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# BULLETIN OF THE MASSACHUSETTS ARCHAEOLOGICAL SOCIETY



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The Past Is with Us on Third Cliff Beach. Cynthia Krusell.....	1
Examination of Bone Harpoon from Third Cliff, Scituate, Massachusetts. Tonya Largy.....	2
A Deep Sea Plummet from Carver, MA. William B. Taylor.....	4
Looking at Archaeology in New England from Three Feet above the Water. Jonathan K. Patton.....	7
A Preliminary Report on Surface Collections and Initial Recovery Efforts on an Archaic Site on the Town Forest Branch Brook, Western Danvers, Massachusetts. David P. McKenna.....	20
Whaletail Pendants. William B. Taylor.....	30
A Place of Respect for the Robbins Museum. Victoria Rourke-Rooney.....	33
Contributors.....	37

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## The Past Is with Us on Third Cliff Beach

Cynthia Krusell

*(Editor's note: This article was originally published in the Marshfield Mariner on Wednesday, September 10th, 1980. Ms. Krusell brought it in to the Museum during the summer of 2011, along with the artifact in question. Her original account is accompanied by a preliminary analysis of the item by Tonya Largy.)*

They fished on Third Cliff beach in Scituate three thousand years ago. They left few clues about their way of life. They came quietly along the beach on foot or swiftly gliding down the rivers in their canoes. They waited for the full of the tide when the waters covered the sand shoals. There the sturgeon, bass and bluefish gathered in the shallows of the barrier beach to feed on small fish. They lured these great fish with flaming torches of dry birch bark held low over the side of their canoe. They waited silently for their prey, holding high their harpoons and spears.

The fish swam close. With skilled marksmanship, they thrust the harpoon deep to the bone. The staff was pulled away. The carefully designed, multi-hooked, boney spearhead stuck fast in the fish's body. The line went taut. The string was attached to the canoe. Hauling "half a dozen or half a score of great fishes" alongside their canoes in the dark of the evening, they paddled quietly away, their flaming torches extinguished, that day's fishing accomplished. They are not remembered today. But, unknowingly, they left a clue behind them. On Third Cliff beach, where the sand bar stretches toward the mouth of the North River and where it is covered with water at high tide, one of the most exciting Indian artifacts to appear in recent times was found on Sunday, August 24th.

While wandering along the seaward edge of the barrier sand spit, Kevin Kelly of Lowell spotted what looked like nothing more than an oddly shaped, small chip of driftwood. It was a dark gray object, slightly curved and about seven and a half inches long and an inch wide. Strangely, it had four blunted barbs at intervals along its length and a carefully crafted barb at the curved end.

Along with his friend, Peter Krusell of Marshfield Hills, the boys decided that it had to be an artifact of some significance. They brought it to historian, Cynthia Krusell, who, in turn, took the object for authentic identification to Dr. Maurice Robbins, former State Archaeologist and present Director of the Massachusetts Archaeological Society in Attleboro. He recognized it at once as a harpoon hook made of caribou antler and dating to the Archaec [sic!] period of Indian culture, 6000 B.C. to 1000 B.C. Great herds of caribou roamed southeastern Massachusetts during that period and it is known that their antlers, classified as a hair material rather than bone, were used extensively by the Indians for tools, points and implements.

A piece of antler was straightened by heat, then meticulously wrought with crude stone chips to fashion such artifacts as this finely-tooled harpoon point.

Dr. Robbins has identified similar Indian pieces of the Archaec period made of bone or antler through a process known as carbon-dating. He marveled at this unusually well-preserved antler harpoon point, one of the most perfect he has seen. Its excellent state of preservation he believes is due to the fact that it was submerged in salt water for thousands of years. It is from 300 to 8000 years old. On land, such an artifact would have quickly disintegrated. Other like pieces have been found on Cape Cod and Cape Ann. Dr. Robbins knows that such artifacts were definitely made here locally in southeastern Massachusetts and did not come from elsewhere.

The past is indeed with us. On Third Cliff beach, a remnant from a long-ago culture emerges to remind us of those thousands who have lived here before us. Passing silently over the waters and through the woods, moving along moonlit paths, these figures from the past disappear around a bend in the trail leaving only a clue by which we today may seek to understand their culture.

