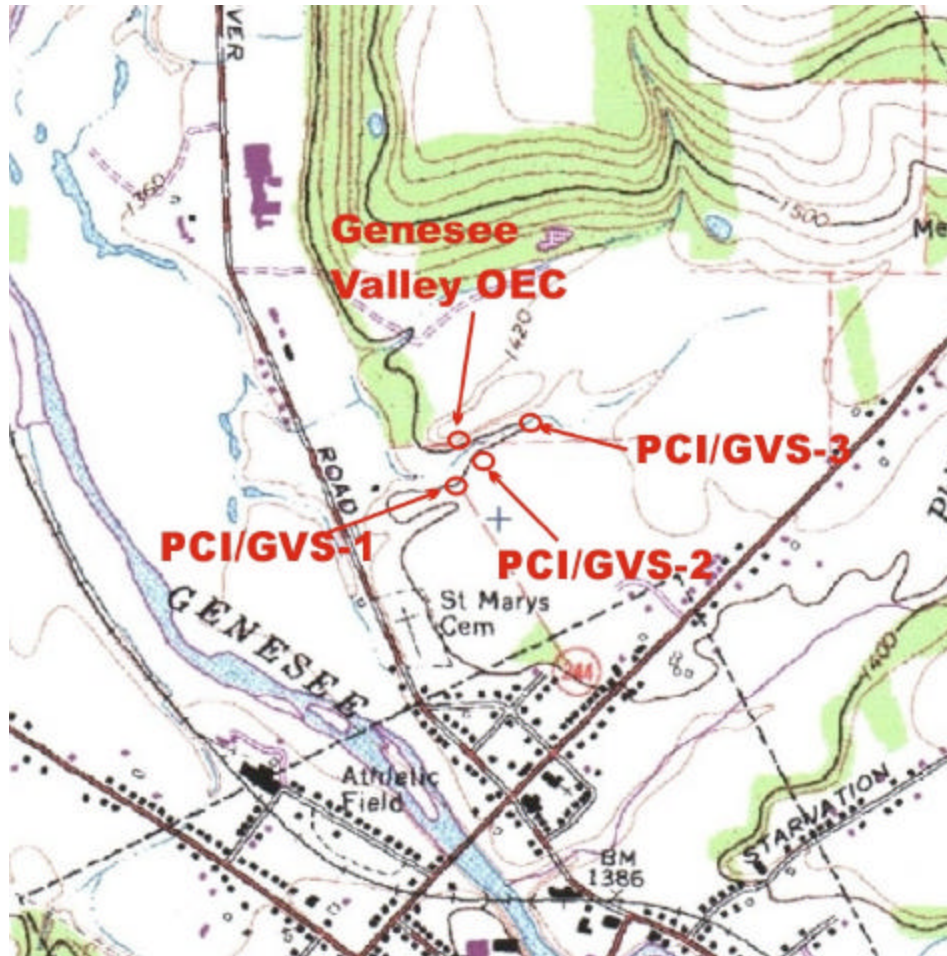


Figure 6. Distribution of sites around Giant's Grave. Base map from USGS 1965 Belmont, NY 7.5' Quadrangle.

Due to their small size and relatively low artifact densities, all four sites most likely represent short-term or seasonal camp sites. The first site, PCI/GVS-1, was initially defined through systematic surface inspection and the excavation of 10 shovel tests. An additional 81 shovel tests as well as six 1-meter by 1-meter test units were excavated during the Phase II fieldwork (Hayward et al. 2001).

PCI/GVS-1 is located on a flat plateau-like lobe overlooking the roughly 15-ft slope to the stream and wetlands just to the north (Figure 7). The site was defined as a somewhat linear, low-density scatter of prehistoric chert tools and debitage spread over an area of 30,000 square feet (2,821 square meters). The dispersed nature of the remains

is likely the result of historic plowing. A total of 480 chert artifacts were recovered from the site during the Phase I and II fieldwork. These include: a modified diagnostic projectile point comparable to a middle Late Archaic Brewerton side-notched point; a small biface fragment; one biface preform or blank with scraper usewear; three utilized flakes; a core fragment; 446 flakes and flake fragments, and 27 pieces of shatter. All stages of lithic reduction were represented by the flake remains, particularly the tertiary, or last stage. In addition, three flakes showed evidence of exposure to fire in the form of heat spalling. The presence of the projectile point, utilized biface preform, and tertiary and secondary reduction flakes indicated that tool finishing occurred at this location, while the scraper and utilized flakes suggested resource procurement and preparation. No prehistoric cultural features were located at the site (Hayward et al. 2001).



