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BULLETIN OF THE MASSACHUSETTS ARCHAEOLOGICAL SOCIETY



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EDITOR'S NOTE

We are greatly saddened by the recent passing of two well-loved and long time supporters of the Massachusetts Archaeological Society, Dr. Barbara Luedtke of the University of Massachusetts in Boston, and Russell Gardner, also known as Great Moose, the Wampanoag historian. The next issue will be centered on them, and they will not be forgotten.

In this issue, Mary Lynne Rainey shows how developments in archaeological theory have affected the interpretation of ulus through time, and argues that what is now taken as common knowledge about them is eminently misleading. Joseph Waller's account of working with the Narragansetts to derive information from a disturbed cemetery indicates that valuable cultural data may be obtained in less than optimal conditions. Bernard Otto's report on the Margaret Angell site in Kingston, Massachusetts, includes photographs of his and Dennis Martin's artifacts recovered during the Massasoit Chapter excavations in the 1980s, as well as plans of a curious reddened area containing finds. Jic Davis describes some strange artifacts of unknown type and purpose. If anyone has knowledge of such artifacts elsewhere, the *Bulletin* would be very pleased to hear about it.

Very special thanks are due to Kathryn Fairbanks and Elizabeth Tharp for compiling an index covering the last seven years of the *Bulletin*. They have generously given their time to this detailed and tedious work for the benefit of the *Bulletin's* readers.

CONTRIBUTORS

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AN HISTORIC PERSPECTIVE ON CONTEMPORARY CLASSIFICATION SYSTEMS: THE CASE OF THE GROUND STONE ULU

Mary Lynne Rainey

Abstract

Throughout the New England region, ground stone, semilunar knives have been discovered in archaeological contexts and as minor elements of private and museum artifact collections. They are widely distributed yet relatively rare. Contemporary lithic classification systems recognize this tool form as the ulu, an Eskimo word meaning woman's knife. This paper traces the development of archaeological thought regarding ulu discoveries in several New England archaeological contexts from the late 19th century through the present. The effects of 19th and early 20th-century selective ethnographic analogy is demonstrated, as a precursor to historic trends and contemporary biases in the way these tools have been interpreted. A brief overview of ulu stylistic and functional variation evident in the Arctic and Subarctic territory further illustrates the interpretive limitations of this tool classification as applied today. It is suggested that the term "ulu" be abandoned for a straight morphological system of classification.

The cognitive path from an artifact or artifact assemblage to a hypothetical portrait of human behavior begins with the classification process. "What is this? ... how and when was it made? ... what was it used for?... who used it? ... and why was it left behind?" Classification fulfills our primary need to define objects. At the simplest level is material type: clay, stone, bone, wood,

metal, shell, and so on. On this point most of us could reach agreement. Beyond material type, attribute analysis and definition of form and function target more enigmatic questions. The elected terminology can invoke a specific form - like projectile point; a manufacturing technique - biface or uniface for example; a single function - as in net sinker or drill; or multiple functions - like scrapers and knives. Typological classifications broaden the scope of interpretation by linking artifacts with a place in time, a cultural group, a settlement system, or a geographical region. When an artifact type has behavioral correlates based on ethnographic analogy, the form-function relationship is further enhanced with visual imagery - a tangible reality justifies our concept of the distant past.

Techniques of classifying artifacts have evolved over time in conjunction with archaeological method and theory. Clearly major advances have been made in recent years. Nevertheless, our theories of form, function, and behavior have been channeled and at times limited by the course of published archaeological research. Although much has changed, vestiges of archaic nomenclature, ideas, and some undying arguments have survived. A consideration of ground stone semilunar knives may illustrate this point (Figure 1).

Development of Functional Analogies

Ground stone semilunar knives are widely distributed throughout New England but may be considered relatively rare when compared with frequencies of other tool types. During the 19th century, it was recognized that morphologically



Figure 1. Braintree slate semilunar knife from the Walker Point site (RI-653), upper Narragansett Bay, Rhode Island (Rainey and Ritchie 1996)(Actual size).

identical tools called "ulus" or "ulos" were commonly used by Eskimo groups and other Indians of the Arctic and Subarctic regions of North America. Across this vast territory, the term ulu was also used in reference to a broad range of edge tools made from a variety of raw materials in many different shapes and sizes. The United States National Museum in Washington, D.C. had so many ulus in their possession, that in 1892, a monograph was dedicated to them (Mason 1892). At least 23 individuals who conducted various types of explorative research into the Arctic or Subarctic contributed to the collection. Mason concluded that ulu form and material type could be linked with specific regions and culture groups. For example, ulus made with handles of antler, musk-ox horn, walrus ivory or wood would be expected in regions where these resources were abundant (Mason 1892:413). Examples made entirely out of native material and workmanship were generally rare and old, and had blades of polished slate or chipped stone; handles of wood, bone, ivory or antler, glue of native manufacture, or lashing of spruce root, rawhide, or sinew (Mason 1892:414).

The nearly 75 plates included in Mason's monograph demonstrate an extensive degree of stylistic variation for ulus from region to region. Materials, blade shapes, handle forms, and decorative elements reveal broad technological and artistic divergence. Many are by no means semilunar. Rectangular, fan-shaped, and cleaver shaped are common. Many stone examples from Northern Alaska are simply chipped or crudely pecked tools that compare well with semilunar knife preforms found in southern New England (Figure 2, #2). A particularly unique example is a leaf-shaped biface made of hornstone (Figure 2, #1). Fish scales were used to fill in and tighten the weave of a willow root handle. In addition to these, there are several ground and polished slate varieties commonly recognized in New England stone tool assemblages. Mason's work demonstrates the extent of other technological parallels which exist between Northeastern chipped and ground stone tool forms, and the Eskimo "ulu." The chipped stone ulus shown in Figure 2, for example, compare well with large flake knives and other bifacial edge tools found at the Walker Point Site in Rhode Island (RI-653; Rainey and Ritchie 1996), and at many sites throughout the New England region (Figure 3).

Despite Mason's thorough coverage of the topic, in New England attention was focused on a narrow selection of ulus used by Eskimo women to clean and prepare seal skins. As a result, the analogous ground stone semilunar knives found throughout New England became known as ulus. Furthermore, their discovery at sites within the region has often carried an inferred gender association and an assumed maritime or riverine cultural adaptation.

Detailed descriptions of regionally collected ground stone semilunar knives first appeared in the late 19th century. Charles Abbott, a 'relic-hunter' from Trenton, New Jersey published *Primitive*

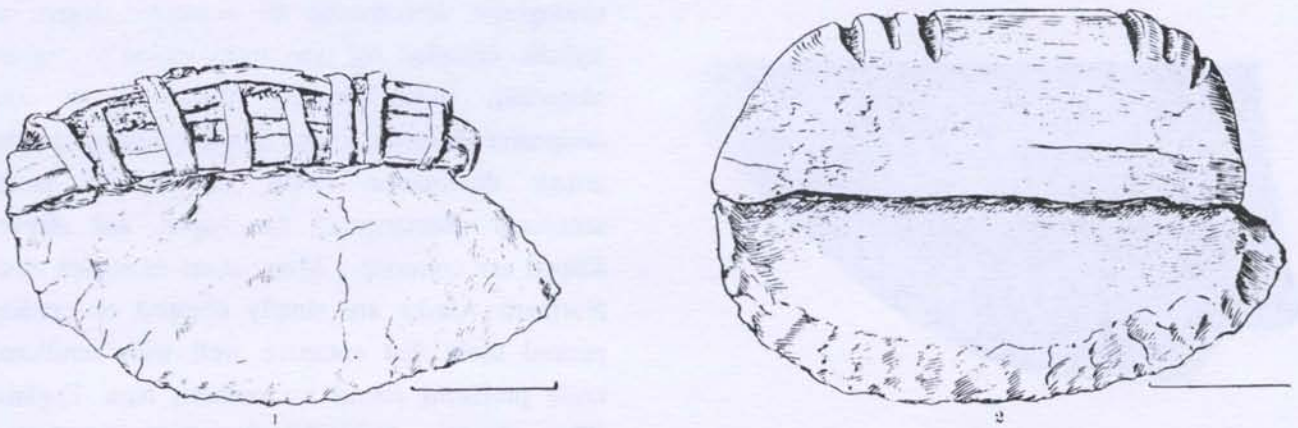


Figure 2. Ulus from Northern Alaska (Mason 1892: Plate LXI). #1 Hornstone ulu; with osier handle; length 3 3/4 in (9.5 cm). #2 Chert or flint ulu with wooden handle; length 4 in (10 cm). (Reproduced with permission of the Smithsonian Institution.)

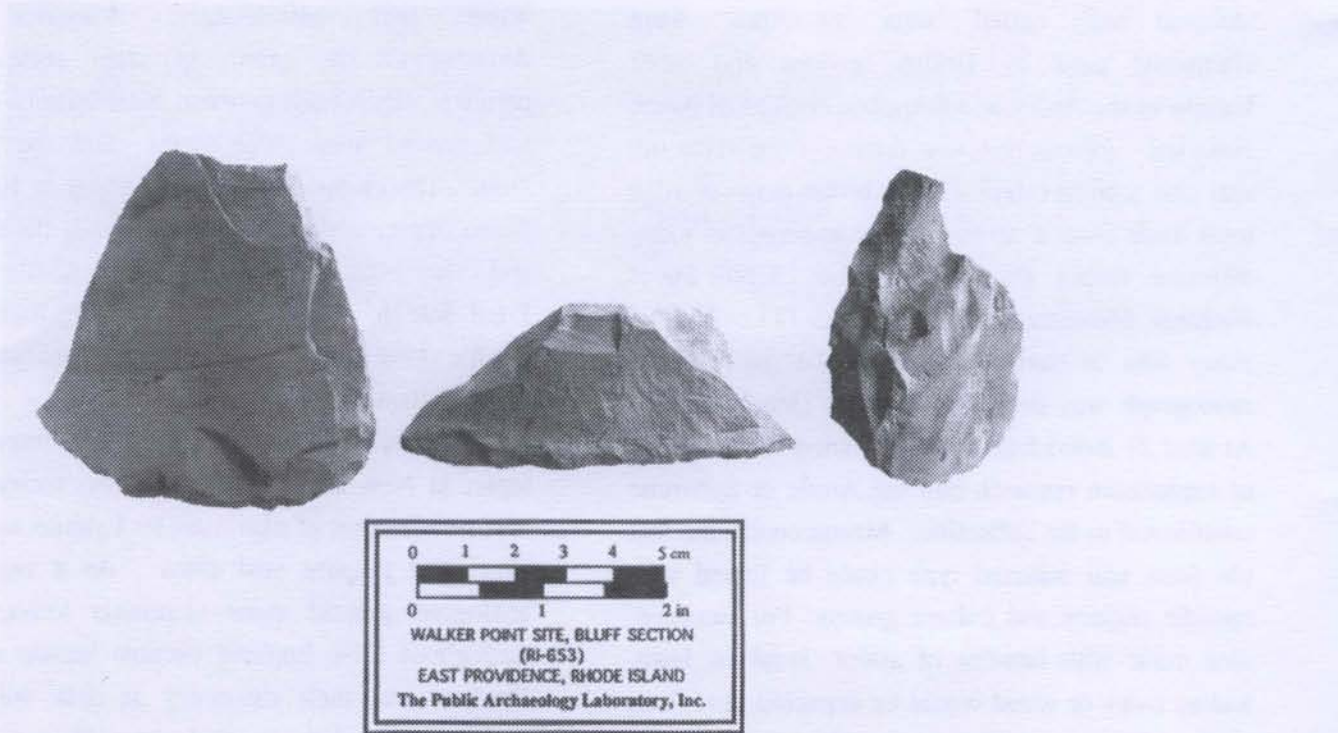


Figure 3. Selection of argillite bifacial edge tools from the Walker Point site (RI-653), upper Narragansett Bay, Rhode Island (Rainey and Ritchie 1996).