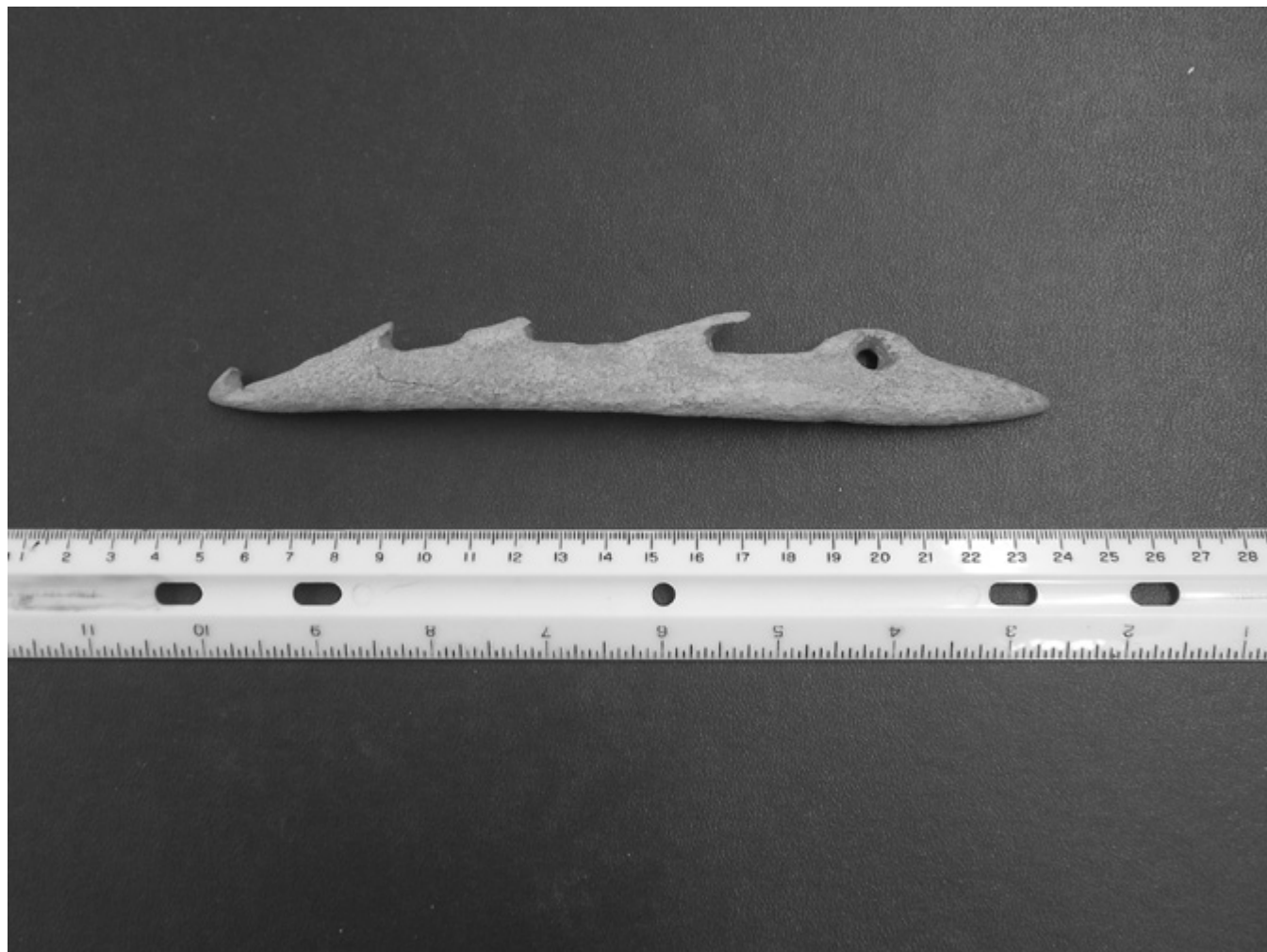


Figure 1: Bone Harpoon from Scituate (photo: Dan Lorraine)

## Examination of Bone Harpoon from Third Cliff, Scituate, Massachusetts

Tonya Largy, M.A.