Figure 7. Site location of PCI/GVS-1

PCI/GVS-2 is the designation given to a series of three apparent loci comprising an area of approximately 45,000 square feet (4,095 square meters). This site was also

identified during systematic surface inspection, and was further defined by the excavation of four shovel tests (Schieppati et al. 1999). An additional 73 shovel tests as well as five 1-meter by 1-meter test units were excavated during the Phase II fieldwork (Hayward et al. 2001).

Site PCIGVS-2 is located on a small knoll about 350 feet (106 meters) east of site 1, overlooking the stream and wetlands to the north. Giant's Grave provides an impressive backdrop. A total of 86 chert artifacts were recovered during both the Phase I and II fieldwork, a much lower number than that recovered from PCI/GVS-1. Diagnostic artifacts consist of two Late Archaic Lamoka projectile points, one with an extensively retouched distal end and side notches for use as a hafted cutting tool. The remaining artifacts include: two broken biface fragments; an endscraper or cutting tool with unifacial and bifacial reduction; two utilized flakes; seven pieces of shatter; and 72 flakes and flake fragments (Figure 10). Similar to site PCI/GVS-1, the majority of the flakes represented the tertiary, or last stage of lithic reduction. Only one flake showed evidence of exposure to fire (e.g., was heat-spalled) (Hayward et al. 2001).

After completion of the Phase II shovel testing and unit excavation, the topsoil or plowzone was removed by grading machinery from a portion of site PCI/GVS-2 with the aim of uncovering features or other evidence of cultural activity at the soil interface. One



Figure 8. Hearth identified at PCI/GVS-2 (Hayward et al. 2001).

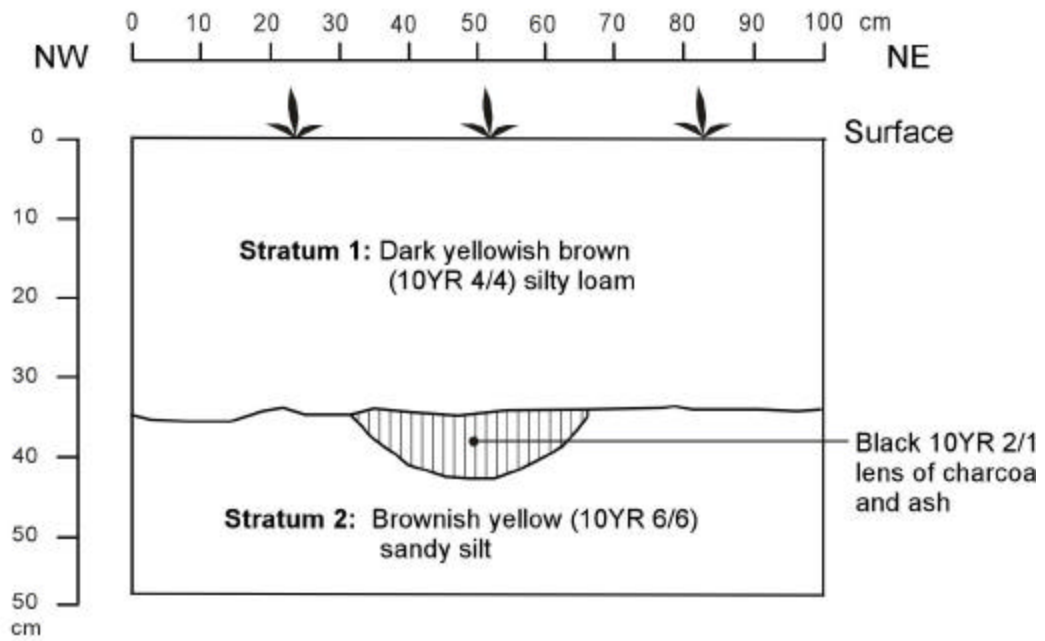


Figure 9. Profile sketch of hearth from PCI/GVS-2 (Hayward et al. 2001).

cultural feature, a hearth, was identified (Figures 8 and 9). This feature was located approximately 14 inches (36 cm) below the ground surface level. It was circular in form and extended three and a half inches (9-cm) into the subsoil. Two of the chert flakes from the site, including the heat-spalled one, were recovered from within the hearth itself (Hayward et al. 2001).