Industry in 1881, one of the first descriptive classification systems for regional Native American tool assemblages. He designated the term, "Semilunar Slate Knife" to a group of thin, broad blades, averaging six inches in length with semilunar cutting edges, and, in his experience, often found on "former Indian villages in New Jersey." Most had a ridge along the back, presumably used as a handle or grip. Other styles were incised, decorated, or drilled. Abbott interpreted them as domestic, household items used for flesh cutting; they did not seem conducive for carrying around (Abbott 1881:63-74). To further justify the domestic idea, he used an 1879 report of similar knives used by Eskimo women of Cumberland Sound, citing, "It is probable that the pattern was derived from the Eskimo with whom the northern Algonkins were frequently in contact" (Kumlein 1879, cited in Abbott 1881). In the Cumberland Sound region, these knives were used for the removal of blubber, skin and meat cutting, and as scissors in sewing garments.

When Peabody Museum director, Charles Willoughby published *Antiquities of the New England Indians*, over 50 years later, little had changed in terms of research directions; the interpretation of artifact function remained central although a cultural chronology was beginning to emerge. Willoughby was strongly influenced by Howley's 1915 study of the Beothuck, and the well-known Warren Moorehead report on the archaeology of Maine (Moorehead 1922). By this time, stone adzes, semilunar knives, and slate projectile points were thought to be markers of the pre-Algonquians, a people with no knowledge of agriculture, pottery-making, grooved axes, or tobacco (Willoughby 1935:70-75). According to Willoughby, "These cutting implements attained a high development in New England. Nowhere else do they have so great a range in size" (Willoughby 1935:74). Two styles were recognized: perforated

for hafting, or monolithic, with a handle. Drawing on general analogy, he stated that the tools were commonly referred to in the north as fish knives, used by women to split salmon and other fish in preparation for drying.

Chronologies and Ecological Modeling

Soon after Willoughby's publication, avocational archaeology took hold throughout the New England region and the numbers of excavated sites and artifact assemblages grew rapidly. Beginning in the 1930's, society bulletins and meetings fueled debates on the functional classification and relative dating of artifacts. The Massachusetts, Rhode Island, and Connecticut Archaeological Societies were particularly active in the post war years through the 1960's. From 1963 through 1970, the Massachusetts Archaeological Society (MAS) published at least nine site reports in which semilunar knives are discussed. William Fowler, MAS Bulletin editor and author, considered the tools an Early Archaic Period manifestation along with bifurcate base, Neville, and Stark projectile points (Fowler 1963). At the Titicut site in Bridgewater, Fowler identified what he suspected to be the forerunner to the ulu, possibly dating to the PaleoIndian Period. The artifact was described as a 1/2" thick, straight-back knife, made of a semi-hard stone that had been pecked into a semilunar shape. With only the blade edge ground and polished, it was perceived as primitive compared to the stylized polished variety, and therefore an older style (Fowler 1964:59) (Figure 4).

Perceptions of a cultural development sequence shifted dramatically when William Ritchie first published his New York data in 1965 (Ritchie 1969, 2nd edition). Armed with radiocarbon dates, he proposed a series of new Late Archaic cultural traditions- the Lamoka, Laurentian, and Frontenac Island phases. The ulu was included as a diagnostic

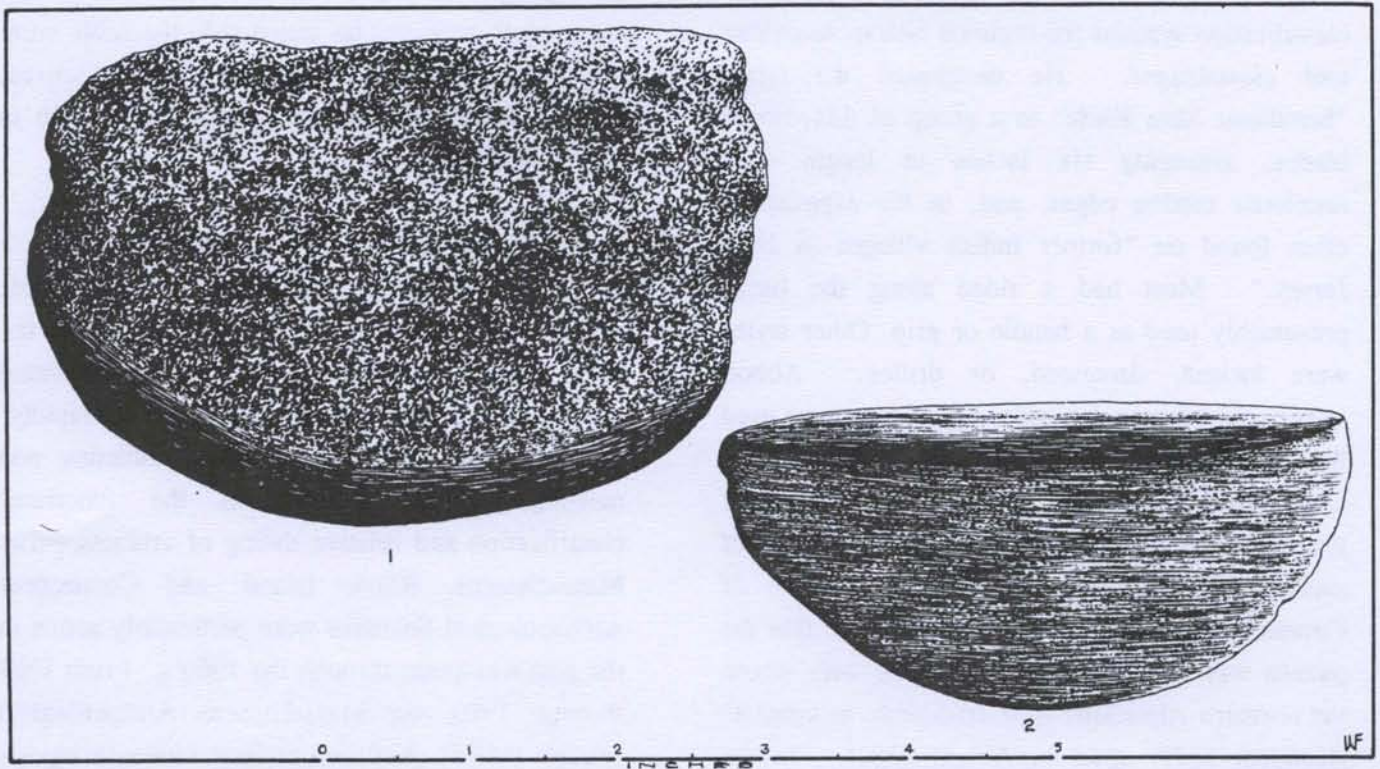


Figure 4. Ulu illustrations by William Fowler, former *MAS Bulletin* editor, author (Fowler 1964:59).

trait of the Laurentian Tradition (ca. 6000-4000 B.P.), an ecological adaptation to the interior, river systems of the Great Lakes and northern forest regions of eastern Canada and New England (Ritchie 1969). Fowler responded by publishing a synthesis of nine sites that provided solid evidence of an Early Archaic Period in the northeast (Fowler 1968). Though lacking radiocarbon dates, he maintained that at least eleven tool forms including the ulu were diagnostic traits of an Early Archaic Period (Fowler 1968:54).

Within two years, Fowler turned his attention again to chipped stone ulus, posing for the first time a manufacturing sequence which considered chipped ulus as preforms in a manufacturing progression (Fowler 1970:30). Abandoning the PaleoIndian idea, Fowler and others hinted at the possibility that chipped semilunar blades may have been finished,

functional tools. The next decade saw a rapid increase in the numbers of documented sites, radiocarbon-dated material, and published data. The relative chronology of chipped stone tools was becoming less of a contentious issue and experimental archaeology virtually replaced the use of ethnographic analogy.