### Introduction

Dr. Curtiss Hoffman requested that I examine a harpoon found offshore of Third Cliff beach in Scituate, Massachusetts by Kevin Kelly of Lowell and Peter Krusell of Marshfield Hills. Ms. Cynthia Krusell, Peter's mother and a local historian, published an article dated September 10, 1980 in the local newspaper. Dr. Maurice Robbins examined the artifact and declared it was made of caribou antler and dated to the "Archaic Period of Indian culture, 6000 B.C. to 1000 B.C" (1980 Krusell, *Marshfield Mariner*). However, in the absence of a

clear context for this find, it would be very difficult to assign a time period without a radiocarbon date which would require destruction of at least part of the harpoon. The main question concerns whether this artifact is made from a caribou antler.

### Methods

I examined the harpoon's structure using a stereomicroscope at magnification ranging from 7X to 45X. It was compared with antlers of every native

species in the Family Cervidae (deer, elk, moose, and caribou) found in the far northeast and Canada which are housed in the collection of the Mammal Department in the Harvard University Museum of Comparative Zoology (MCZ). After examining the artifact, I sought the opinions of the MCZ staff including Judy Chupasko and Mark Omura. My colleagues in the Zooarchaeology Laboratory of the Peabody Museum, Dr. Richard Meadow and Peter Burns were consulted as well and their opinions contributed to this study.

## Results

The harpoon is heavy and dense for its size, suggesting it may be antler rather than a mammal long bone. It weighs approximately 42 grams. It is 188 mm. (1.8 cm) long, and has a slight curve similar to an antler tine. It has four barbs, three of which have broken tips. The barb near the shaft end is intact. A hole is drilled from both sides beginning 30 mm (3.0 cm) from the end of the shaft, and measures 5 mm. (0.5cm) in diameter.

The structure is bone, however, antler is also considered to be bone. The question of whether this is an antler tine as opposed to some other worked long bone fragment from an animal skeleton is difficult to determine without having a view of its internal structure. Antler has a distinctive internal structure which might be ascertained using expensive non-destructive imaging such as a CT scan (computed tomography). The harpoon conceivably could have been crafted from the outer edge of an antler which would have avoided the central part with its distinctive morphology. If this part of the antler was used, it would have to be

made from a very large cervid. Another way to determine species is to submit a sample for DNA testing. This method is destructive, however.

The extent of the post-glacial range for Woodland Caribou (*R. tarandus caribou*), is unknown. However, caribou foot bones were identified by Dr. Arthur Spiess from at least three loci at Bull Brook, Ipswich, Massachusetts (Robinson 2009:16; Spiess et al. 1998). Unquestionably, Bull Brook dates from the Paleoindian period. As yet, there are no other finds of caribou bones further south than Ipswich, Massachusetts and none have been identified from sites further south.

Preservation of non-calcined or burned bones and bone/antler artifacts from the Paleoindian period or even the later Archaic period is questionable due to the nature of the acid soils in our region, unless it was buried in wet sand or constantly submerged in water. The lack of cultural context is also problematical. It is unknown whether the harpoon originated from hunting activities near Third Cliff, was received in trade, or whether it moved with sands which are redeposited along the coast on a regular basis.

## Conclusion

Without further study, it cannot be determined if this harpoon definitely is made of bone or antler, although antler is a good possibility. Similarly, it is impossible to determine species without using methods destructive to the artifact.

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## A Deep Sea Plummet from Carver, MA

William B. Taylor

### Introduction

In the fall of 2010 the Edward G. Bielski collection of Indian Artifacts was donated to the Robbins Museum by his family. Mr. Bielski was a school teacher for many years at the Gates Junior High School in Scituate. He was a former M.A.S. Trustee. He received his Masters degree at Indiana University. He was also very interested in the study of fossils, which he collected along with Indian relics. Mr. Bielski's digging partner was Richard H. Bent of Plymouth. Their area of interest covered from Marshfield to Plymouth and Carver and amounted to over 2000 pieces. Many years were spent digging at the Swan Hold Site in Carver. Mr. Bent was a surveyor in Plymouth, and after his death his collection was acquired by Mr Bielski. There were some outstanding artifacts in this collection and this and future articles will feature some of the most unusual artifacts.