The scatter of remains found at PCI/GVS-2 may be interpreted as three very small, briefly occupied prehistoric camps. Conversely, it could represent a single camp site disturbed by post-depositional plowing and other agricultural activities that likely spread cultural materials both horizontally as well as vertically. Based upon the recovered artifacts, tool finishing or retouching and resource preparation were the primary activities that took place (Hayward et al. 2001).

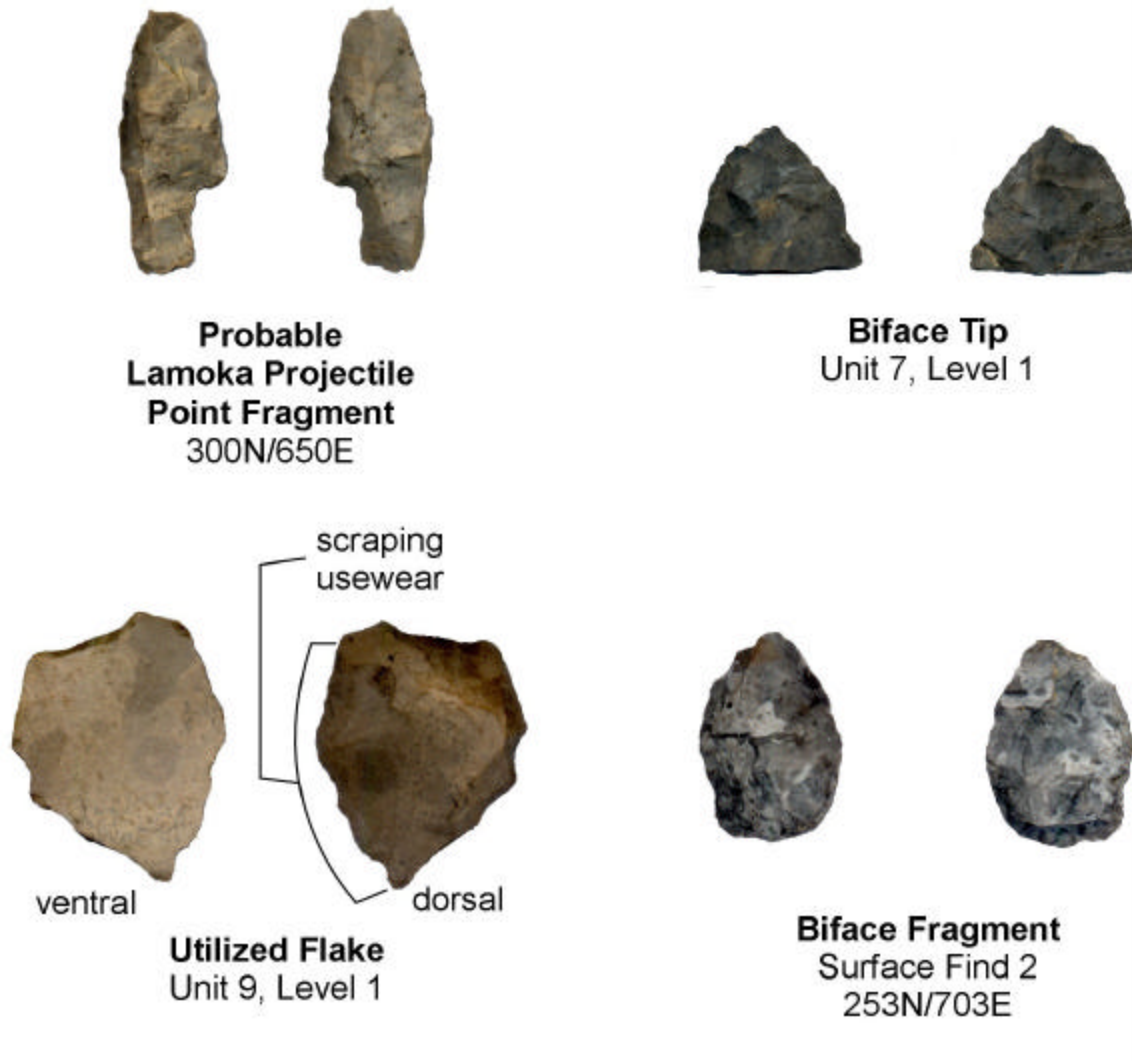


Figure 10. Artifacts recovered from PCI/GVS-2 (Hayward et al. 2001).