In 1976, Dena Dincauze's analysis of the Neville site in New Hampshire established a Middle Archaic technological sequence spanning the period, 8,000 to 6,000 B.P. (Dincauze 1976). She recognized the ulu as one of several ground stone tool forms typically found in association with Middle Archaic Period Neville and Stark points. In 1977, the *MAS Bulletin* featured an article on a slate quarry in Milton Massachusetts, where ulu manufacturing took place (Bowman and Zeoli 1977)(Figure 5). Details on lithic procurement methods, blank and preform preparation, and

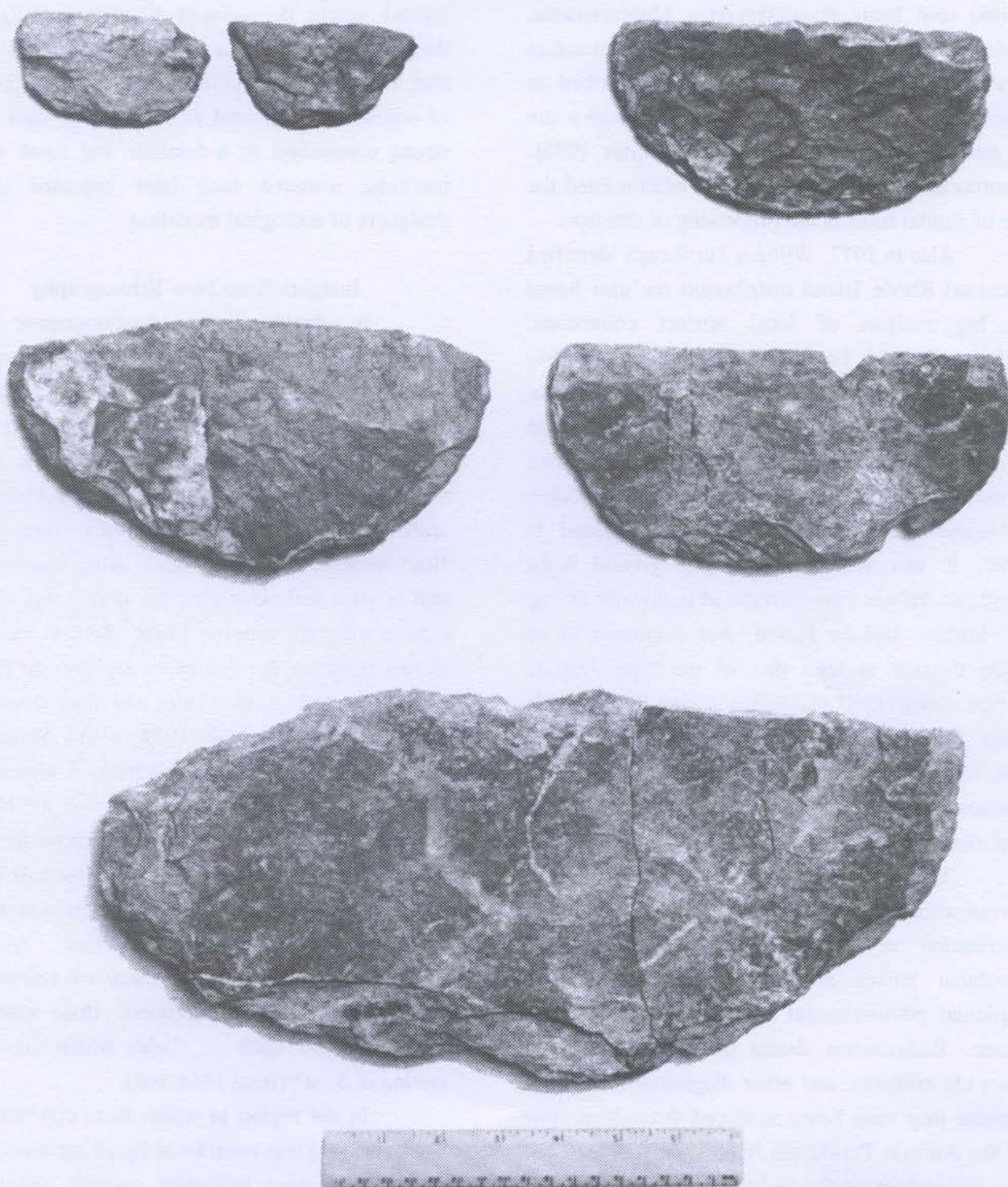


Figure 5. Brantree slate semilunar knives from Milton, Massachusetts (Bowman and Zeoli 1977: 44).

geologic characteristics of the source material were provided by the authors. They concurred with Dincauze regarding the ulu as a Middle Archaic Period tool form in southeastern Massachusetts, noting an occasional association with the Laurentian Tradition. A second article that year described an assemblage of 183 crudely-chipped ulus from a site in nearby Canton, Massachusetts (Martin 1977). Incorporating an African analogy, Martin cited the use of similar tools in the processing of antelope.

Also in 1977, William Turnbaugh identified a coastal Rhode Island distribution for ulus based on his analysis of local artifact collections. Refuting Ritchie, Turnbaugh surmised that the ulu developed as a Maritime adaptation in the northeast during the Early Archaic Period, and that these people later turned inward during the Late Archaic Period (Turnbaugh 1977). By the time Dean Snow published *The Archaeology of New England* in 1980, it was well accepted that ground stone semilunar knives were introduced regionally during the Middle Archaic Period, and continued to be made through at least part of the Late Archaic Period (Snow 1980:172-233). Citing Turnbaugh's study, Snow confirmed with caution the suspected link between ulus and maritime resources of the northeast, while reiterating an Eskimo analogy with seal skin processing.

The past twenty years of archaeological investigations in New England have shown that the distribution of sites containing ground stone semilunar knives does not correspond to one particular environmental zone or natural resource biome. Radiocarbon dating of organic materials from ulu contexts, and other diagnostic techniques indicate they were being produced throughout most of the Archaic Period (ca 8000 - 3000 B.P.), but that regional variability exists in terms of temporal and cultural associations. To date, there has been no clear evidence of a gender association or of a relationship between any one particular style and a

set of specific human behaviors. History has shown that use of analogy in this case was driven by the need to justify functional classifications, and was logical within the context of diffusion/migration theories. It was also captivating imagery for a 19th and 20th century "civilized" audience [community of scientists] dominated at the time by men. The strong connection of a familiar tool form with a maritime resource base later appealed to the designers of ecological modeling.

Insights from New Ethnography

In a brief overview of ethnographic source materials, the limitations of selective analogy quickly become clear. During the last quarter of the nineteenth century, Franz Boas was among the first to engage in ethnographic fieldwork among Central Eskimo groups, detailing human interaction with the harsh northern environment (Boas 1964). Boas witnessed Eskimo women using ulus to clean and prepare seal skins after the animal was skinned with a different type of blade. Several examples shown illustrate the degree of stylistic divergence between a modern, metal ulu, and older stone types with bone handles (Boas 1964: 110). Skins were spread over a piece of whalebone, a board, or a stone, and the ulu was used to scrape the blubber off into a tub. It was also used to remove the inner membrane of the skin in cases when the hair was to remain intact. Another type of scraper was used to clean the seal skins after they dried. Although there seems to be a wide range of knives with specific uses in the entire process, Boas states that the ulu is the knife ... "with which almost all cutting is done" (Boas 1964:109).

In the region in which Boas conducted his work, the seal was considered by all accounts, to be one of the most important animals for human survival, although deer, musk ox, and bear were also hunted in the summer, and other types of fish provided food year around. The by-products of

harvested seals furnished skins for tent making, clothing, kayak covers, and boots, as well as food and fuel. The cultural significance of the seal is exemplified throughout many of the Alaskan myths and legends documented by Boas, as is an association between women and ulu knives.

Based on essays from the Harriman expedition of 1899, Grinnell (1995:161) also made the observation that all cutting was done with a crescent-shaped knife of iron or stone, by women. In this case however, from the Yakutat Bay Area, the preliminary skin removal was also done with an ulu, in addition to blubber and/or hair removal and later hide cleaning. At the time, Grinnell focused on the importance of the oil obtained from seals, remarking that this is the main impetus for killing the animals.

In the late 1940's, Frederica de Laguna entered into an archaeological project within the Yakutat Bay Area of Alaska, the region formerly studied by Boas. The combined archaeological and ethnological effort, supported by the Smithsonian Institute, was intended to address issues of cultural exchange between various Alaskan Indian groups (De Laguna et al. 1964). This work provides a number of important details about ulu use from a different perspective. She observed the ulu in use among older Yakutat women for 'flensing' (stripping) seals, and as scrapers for cleaning sealskins, only if the blades were dull. Clam and mussel shells were essential ulu forms among many Alaskan groups, functioning as knives or scrapers for cutting meat and fish, for scraping bark and skins, for de-hairing, for shaving off the inner bark of the hemlock, and for splitting spruce roots for basket-making.

De Laguna provided a complete inventory of archaeologically obtained ulus from the region, along with radiocarbon dates and trends in distribution patterns. In particular, she felt that in sub-regions where a ground slate industry was

lacking, chipped blades were presumably functioning in the same way as the slate ulu (De Laguna et al. 1964: 101). Shell was a more popular blade form along the central and northern Northwest Coast according to the archaeological evidence. Working edges were kept dull for cleaning, and sharp for fleshing.

A more recent study of modern Inuit women traditions provides yet another perspective, drawn from a combination of archaeological evidence, oral history, and ethnohistoric or ethnographic accounts pertaining to the Copper and Caribou Inuit (Hall et al. 1994). The Copper Inuit occupy the north central region of the Canadian mainland, and the Caribou Inuit occupy the western region of the Hudson Bay. Hall's book was produced as a result of extensive research into the dress and adornment traditions of these Inuit cultures in support of an exhibition at the Canadian Museum of Civilization. Here the technological skill and knowledge needed to produce clothing in these harsh northern environments is brought to light. Well-made clothing was essential to survival not only as a source of warmth, but for dryness, mobility, the success of the hunter, and for general health. Hall confirms the idea that men typically made the tools which women used to prepare skins. However, she does point out that men also participated in hide preparation when necessary.

Regarding caribou, age and sex, and season of death were all factors considered in determining how each particular animal skin would be used. Skins from late summer or early fall were preferred for clothing, before the hair became too thick, heavy, and brittle. These were useful as tent covers or for bedding. In the spring and early summer the caribou molt and their skins are full of holes from parasites. Other factors which affected the type of skin desired included personal taste, the occupation and age of the wearer, and the season of year in which the garment is worn. As part of the skin

processing, a blunt ulu was used to scrape off connective tissues and bits of fat. In later stages (after drying, etc.), a sharp ulu was used to rescrrape the hide, sometimes two or three times for softening. (Hall 1994 et al.:17-18)(Figure 6).

In a contemporary interview, an Inuit woman explains her skin-preparation techniques:

I use a scraper to soften and stretch the skin at the same time. Then I use another scraper to take off the inner surface of the skin. When the scraper gets dull, I sharpen it with another ulu and use it again. If the skin is too hard, I chew on it to try to make it softer. At home I have three different kinds of ulus to use for different things. The first one I have is to scrape the caribou skin. Another is to cut the skin. I don't use it for anything else because it will get dull and I don't let anyone else touch it. A larger ulu is to cut up the caribou meat or to make dry meat and eat with. (Emily Nipishna Alerk, in Hall et al. 1994:18)

For the most part, seal skin processing using an ulu involved the same basic stages as caribou skin processing described earlier. Shaving of seal hair, if necessary, also involved the ulu. It is clear that the preparation of skins was extremely time consuming (up to 9 hours for one skin), and that the construction of each article of clothing required many well-prepared skins (Figure 6). For the Copper and Caribou Inuit, clothing as a reflection of skill, creativity, strength, and tradition involved women and their specialized tool kit. These ideas are further supported by regional archaeological assemblages containing the same tool forms.