### Swan Hold Site

The Swan Hold site in Carver, Massachusetts is situated along a sandy terrace overlooking South Meadow Brook. Much of the marshy area of this swamp has been converted into a cranberry bog, which today has a stream running through it that empties into the Weweantic River and flows south towards Buzzard's Bay and the ocean. For many years members of the Massasoit Chapter of the Massachusetts Archaeological Society carried on an excavation at this site. Artifact recoveries show the site was first occupied during the Early Archaic period and remained in use through the Late Archaic and Woodland culture periods. Many outstanding implements have been recovered here including the large plummet which is the subject of the report (see Figure 1). Found by the late Richard Bent of Plymouth, this artifact was uncovered 4 inches (10 cm) below the junction of loam and yellow subsoil, yet well within the Late Archaic zone. It is an unusually large plummet

and weighs 2½ lbs (0.9 kg). "An odd feature of this plummet is its rough base, which seems to point to its possible use as a pestle. Here is an instance of a later culture borrowing an implement from an earlier one and appropriating it for a new use. It seems probable that this plummet was first used as a deep-sea net sinker at some shore site. Here it was found by a later culture during a fishing excursion and brought back to the Swan Hold site several miles inland" (Taylor 1976). C.C. Willoughby, in his *Antiquities of the New England Indians*, shows six similar artifacts (1935: Fig. 27, p. 45) which he calls large pendants. All of these closely resemble the Swan Hold plummet, both in size and symmetry". In Maine these objects have been found in graves from cemeteries in Orland and several recorded from shell heaps. The others were surface finds from Massachusetts and were possibly plowed from shallow graves. "The best examples are pecked over the entire surface. They are rarely, if ever, polished" (Willoughby 1935). The base of these weights tends to be pointed, although some are rounded. Materials such as granite, quartzite, gneiss, felsite, sandstone and argillite are the most common stones used in their manufacture. It is pecked into shape and occasionally is ground smooth over all (Fowler 1963). "The larger forms are similar to the smaller ones and are thought to have been used for deep sea fishing. Plummetts of large size are quite scarce in New England, and almost always are found on sites along the sea coast or on major rivers a short way inland from the ocean. Many are made from water-worn stones, with the only alteration being a knob crudely pecked near one end. Rarely do deep sea plummetts attain the symmetry seen in this classic example from Swan Hold." (Fowler 1963)

### Possible Usage

Many people think of large plummetts as anchors for canoes (Fowler 1963). While this may be true on small ponds or lakes, they are not heavy enough for ocean currents (Moody 2001). However, they

could anchor lobster or crab traps set in shallow waters along our coast. Eugene Winter related a possible use for these objects. While at Hampton Falls in New Hampshire, he noticed four large plummets, in an upright position, stuck on the ocean bottom at low tide. It looked as if a gill-net was stretched across a narrow channel during low tide and anchored along the bottom with a series of large net weights. During high tide, large fish would chase smaller bait upstream, while passing above the top of the net. As the tide went out the water level dropped, and these big fish would get caught in the net, while attempting to return to the open ocean. Every tide would leave some bass and other large fish as a daily food supply (Winter personal communication 2010).

## Conclusion

In the Robbins Museum there are 5 examples of deep sea plummets on display in the "Walk Thru Time Exhibit". Some of these plummets reach 10" (25.4 cm) in length and show little workmanship except for the knob on top. Others are more completely finished. These large plummets are not commonly found on inland sites. However, occasional examples have been recovered from the Nemasket River and the Three Mile River in Taunton. They are an interesting implement and deserve more interest and research (see Figure 2).

## Acknowledgements

I would like to thank Jeff Boudreau for his assistance in taking the photographs and Laurie Stundis for typing this report.

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Figure 1. Symmetrical Deep Sea Plummet from Carver, Massachusetts. It measures 6 ½" (16.5 cm.) in height and weighs 2 ½ lbs. (0.9 kg). Material is gray granite.