PCI/GVS-3 was originally located during the 1999 Phase I investigation by Panamerican Consultants (Schieppati et al. 1999). At that time, nine chert flakes and flake fragments were recovered from three shovel tests from what was defined as the site area just north of the stream. In addition, three flake fragments were encountered within a single shovel test located south of the stream. Due to the lack of diagnostic material, no cultural affiliation could be determined. As already noted, the project plans were subsequently altered to avoid the site and no Phase II investigations were conducted.

In 2002, SUNY Buffalo began Phase I investigations for the proposed Genesee Valley Outdoor Education Center, which encompassed all of PCI/GVS-3 and extended further north and west than what fell within the earlier Panamerican project. Because SUNY Buffalo was made aware of the previous work, this portion of the project area was considered extremely sensitive. In particular, a primary goal of the investigation was to relocate and further define site PCI/GVS-3. Within the vicinity of this site, the field investigation consisted of a 25-foot (7.5-m) interval shovel test grid, with tests located along each side of the stream. The shovel test results indicated that there were in fact two distinct loci, separated by the stream (Salisbury 2002). Both loci fell on low terraces of fairly well drained soils (Figure 11).



Figure 11. Site location of PCI/GVS-3.

Locus 1, the original site identified north of the stream in 1999, covers an area of about 4,323 square feet (400 m²). Locus 2, south of the stream, encompasses 500 square feet (45 m²). In total, 52 chert flakes and flake fragments, seven fire-cracked rock fragments, and two core fragments were recovered along with a few fragments of charcoal. No cultural features were identified (Salisbury 2002). Although this site cannot yet be assigned to a particular prehistoric culture or temporal period, it does contribute to the overall picture of intensive prehistoric activity at this unique location. Further investigation of site PCI/GVS-3 will almost certainly yield significant data regarding prehistoric subsistence and settlement within the region.

The fourth site, Genesee Valley OEC (UB 3609), sits on a terrace along the base of Giant's Grave overlooking the pond and marshy area (Figure 12). Soils at this site are deep and moderately well drained and several large hardwoods cover the site. This is an exceptionally well-sheltered location, situated at the western end of the glacial mound near its steep slope. There is no indication that this area was plowed in the past and site preservation is considered to be good. The identification of several chert flakes and a projectile point during the Phase I investigation resulted in the excavation of a 25-ft (7.5-m) interval grid across the terrace. Based on the results of the shovel tests, the total site area is approximately 3,825 square meters (41,850 sq. ft). The artifact assemblage from the site consisted of 41 chert flakes and flake fragments, one Late Archaic Lamoka projectile point fragment, two additional biface fragments, two core fragments, five fire-cracked rock fragments, and six pieces of shatter. Potential prehistoric cultural features, consisting of black, ashy soil and charcoal concentrations, were identified in six different shovel tests. Despite this, no burned flakes were recovered (Salisbury 2002).



Figure 12. Location of Genesee Valley OEC site.

To complete the reconstruction of prehistoric activity on and around Giant's Grave, the glacial mound itself was classified as a site by SUNY Buffalo. Designated site Giant's Grave, or UB 3608, cultural materials from the dome were recovered from both surface and excavated contexts. Recovered artifacts included 9 chert flakes, one scraper, 19 pieces of shatter, one ground stone, and two fragments of fire-cracked rock. During SUNY Buffalo's reconnaissance survey of the knoll, Fred Sinclair of the Allegany County Soil and Water Conservation District, Agricultural Service Center recovered a probable Late-to-Terminal Archaic Genesee projectile point from the ground surface along the boundary of the Outdoor Education Center project area. In the surrounding flats, Panamerican Consultants identified 14 stray artifact findspots, one of

which consisted of a Late Archaic Brewerton Corner Notched projectile point, and UB Archaeological Survey crew recovered several biface fragments (Salisbury 2002).