Conclusions

Ethnographic research has shown that ulus were made throughout the Arctic and SubArctic regions in a vast array of styles, were used for a multitude of domestic tasks not only by women, and held spiritual significance in Eskimo



Figure 6. Kila Arnatuyuk photographed in 1916 by Rudolph Anderson (Hall et al. 1994: Figure 18). (Reproduced with permission of the Canadian Museum of Civilization, Hull, Quebec, Canada).

mythology. They were found throughout coastal maritime and interior settings, and bear no specialized relationship to a particular food source. The chipped and ground stone semilunar knives found in New England have been isolated not because they are unique functionally, but rather for their stylized appearance.

Rather than evaluating ground stone semilunar knives as a group in which technological variation or seriation of style is sought, it may be beneficial to abandon the term "ulu" altogether. By continuing to use the term, a tool form is isolated that is different only in stylistic treatment from many other edge tools for reasons that are unknown. The reasons may have been spiritual, social, or artistic, but surely were not just functional. In addition to isolating the tool form, the term "ulu" now suggests a maritime resource use such as fish processing, or a specialized women's function, biases inherent in the name because of the history of its interpretation. Reconsideration of the appropriateness of artifact-specific ethnographic analogy may offer an opportunity to expand our concepts of form, function, and human behavior, in the context of New England archaeological studies. The term "ulu" should be dropped in favor of a classification system which focuses on basic morphological variations of all excurvate edge tools in an

assemblage (scrapers, bifaces, flake knives, etc.). In conjunction with use-wear analyses, interpretations of the function and significance of groundstone semilunar knives may then outgrow the stigma of antiquated analogies.

Acknowledgments

Permission to reproduce Plate LXI from Otis Mason's "The Ulu, or Woman's Knife, of the Eskimo," *Annual Report of the United States National Museum*, 1890 (Figure 2 in this article) was provided by the Smithsonian Institute, Archives Division. Permission to reproduce Plate 18 from the 1994 book, *Sanatujut: Pride in Women's Work: Copper and Caribou Inuit Clothing Traditions* by Judy Hall, Jill Oakes, and Sally Quimmiu'naaq Webster (Figure 6 in this article) was provided by the Canadian Museum of Civilization, Hull, Quebec, Canada. Special thanks to Dr. Shirley Blancke for attending PAL's 1999 NEAA symposium, and for encouraging me to submit this paper to the *MAS Bulletin*.

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ARCHAEOLOGISTS, NARRAGANSETTS, AND CEMETERIES: INVESTIGATIONS AT AN UNMARKED NARRAGANSETT CEMETERY IN CHARLESTOWN, RHODE ISLAND

Joseph N. Waller, Jr.

Abstract

Human remains inadvertently unearthed in the Town of Charlestown, Rhode Island have resulted in the discovery of a Narragansett Indian cemetery dating to the 18th century Reservation Period. Archaeological recovery efforts were coordinated by representatives of the Narragansett Indian Tribe. The project provided a unique insight into eighteenth century Narragansett Indian burial patterns. Following archaeological investigations, it became surprisingly evident that in spite of a lack of systematic archaeological excavation, archaeological themes of interest, although limited in scope, can be generated through our involvement in projects under Native American direction.

Introduction

In the fall of 1999, human remains were inadvertently unearthed at the construction site of a residential subdivision in the town of Charlestown, Rhode Island. Upon careful examination, approximately twelve pairs of rough fieldstone head- and foot-stone burial markers were identified in the construction site, some having been disturbed by related stripping activities (Figure 1). Although most of the markers within the cemetery were unadorned, one was inscribed with a date of 1746. The cemetery's situation within the western periphery of the eighteenth century Narragansett Indian Reservation in Charlestown made it likely that the interred were Narragansett Indians. Consequently, representatives of the Narragansett Indian Tribe were contacted,

notified of the findings, consulted, and subsequently directed archaeological recovery efforts.

Contemporary practice

The policy of the Narragansett Indian tribe regarding Native American burials in Rhode Island is extremely clear. They prohibit, in no uncertain terms, the violation (and hence desecration) of any known and/or perceived burial features. The Narragansett Indian Tribal Historic Preservation Officer explains that tribal custom is not to have their ancestors exhumed for purposes of historical or archaeological research and that archaeology cannot inform him of anything that he does not already know (Brown 1999: personal communication). Despite his position, unanticipated Native burials that require archaeological examination are occasionally unearthed in the state, most commonly during residential or commercial construction.

Contemporary practice in the State of Rhode Island regarding the unanticipated recovery of human remains involves the strictest sensitivity to Native American concerns. Excavation/recovery of Native American human remains within the purview of local town and state ordinances and outside the review of Federal compliance projects is commonly structured by members of the Narragansett Indian tribe. The resultant archaeological projects involve the recovery of human remains coordinated by Narragansett tribal representatives and implemented by professional archaeologists. Procedures for the recovery of disturbed human remains typically involves the screening of disturbed backdirt piles to recover any and all remains. Commonly, the remains are considered for relative age and gender. All skeletal

materials are maintained by the tribe and remitted to the tribe on a daily basis until plans for their reinterment and sanctification are met.

The coordination of archaeological projects by tribal members may, as one might expect, result in archaeological investigations that are oftentimes less than ideally systematic. The question remains, however, should professional archaeologists undertake such projects if normally acceptable methodological approaches to fieldwork are not im-

plemented, and can we as professionals learn anything regarding Native American customs from such investigations? Following archaeological investigations at the unmarked cemetery in Charlestown, it became evident that archaeological themes of interest could still be gleaned from such investigations in spite of the lack of a systematic archaeological methodological approach.

Approaching the Site: Narragansett Indian Tribal Context

Rhode Island contains archaeological evidence for Native American occupation beginning approximately 12,000 years ago and continuing to the present. With the formation of the tidal estuaries beginning ca. 4,000 years ago, Native American occupation in the state became focused along the coastal margins of southern Rhode Island where there is a reliable subsistence base. Seventeenth century settlements continued to be focused in traditional tribal territories along the coast that developed prior to and



Figure 1. Unmarked 18th century Narragansett Indian Cemetery, Charlestown, Rhode Island. Fieldstone burial markers disturbed by stripping.

during the Late Woodland Period. Indigenous materials, such as pottery vessels and lithic artifacts, continued to be manufactured. Subsistence activities included horticulture supplemented by fishing, hunting, and the gathering of plants and nuts. Eventually the subsistence economy of these individuals changed as a result of the increasing influence and partial adaptations of the European commodity-based economic system.

Throughout the seventeenth century, the Narragansett began selling off their land as they became increasingly reliant upon goods of European origin. A desire for European commodities led to the establishment of a Dutch and Indian trading post north of Ninigret Pond in present-day Charlestown. A second fort is reputedly located in the vicinity of the unmarked cemetery near Shamunkanuc Hill also in Charlestown (Tucker 1877).

In 1660 portions of Charlestown, Richmond, Westerly, and Hopkinton were included in the purchase of Misquimicut (RIHPC 1981). These lands

were purchased from Soso, a defected Pequot who was awarded the land by the Narragansett sachems Miantonomi and Canonicus for serving the Narragansett during the Pequot War of 1636. Unclear ownership rights to the land led to multiple land claims by the Rhode Island, Massachusetts, and Connecticut governments during the early to mid seventeenth century. The effects of King Phillip's War on the Misquamicut lands are unclear, but it appears as if the Niantic sachem Ninigret was allotted a tract of land in Charlestown for remaining neutral during the war. This tract provided a nominal sanctuary for surviving Niantic and Narragansett Indians following the cessation of hostilities associated with the war (RIHPC 1981).

Following King Phillip's War, the surviving Native population in "Narragansett Country" consisted of an amalgam of Narragansett, Pequot, and Wampanoag refugees with surviving Niantic tribal members (Campbell and LaFantasie 1978:70). Close ancestral ties between the Niantics and the surviving Narragansetts led sachem Ninigret to adopt the Narragansett name and declare himself sachem of the Narragansetts. In 1709 the Rhode Island government established a protective act establishing an approximate sixty-four square mile tract of land in Charlestown as Narragansett Reservation land (Herndon and Sekatau 1997). Throughout the eighteenth century, reservation lands slowly diminished as the tribal sachems sold off lands to pay debts and receive monies (Campbell and LaFantasie 1978; Sekatau n.d.). The continued loss of tribal lands resulted in the passage of the Non-Intercourse Act in 1790 which attempted to curtail the loss of tribal lands by prohibiting State and local authorities from acquiring Indian lands as payment for debts (Sekatau 1994). However, it did little to prevent the continued loss of tribal lands.

The Narragansett continued to concern themselves with land issues throughout the late

eighteenth and early nineteenth centuries. Large numbers of tribal members moved from the area during two separate emigrations reducing the tribe's number (Simmons and Simmons 1982). By 1879 the Tribal Council agreed to quitclaim to the state all common, tribal, or vacant lands (Simmons 1978) reducing tribal lands to 922 acres in central Charlestown. The continued reduction of tribal numbers and lands resulted in the abolition of all tribal authority in 1880 by the Rhode Island state legislature (Simmons 1978). The Narragansett Indian Tribe was re-incorporated shortly after the Indian Reorganization Act of 1934 (RIHPC 1981). In 1975 tribal members sued the state government claiming that the state had violated the Federal Non-Intercourse Act of 1790. The case was settled out of court resulting in the return of 1,800 acres of tribal land (Robinson 1994). In 1983 the tribe was awarded Federal recognition of tribal status which is maintained today.

Archaeological Investigations at an Unmarked Narragansett Indian Cemetery

This recently rediscovered cemetery in Charlestown was located on the western edge of the eighteenth century Narragansett Indian tribal reservation. Burial markers within the cemetery consisted of crude fieldstones. Although most of the markers within the cemetery were unmarked, two samples were inscribed, one with the initials *EM* and a date of 1746 (Figure 2) and a second with a *92* (Figure 3). Continued attrition of tribal lands over the next 200 years, eventually resulted in the removal of the cemetery from Narragansett hands. By the early to mid-nineteenth century the cemetery was abandoned, overgrown, and forgotten as neither the Kenyon (1878) map of the tribal reservation nor the Everts and Richards (1895) map of the town of Charlestown make any reference to it.



Figure 2. Fieldstone burial marker inscribed $\bar{I}M$ and with a date of 1746.



Figure 3. Fieldstone burial marker inscribed 92.