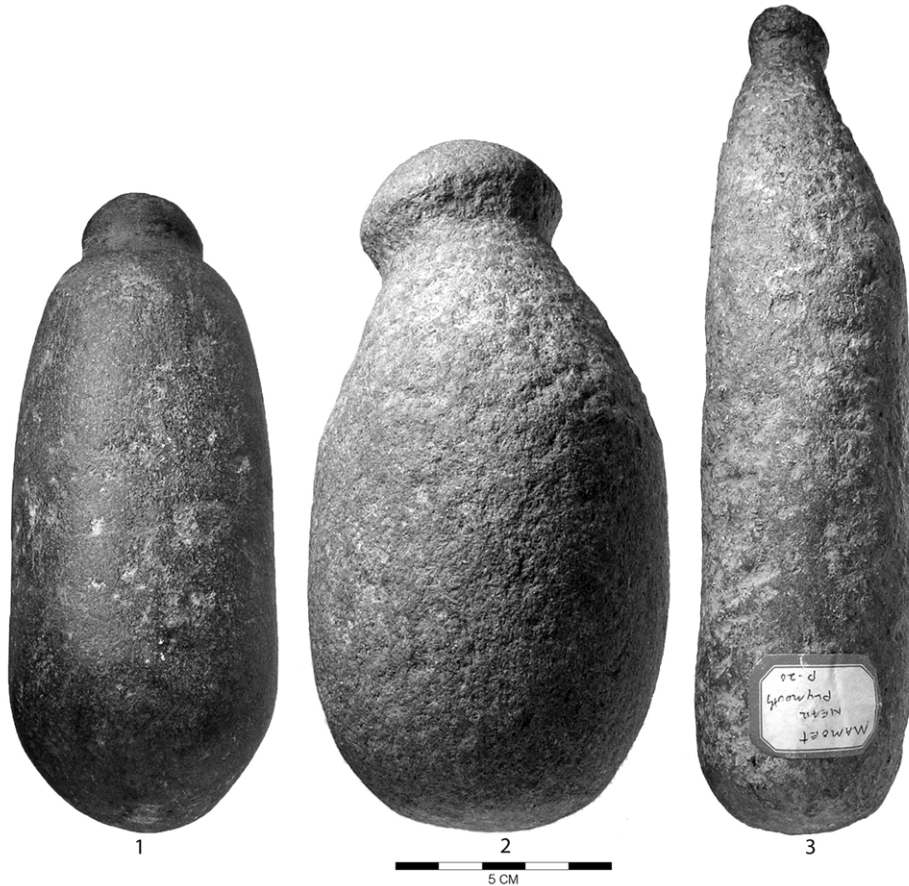


Figure 2. Three Deep Sea Plummetts found in eastern Massachusetts. No. 1 is 5 ½" tall from Taunton, MA.; No. 2 is 5 ¾" tall from Plymouth County; No. 3 is 7 ½" tall from Manomet, near Plymouth.

## Looking at Archaeology in New England from Three Feet above the Water

Jonathan K. Patton

This paper introduces two archaeological heuristics – the watercraft as “floating individuals” and marine navigational landscapes or “naviscapes” – to encourage further integration of maritime culture and hydrogeography into archaeological research designs and interpretations in contemporary New England archaeological practice. Examples of the utility of these concepts are offered, and floating individual design and construction are discussed in the context of archaeological data. A set of hydrogeographically focused research questions is presented to guide future research.

Recent archaeological scholarship tends to speak in etic terms of indigenous “marine technology,” “watercraft,” “vessels,” and in descriptors such as canoe, skinboat, dugout, logboat, kayak, etc. In doing so we as anthropologists may actually be artificially decoupling these objects from their culture, because they are at once creations of peoples and are themselves living bodies with beginnings, middles and ends. These creations are material culture to our view, but also could be understood more emically as “floating individuals,” that have lives and embody particular individual and group ideals of materials, form and shape, and ways of knowing, as well as environmental and functional constraints of materials, purpose, and characteristics of intended waters and uses.