There was also an archaeological study conducted in 1985 for the gravel quarry operation on the northwest slope of Giant's Grave (Southern Tier Consulting 1985). One hundred seven shovel tests were excavated at 50-ft (15-m) intervals to an average depth of .5 meters, with some deep testing up to 1 meter. Although the fieldwork approximates today's cultural resource standards, no cultural materials were recovered during the survey. This occurred despite the sheer volume of prehistoric cultural material from practically every portion of the mound and its surroundings. Unfortunately, the implications of the 1985 study are that it is simply not clear what is going on in that portion of Giant's Grave. Due to the heavy disturbances there, it may never be known.

In most cases, characterization of the Late Archaic Period within New York State is limited to the recognition of diagnostic artifacts and the distribution of sites. The understanding of subsistence practices generally follows William Ritchie's "oak-chestnut-deer-turkey biome" concept (Ritchie 1980:32). Although some large, semi-sedentary communities have been identified, including those with traces of domestic structures, most sites are quite small, indicating short-term, probably seasonal occupation by mobile hunting and gathering groups. Small Brewerton camps situated near swamps and springs have been associated with winter hunting camps (Ritchie and Funk 1973:44). For the current study region, streams, creeks, and rivers would have provided easy trails into and out of the forest-covered hilly country of the Allegheny Plateau. Small kinship-based bands doubtless moved from high hillside to oak meadow to marsh or lakeside to river narrows in seasonal pursuit of animal and vegetable foodstuffs and raw materials.

This was a semi-nomadic life-style bounded by a distinct range. As part of their transition from earlier periods, these people settled into a definite home territory, tapping a broad spectrum of resources (Mason 1981:155).

Discussion

In considering the results of the UB and Panamerican projects in light of what is known about the Archaic Period, several problems are immediately apparent. These include sampling bias from the variation between shovel testing and surface collections, lack of more precise dates for occupations, and the removal of diagnostic material from the immediate area by local collectors. However, these are offset by the potential for gaining data pertinent to a range of archaeological questions. For example, what of the light but almost continuous distribution of charcoal found across Giant's Grave? This dispersal of charcoal could reflect fires used to clear land. In the historic period this could be associated with clearing the mound for planting of the red-pine plantation. However, Delcourt et al. (1998) have found charcoal evidence indicating that Archaic populations used fire to clear small patches of land. These fires served to provide space for native plants in the Eastern Agricultural Complex, and also increased populations of fire-resistant mast-bearing trees. The charcoal could also be the remains of roasting pit features—like those mentioned by Ritchie and Funk (1973:41) from the Lamoka site—used for processing acorns.

Issues of Archaic settlement can also be addressed by future research. With the exception of the unique qualities of the glacial mound, the location of the sites seems typical for this period. The location is sheltered from northern winds and storms by the high slope. All of the campsites identified so far are located with a southern exposure.

Well-drained soils probably offered a dry spot to camp and access to mast resources, game would have come here, the low-lying marshy areas likely supplied some other vegetal resources, and there is easy access to fresh water. So the question remains what other factors drew prehistoric groups to this location?

One possibility is that the preponderance of sites here is a factor of increased regional population and subsequent reduced group mobility. Both Funk (1983:320) and Mason (1981) mention that Late Archaic bands presumably occupied more restricted ranges than earlier groups. Giant's Grave could be part of a restricted range of one band, who frequently reoccupied this location because of the favorable conditions. In accordance with optimal settlement location models, prehistoric people may have stayed here because it was simply the best place to camp (Wood 1978). Also, this location fits perfectly Ritchie's statement (1980:38) that Lamoka campsites may be found within about a quarter mile of "navigable and fishable waters". Although people could get fresh water and chert cobbles from the river, and there are well-drained soils with mast and game all over the Allegheny Plateau, as well as many marshy areas, Giant's Grave does represent a location where all these come together, and one with a vantage point where you can watch the river.

Ritual possibilities also exist. There appears to be distinct ritual significance in the choice of glacial landforms for burials and recurrent, short-term habitation. Despite a lack of direct evidence for ritual activity at Giant's Grave, several aspects of the landform are amenable to ritual behavior. For example, the mound, especially the western end, is clearly visible from the south, and also visible from the Genesee River. In addition, approaches from the river and points south should have been visible from the top of the

mound. It is interesting to note that there is a shelter on top of the mound today. Built by local Boy Scouts, the location of the shelter offers a splendid view of, by now, a new school. Presumably this location, even when surrounded with primary growth forest, would have offered a splendid view of the local countryside (Figure 13).