Archaeological Recovery of Human Remains

The scope of the archaeological investigations within the cemetery involved the archaeological recovery of disturbed human remains and identification and mapping of all visible burial markers. Fieldwork for the project commenced with a walkover inspection of the cemetery. It was clear prior to archaeological recovery efforts that multiple burials had been impacted by site preparation activities from three discontinuous areas within the cemetery (Figure 4). Fragmentary and complete human skeletal elements were exposed across the surface and were recovered from backfill in all three areas. Recovered elements include vertebra, a scapula, ribs, phalanges, humeri, fibulae, tibias, femurs, and a mandible indicating that a minimum of 4 individuals (3 adults and 1 sub-adult) were impacted. The depth of materials from exposed grave shafts indicate that the burials did not extend more than a meter (60-90 cm) below ground surface.

Once all of the disturbed backdirt piles were screened and the human remains were recovered, visible headstone and footstone markers were mapped onto a master site plan using an optical transit. Burial markers were identified using a combination of a walkover investigation and systematic probing using a steel probe. A total of 95 burial markers were identified during investigations. Spatially, burial markers were clustered in the northeastern and southwestern limits of the cemetery and arranged in roughly parallel lines running northwest to southeast (see Figure 4).

Discussion

The current state of Native American mortuary knowledge in Rhode Island is limited to few investigations by local avocational societies, professional archaeologists, and inadvertent discoveries of Native American Woodland and Contact Period burials. These contexts include isolated burials as well as larger Indian cemetery

complexes. The collective database of sites to date indicates that during the seventeenth century Narragansett Indians typically oriented their burials northeast to southwest (Robinson 1990; Robinson et al. 1985; Simmons 1970). This pattern was well established at the Contact Period sites of RI 1000 and West Ferry in the towns of North Kingstown and Jamestown respectively. The individuals interred in such graves were typically buried on their sides in a tightly flexed position with the head facing the southwest. The Narragansetts oriented their dead to face the direction upon which their souls departed and would travel. This is consistent with seventeenth century Narragansett religion and mortuary practices recorded by Roger Williams and reaffirmed by John Brown, Narragansett Indian Historic Preservation Officer (1999 personal communication). Williams notes in 1643 that the Narragansetts believed "to the southwest is the Court of their *great God Cautantouwit: At the South-west* are their *Fore-fathers* soules: *to the South-west* they goe themselves when they dye [*italics in original*]" (Williams 1973 [1636]: 86).

However, beginning with initial contact with Europeans, early colonial evangelists and Puritan missionaries attempted to convert the indigenous peoples to Christianity despite tribal protests. In a letter to the General Court of Massachusetts Bay on October 5, 1654, Roger Williams writes "At my last departure for Engl. [England] I was importuned by the Nariganset Sachims and especially by Nenekunat [Ninigret], to present their petition to the high Sachims of England that they might not be forced from their Religion" (LaFantasie 1988: 409). Despite the obvious concerns on behalf of the seventeenth century Narragansetts on the loss of their religion, it appears that elements of it remained intact into the eighteenth century.

Examination of the exposed burial shafts indicates that the individuals buried within this

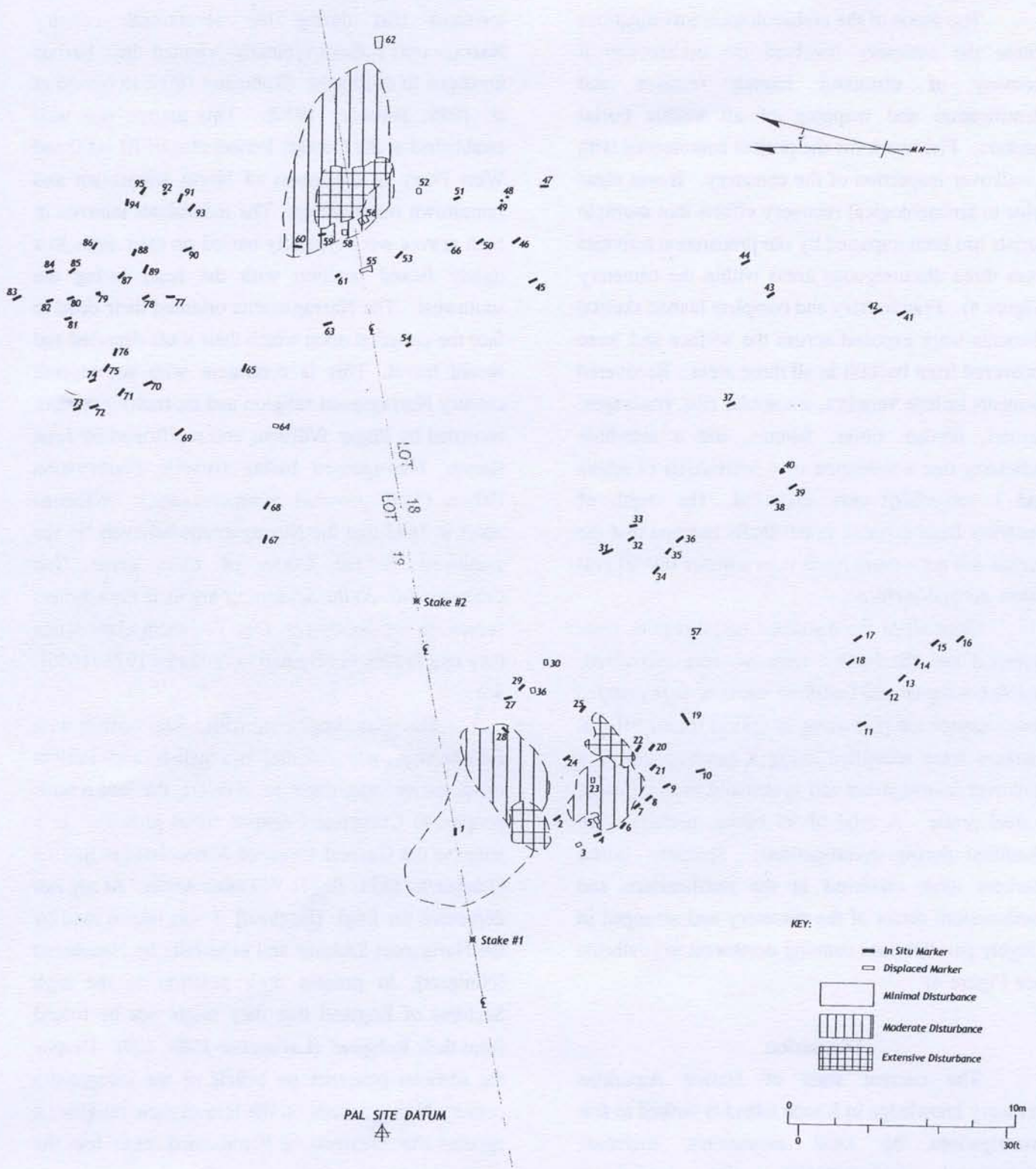


Figure 4. Cemetery map of 18th century Narragansett Indian burial ground at Charlestown, Rhode Island.

cemetery represent a fusion of colonial (Euroamerican) and traditional Narragansett Indian tribal mortuary practices. Colonial aspects adopted into Narragansett mortuary ritual involved the use of markers to identify grave shafts. The placement of rough fieldstones at both the head and foot of a grave shaft was distinctive of colonial death ritual. Additionally, two of the burial markers were inscribed with initials, adapted from the colonial practice. However, inconsistent with Christian burials, the alignment of burial markers in this cemetery was from southwest to northeast. Christian interments are customarily oriented from east to west with feet to the east. The recovery of human remains from disturbed grave shafts suggest that the crania and upper torsos of these individuals were located to the southwestern side of the grave shaft while all the post-cranial extremities were located within the northeastern end of the grave shafts. Consequently, the orientation of the burial markers in the cemetery, in conjunction with the apparent alignment of the deceased in the grave shafts, appears to represent a decidedly Narragansett pattern.

At present, it is difficult to determine if the individuals interred at the cemetery were buried in an extended (supine) position or in a more traditional flexed position. However, the recovery of wrought nails with associated wood entrapped in the encrusted iron matrix indicates that these eighteenth century Narragansetts were buried in wooden coffins, and therefore, likely in an extended rather than a flexed position.

Conclusions

Based upon archaeological recovery efforts at the unmarked cemetery, it was possible to establish that the unmarked cemetery covers an approximately 2 acre area. The recovery efforts led to the identification of at least 4 individuals who were buried in an enculturated mix of traditional Narragansett mortuary practices with seventeenth and eighteenth century colonial burial customs. More importantly the project opened up a dialog with the Narragansett who offered information pertaining to specific tribal histories and mortuary customs. Although the investigations were not conducted using accepted archaeological testing strategies, it became apparent that through continued cooperative efforts between the Narragansett and archaeologists, relations will continue to be fostered and archaeological themes of interest can be investigated.

Acknowledgments

I would like to thank James C. Garman for giving me the opportunity to work on the site, Dana Richardi for drafting the cemetery map, and Alan Leveillee for providing the project photos and reading an earlier draft of this paper. I would also like to thank Mary Lynne Rainey for assistance in the development of the tribal historic context. Special thanks go to representatives of the Narragansett Indian Tribal Historic Preservation Office (NITHPO) who oversaw the investigations and provided us with unique insights into tribal lore and custom. Finally, I wish to thank the PAL field crew who conducted themselves in an exemplary fashion during fieldwork.

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THE MARGARET ANGELL SITE, KINGSTON, MASSACHUSETTS

Bernard A. Otto

The Margaret Angell site (19-TL-586) in Kingston, Massachusetts, was excavated site by members of the Massasoit chapter of the Massachusetts Archaeological Society between 1982 and 1984.

The site area of approximately 22 acres is located east of the Angell house proper. It was formerly owned by the Captain Fred Baily family and before that by the Brewsters. The site was heavily farmed for years and after farming activity ceased a lot of the topsoil was removed for landscaping use in the Kingston area, the loam hauled off by drags pulled by oxen. (I was told this by an elderly Brewster Road resident who knew the area well.)

An active spring was dug out to form a watering hole for cattle in farming days. This spring was the water source for prehistoric occupants. Except for some open meadow near and above the spring-pond the property is reverting back to woodland with growth of cedar, pine, oak, and brush.

Mrs. Angell was a geology teacher at the Plymouth Carver high school, and knowing her quite well I got permission for our chapter to conduct excavation on her property.

One day in the spring of 1982, Dennis Martin, a chapter member, and I began to test hole the area. On the left side of a cart path was an area of young sumac about 100 by 50 yards in size. Here we found underlying the clump and sod grass a disturbed loam zone of finely broken and thinly scattered shell (clam). A few chips were present. Although some minor chipping waste could be found almost everywhere, the best and most

evidence was in the clear meadow area above the spring-pond and under a small hillock. A base line was laid out by our surveyor-member, Russell Holmes. Knowing that the remaining top soil was badly disturbed and any in-ground material dragged back and forth out of *situ* we decided not to line out a grid. But even so, excavations were controlled and recorded.