The propensity for topographic high points as “traditional cultural properties” has been well documented. In the UK, Tilley (1994:150) discusses the importance of Penbury Knoll, the highest point on Cranborne Chase. This point can be seen from four out of five barrows on Cranborne Chase. King (1998), the Dean—so to speak—of cultural resource management, discusses Mount Shasta in California, where tribes claim an entire hill as a Traditional Cultural Property or TCP. TCPs may not look like much – run of the mill hills or valleys, rock outcroppings, islands, or any other natural landscape features could fit the bill. The significance of these locations is not always obvious to the casual observer while archaeologists, on the other hand, are frequently looking for locations that would appear good for large-scale habitation or lithic resource procurement. The importance of natural landscape features as ritual locations has been a subject of much attention in Old World archaeology, and deserves such attention in the New World as well. Natural places have an archaeology when they acquired some significance to people in the past (Bradley 2000:35). The use of artificial mounds is well known if



Figure 13. View from top of Giant's Grave, facing southwest.

poorly documented in parts of North America. Further, the use of glacial landforms as ritual space is not a new concept – the Glacial Kame tradition of the Northern Great Lakes used glacial mounds as burial sites (Converse 1980). Scarre (2002) has recently suggested that the Midwestern Hopewell tradition of mound building imitates natural glacial mounds. In the Northeast, this imitation can be pushed back at least as far as the Early Woodland Meadowood culture. In the Southeast, there was mound building going on very early in the Late Archaic Period (Saunders and Allen 1994). What remains to be demonstrated is that the use of glacial kames or drumlins for ritual purposes, possibly including but not limited to burials, was ongoing in the Northeast prior to the advent of mound-building cultures.

Something draws people to Giant's Grave, but what we know is restricted by the problems mentioned earlier—we have no idea when these sites were occupied, other than

to place them broadly into the Late Archaic based on projectile point typology, and we have an incomplete picture of broad settlement patterns on the Allegheny Plateau. However, the potential for finding undisturbed features at two of the sites gives hope that we will be able to eventually date the sites more precisely. It is also important to understand that there are likely more sites that have not been identified. The abundance of prehistoric material littering the ground around the mound indicates that the few known sites are only the tip of the prehistoric iceberg.

As the case of Giant's Grave shows, collaboration among consulting companies is an important tool for the advancement of prehistoric research. Sharing of data and reports not only alerted SUNY Buffalo to the precise location of sites identified by Panamerican Consultants, but provided a better idea of the big picture. Comparable field methods allowed certain interpretations about prehistoric landuse around most of the Giant's Grave area, with the exception of the gravel quarry. This communication between different archaeological firms instills more confidence in our clients. While we may need to be in competition for business, the dissemination of archaeological knowledge should supercede competition once the project is complete. The need to use a range of methods is also demonstrated. A combination of shovel testing, surface collection, consulting with locals, and collaboration with other firms or schools working in the area leads to a better product in the end. And—as this case demonstrates—using a landscape approach can add to our understanding of what was going on in prehistory. The elevated terrain, well-drained soils, freshwater and close proximity of marshy lowlands all combined to form a unique environment with access to diverse and abundant resources. At a minimum, the location appears to have provided prehistoric populations

with an optimal location for short-term habitation for centuries. It is also intriguing to contemplate the possible ritual purposes that this feature could have fulfilled. Finally, in hindsight, and in keeping with recent New York State SHPO concepts, this entire area probably should have been considered an archaeological district.

Based upon what is known concerning prehistoric activity within the study area, Giant's Grave and its associated sites have the potential to expand our knowledge of the prehistory of the region. The greatest limiting factor, however, is the small sample size. Future research, emphasizing areas where several needs could be met at once—river, fresh water, and all the accompanying resources that make the Giant's Grave location unique—is absolutely necessary. It is difficult to imagine that this one knoll and nearby stream is the only such location within New York. Also problematical is chronology. In particular, it is not clear how much time elapsed between occupations of the different sites.

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