Excavating began on weekends in the early summer of 1982 by chapter members: Terry Byrne, Judy Facchini, Russell Holmes, Dennis Martin, Bob Po, and myself. This research excavation continued into the year of 1984 when Mrs. Angell asked me to cease activities because she had put the property up for sale.

Stratigraphy

The topsoil under grass sod was rather shallow averaging about six inches, and dark brown. The underlying subsoil was usually a sandy tan color with or without a heavy concentration of small stones. In one area the substrate was a reddish orange color roughly 15 square feet (5 sq. m) in extent, which ranged down to more than 4 feet into the sand zones. This reddish stratum was relatively free of stones and seemed unusually deep. It is unlikely to have been caused by iron oxide saturation because of the constant orange-red coloration. It had no definite boundary in the ground; rather there was a blending of orange-red soil with the surrounding tan substrate.

Features

In the relatively small area of excavation there were several stone hearths and fire pits. In addition, the orange-red zone described above could be called a feature (excavated by Dennis

Martin), for nowhere else did we find another stratified profile like it. The hatched square in Figure 1 indicates its approximate horizontal area, and also shows its approximate position in relation to the hillock and other natural features, and the location of parts of a steatite bowl. Several hearths were found within the orange-red area and also a small tapered cone-like pit, 60 cm in diameter at the top, and 35 cm deep (Figures 1,2). It was filled with blackened sand with a black felsite knife lying flat at the bottom of the pit (Figure 1; Figure 5 Left, #1). Dennis Martin says that the blackened sand was definitely not charcoal, and some that was saved started to crystallize. When he first discovered the pit the fill looked shiny and greasy, but there were no traces of decayed material or bone. I agree that it was not charcoal, and have come to postulate that it was pulverized plumbago or graphite.

Artifacts

The number of artifact recoveries from the site by all participating was about 100 pieces, broken and whole. The only artifacts available to me for recording were my own (Table 1) and Dennis Martin's (Table 2), and a selection of these

are shown in Figures 3-7.

Dennis Martin found all of his prehistoric material at a depth of 2 1/2 ft (0.75 m) to 3 ft (1 m). He recovered the most artifacts, most of them in the orange-red stratum. Figure 2 is taken from the overall plan of the excavation and shows the horizontal distribution of artifacts in the orange-red zone. Hearths and Brewerton points were found at its extreme depth. A cluster of Otter Creek points occurred in the northeast half, and quartz Squibnocket points in the southwest. Steatite sherds, a burned grooved weight, and crude pestle also were found. The grooved net weight exhibits thermal degradation because it was part of a stone hearth in the deepest part of the red zone feature (Figure 6 Right, #2).

The high-grade steatite bowl with a lug handle (Figures 1,4) was also found by Martin half complete, and a matching part by Judy Facchini. These pieces were recovered in the lower part of the topsoil.

Roughly 45 ft (14 m) southeast of the orange-red zone, a scraper, reamer, and two drills, one Y-based and the other square-based and broken, were found by Bob Po within an area of

Table 1 - Bernard A. Otto artifact recoveries

Large tapered stemmed felsite point (Figure 3, #1)
Patinated felsite club prong (Figure 7, #4)
Felspar tapered stemmed point (Figure 7, #3)
Large banded felsite hastate form spear or knife with serration (Figure 3, #2)
Large banded felsite (?) broad bladed stemmed point: Neville-Like (restored by me)(Figure 3, #3)
Argillite whetstone with wear polish on edges (Figure 7, #5)
Hoe or heavy scraper (schist) (Figure 7, #2)
Large mottled Susquehanna Broad spear or knife; very thin (restored by me) (Figure 3, #4)
Quartz parallel-sided point form
Quartz Squibnocket triangular point (Figure 7, #1)

Table 2 - Dennis Martin artifact recoveries.

Projectile points:	Nos. of artifacts
Brewerton notched eared triangular	8
Bifurcate serrated	1
Neville-Like	4
Tapered stemmed	11
Large hastate, black felsite	1
Large tapered stemmed (spear)	1
Orient Fishtail	1
Otter Creek	3
Fox Creek Stemmed (large)	1
Drills, expanded and tapered stemmed	3
Net weight, grooved	1
Steatite bowl, 3/4 complete, lug handles	1
Whetstones	3

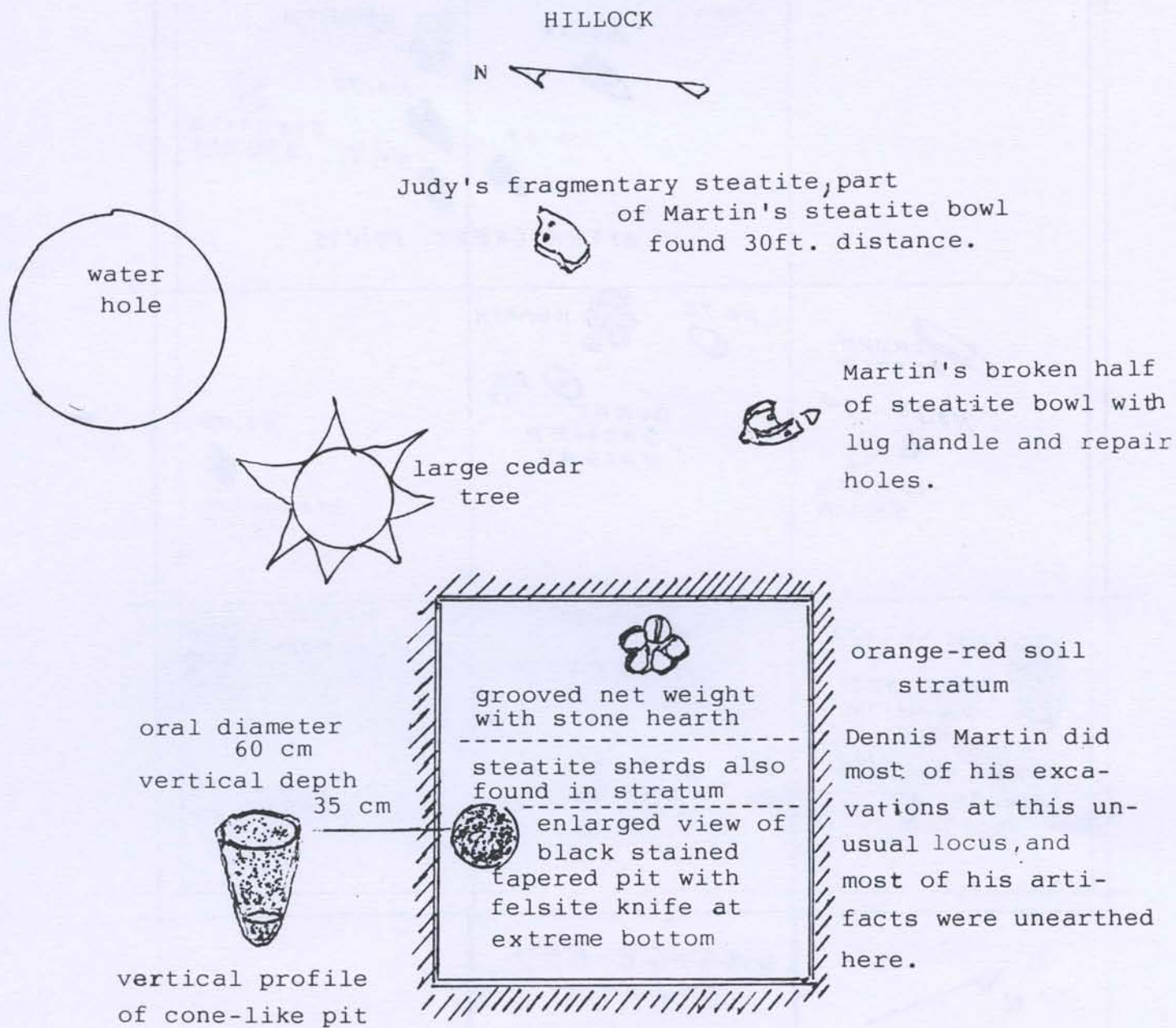


Figure 1. Margaret Angell site. Rough plan of the position of the orange-red zone in relation to natural features and steatite bowl fragments. (Hatched square indicates the orange-red zone with conical pit. Not to scale.)

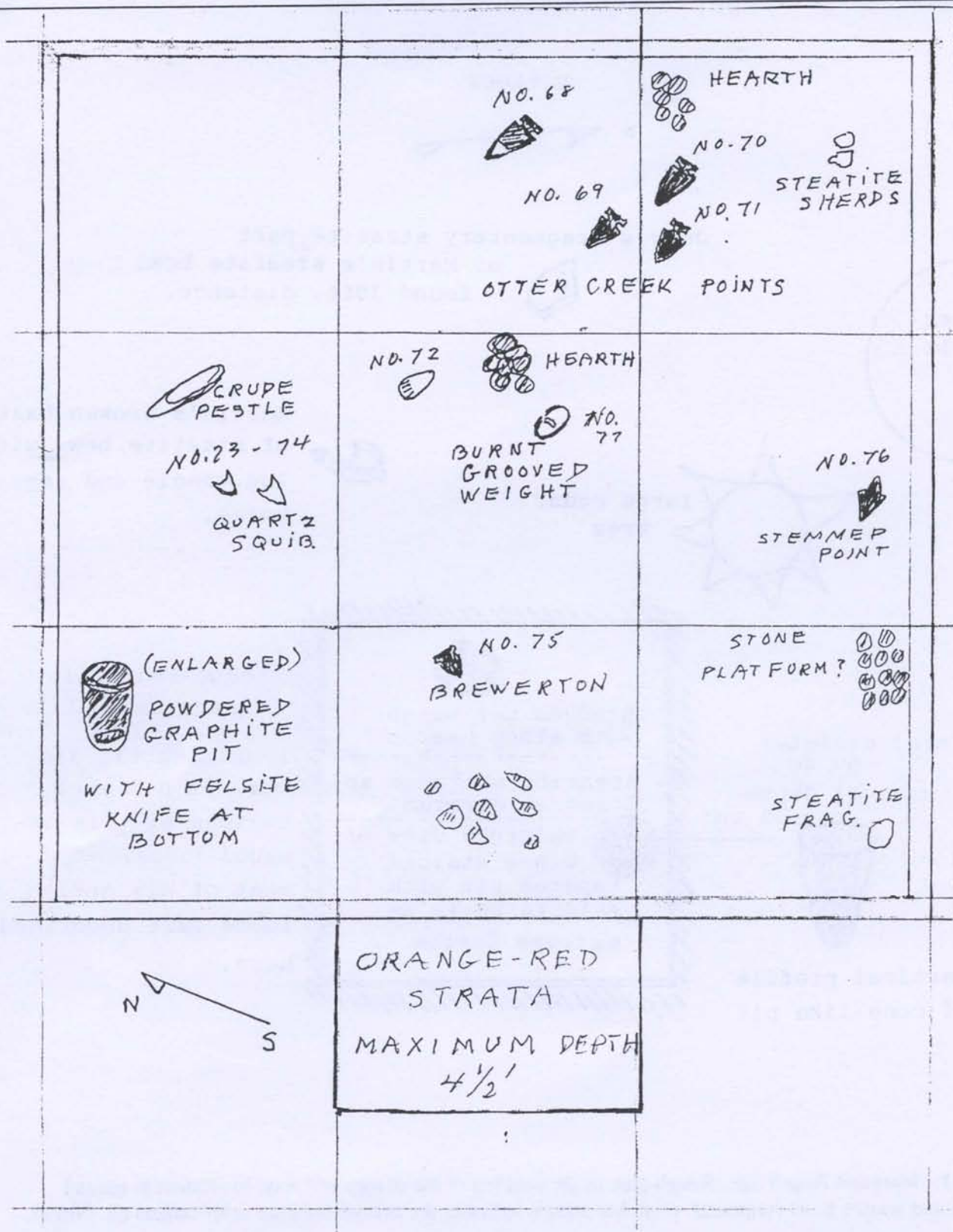


Figure 2. Margaret Angell site. Horizontal plan of the orange-red zone showing hearths, artifact clusters, and other features, including the conical pit, within it. (Scale: 2 in = 5 ft [1.5 m]).

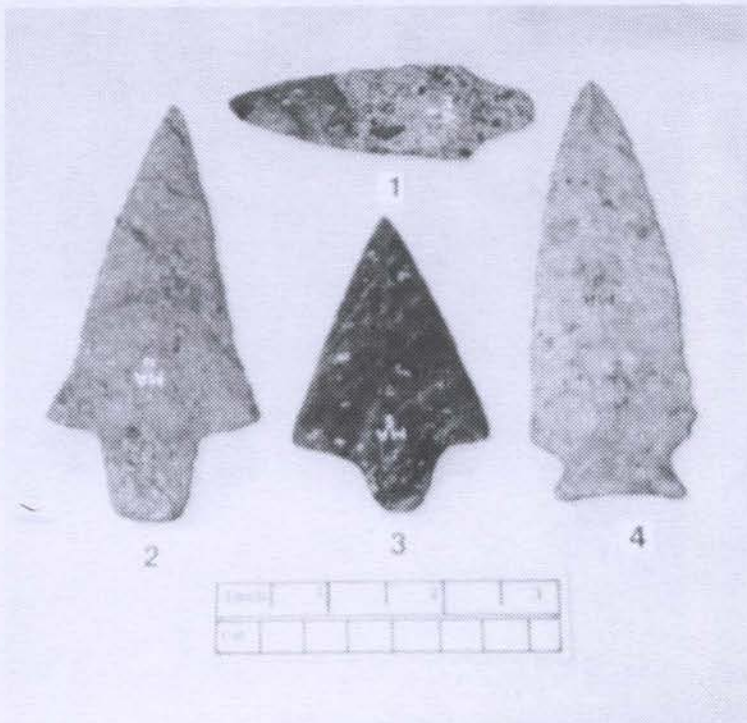


Figure 3. Otto points, Angell site: 1. Tapered stemmed, felsite 2. Large hastate serrated, banded felsite 3. Neville-Like, felsite 4. Susquehanna Broad lance head or knife, very thin.

10 ft (3 m) by 5 ft (1.5 m). Otherwise, points of varying kinds, steatite fragments, and the occasional tool were scattered over the area with no apparent clustering.

Interpretation

There is no way of knowing how many artifacts were carted away when the topsoil was stripped off, and therefore what information may be missing from the interpretation.

Artifact terminology and dating in general follows the Ritchie and the Massachusetts Historical Commission typologies (Ritchie 1971; MHC 1984). The two hastate form (spear-shaped) points, one a large black felsite point (Figure 5 Left, #2) found by Martin, and the other by myself

(Figure 3, #2), in my experience, indicate an early Middle to Late Archaic site use. The early Middle Archaic period is also supported by Neville-Like points, and even a bifurcated point (Early Archaic) (Figure 5 Left, # 5).

The Wading River, Otter Creek, Snook Kill (Atlantic-Like), and Notched-eared Brewerton points (Figure 5 Right) all allude to the Late Archaic time frame. Brewerton points were found at the extreme depth of the red-orange sand zone seem to date that feature to the Late Archaic. Susquehanna Broad points, Orient Fishtail, and steatite bowl remnants are indicative of a Transitional Archaic period.

A Fox Creek Stemmed point (Figure 5 Left, #3) suggests a slight Middle Woodland presence, but no other Woodland evidence such as fired clay pot ware or Levanna type projectile points were recovered anywhere at the site.

The accumulation of the unusual

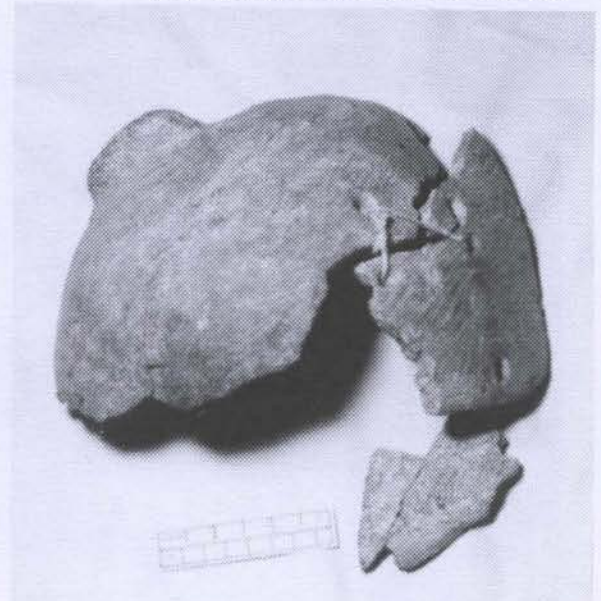


Figure 4. Martin artifacts, Angell site: steatite bowl fragments with lug handle and repair holes.

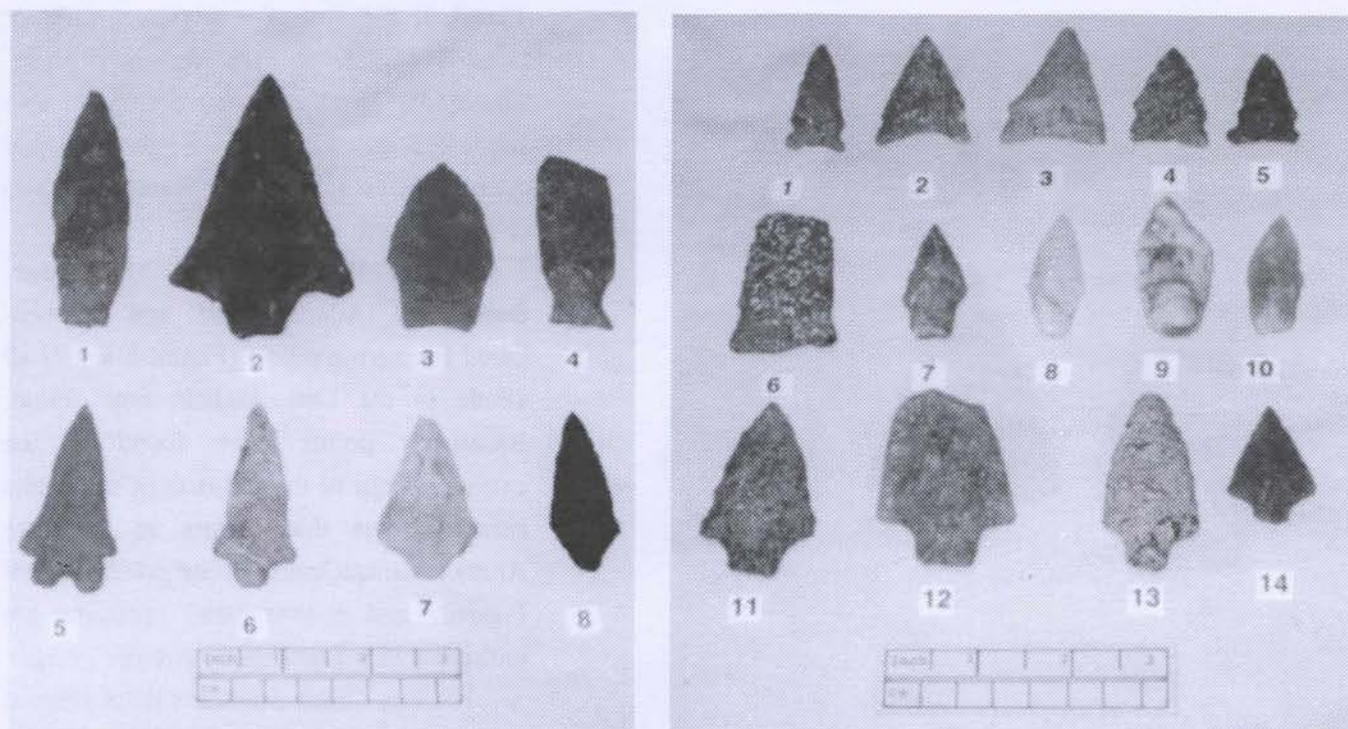


Figure 5. Martin artifacts, Angell site (all from the orange-red zone unless marked *):

Left: points: 1. lanceolate knife, black felsite, black pit feature 2. hastate, black felsite 3. Fox Creek Stemmed *4. Susquehanna Broad, felsite 5. Bifurcate, red felsite 6, 7. Neville-Like 8. Stark-Like
Right: points: 1-5. Brewerton, notched eared triangular 6. Brewerton notched 7-10. Wading River, mostly quartz 11-14. Snook Kill (Atlantic-Like).

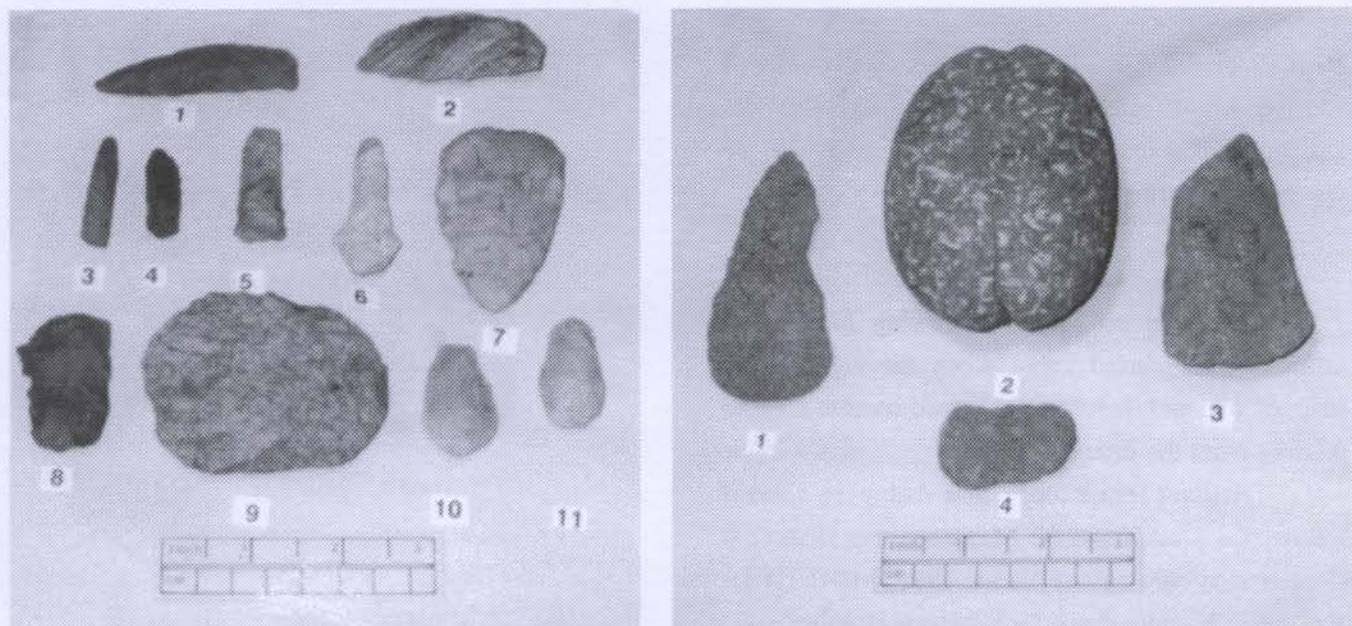


Figure 6. Martin artifacts, Angell site (all from the orange-red zone unless marked *):

Left: 1,2 concentric knives (#2 banded felspar); drills: 3-5. straight stemless 6. expanded base 7. trianguloid knife, thin *8. side and end scraper 9. flesher, thin 10-11. stemmed scrapers, quartz.
Right: *1. endscraper, schist 2. net weight 3. endscraper, schist 4. double-ended scraper, schist.

4 1/2 ft deep (1.37 m), 10 square foot (3 sq. m) area, of the red-orange soil is food for thought, and hearths and Brewerton points were found at its extreme depth. It was also in this red-orange stratum that Martin recovered other Late Archaic pieces. Leaching from the hillock behind the area could not have caused a build up like this because the hill strata had no red soil. The cone-shaped pit with a knife placed flat at the bottom suggests to me a ceremonial deposit.

Some evidence of the use of shellfish was revealed.

Summary

Being a half-mile or more from the coast, the Margaret Angell site was probably a year-round site of occupation. Although somewhat inland from the coastline, this site is still part of the coastal plain. It seems to have been occupied from the early Middle Archaic period to Late Archaic Transitional times.

The prehistoric and still-active spring with a small run-off brooklet was the prime requirement for prehistoric habitation. The spring could have attracted thirsty mammals, and provided an environment for amphibians and other invertebrates.

It has been said that in Colonial times as much as 2 1/2 ft (0.75 m) to more than 4 ft (12 m)

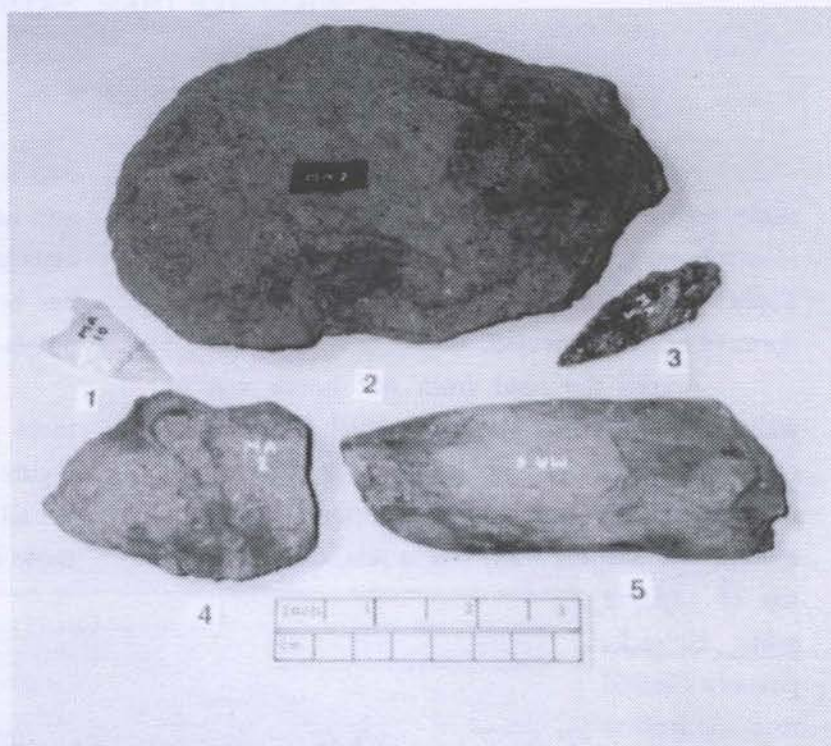


Figure 7. Otto artifacts, Angell site: 1. triangular point, quartz 2. schist heavy scraper or hand spade 3. tapered stemmed felspar point 4. felsite club prong 5. argillite whetstone with wear polish.

of loam or top soil had accumulated in certain areas of the site proper that was hauled away for use in public areas of the town of Kingston. I know of one place that it was used, the large playing field behind the Kingston Library.

I cannot help wondering how many hundreds of artifacts were carted off the site because all indications are that it was heavily occupied in prehistoric times.

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WHAT ARE THESE ARTIFACTS?

Jic Davis

Nearly 35 years ago I discovered my first stone artifacts close by my house in Carlisle, Massachusetts, situated near the southern end of Tophet swamp, and later I found artifacts in the northern end of town also.

Across the road from our house was a walled field, a former barnyard, which has been in existence since early colonial times as part of the Blood Farm. On the south side of the field under a large tree near the wall, was a pile of rocks on

top of exposed schist bedrock, possibly cleared from the field at some point in time but not necessarily so. In the mid-1960s as a child looking through the stone pile, I found my two most remarkable artifacts (Figure 1, top left, middle left). They are of an elongated oval shape, flat in cross-section, and 13.2 cm

(5 1/4 in.) and 17 cm (6 3/4 in.) in length respectively. Made of gray schist of extremely uniform grain, the main surfaces are not worked, but one edge is ground into a curve, and the other

into a series of scallops. These scallops are deep and wide enough to fit the fingers if the artifact is clenched in the hand, but the curved edge would not be easy to use in that position. Further, the points of the scallops show wear.

In the winter of 1999, searching in the same pile, I found the rest of the artifacts in Figure 1. They are smaller than the original two, but all have one or two scallops on one edge. Some show knapping as well as grinding in the formation

of the scallops. Two appear to have broken while being made. One has snapped in half, and the curved edge is knapped, not ground (Figure 1, bottom right). The other is a flake with a single scallop that may have sheared off a larger tool (Figure 1, bottom middle).

What are these artifacts for? They seem well suited to be

a tool for inscribing a series of lines in wet clay for marking pots. The Indian Museum in Warren, Vermont, has a similar, but knapped, tool they describe as used in pottery making. Is there another explanation?

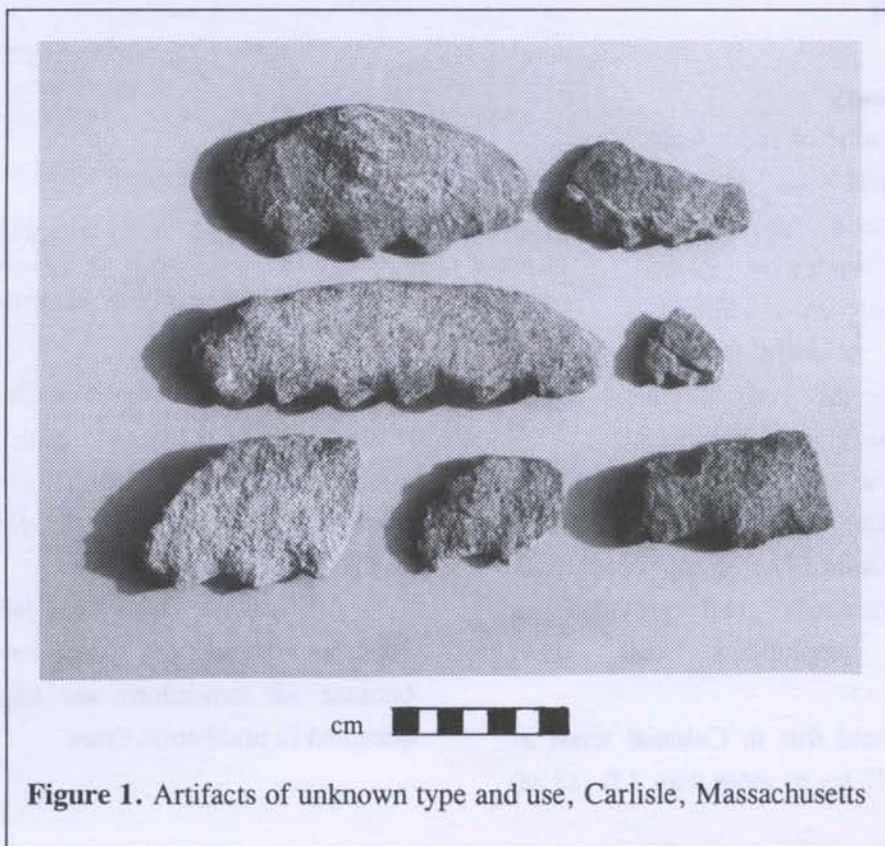


Figure 1. Artifacts of unknown type and use, Carlisle, Massachusetts

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