A reframing of our scholarly understandings of these creations as animate parts of culture is required; as “he,” “she” or “them” with masculine, feminine or corporate identifiers, although based exclusively on archaeological data an etic perspective is still somewhat unavoidable. However, comparative ethnography (e.g. Steinbright 2001) exists which shows that among peoples with a maritime focus, Native watercraft as floating individuals are integral to the continuation and identities of maritime peoples. Even within the historic Anglo-American shipbuilding tradition (e.g. Chappelle 1951, Parker 1994), it is understood that vessels and ships have their own personalities and are identified as animate and addressed as “she” or “her.” People’s floating individuals can be inte-

gral, animate members of their cultures. Whether particular groups consider their watercraft to be, or be transformable to, animate objects is culturally and historically situated. As an archaeological heuristic, watercraft as anthropomorphic floating individuals has potential.

New England archaeology, particularly of the ancient period, has been hesitant to incorporate floating individuals consistently into evaluations and interpretations because the material evidence, even into the colonial period, is so rare in the Northeast. Our terrestrial acidic soils are very well drained and preservation of organic materials is inconsistent and unrepresentative. The materials from which floating individuals were created in the ancient period are exclusively organic: wood, sinew, skin, bark, root, etc., and so archaeological analyses and interpretive discussions have also considered the presence of proxy materials, such as ground stone woodworking tools – gouges, adzes, axes, scrapers – and charcoal concentrations. Rare instances of intact organic preservation, such as the submerged mishoonash in Lake Quinsigamond, Worcester County, Massachusetts, provide valuable interpretive extrapolation, as those particular craft date to the early historical period (Robinson and Stedler 2011). Despite the rarity of direct physical examples of Native American’s floating individuals, archaeologists practicing in New England should regularly consider their vital roles in regional Native cultures and navigational areas.

The lack of integration of floating individuals in New England archaeology is indeed surprising considering the emphasis in our research on water, especially in current cultural resource management models, which stratify sensitivity assessments for the presence of ancient Native American land use, habitation or occupation areas broadly defined, primarily based on their proximity to water bodies. New England ancient period archaeology speaks in terms of drainages, cores and peripheries, uplands, riverine and coastal settlement areas, but predominantly from a terrestrial

perspective looking outward. An emphasis on identifying and documenting terrestrial trail networks as corridors has also prevailed, with the perhaps artificial implication that water routes as marine trail networks, because they are carried in the mind of the pilot or differentially marked, are not material enough to be considered in archaeological interpretation. But just because we do not have indications of floating individuals at archaeological sites or that water trail networks are not well-documented, does not mean we should not routinely consider their manufacture, use and navigation in our regional generally, in site analyses and interpretations.

The soils, geology and topography, the “land” broadly speaking in the sense of William Cronon (1983), is only one aspect of a given ancient or historic landscape. There is of course, and significantly, the hydrogeography. In addition to the prevalent predictive models of regional settlement, we as New England archaeologists could reframe our perspectives, by looking from the water to the land as well as from the land to the water. An inversion of approach that emphasizes the dendritic nature of New England hydrogeography, and its intrinsic linkages to both ancient and historic period settlement and land use areas is useful.

Further contextualization of indigenous people’s floating individuals and waterways by drainage provides connectivity of knowledge from the ancient period through to the documented historic maritime heritage of New England (e.g. Chappelle 1951, Handsman 2010, Parker 1994). Aspects of such an approach have been undertaken historically in Maine (Bourque 2001, Cook 2007, Prins and McBride 2007). In Massachusetts, the extensive work of Barbara Luedtke on the Boston Harbor Islands (1997, 2000) and at the Shattuck Farm site (1983) on the Merrimack River, for example, have hinted at the need to further understand land/water cultural interactions. Future drainage-level archaeological reconnaissance studies should strive to approach research from both land and water-based perspectives and consider floating individuals through the research questions to be presented. Recent cultural resource management technical reports (e.g. Cherau et al. 2011) have also begun to address these issues when survey areas include interior riverine project areas.

The nature of sea level change over the course of the Holocene is primary to our understanding of the changing intersections of land, water and the people’s understanding of them. Post-glacial Holocene isostatic rebound and sea level change, long considered in the region’s archaeology, have been receiving renewed attention in cultural resources survey of offshore renewable energy development (e.g. Robinson 2002, Robinson and Waller 2002, Robinson et al. 2003, 2004, Rhode Island’s Spatial Area Management Plan, <http://seagrant.gso.uri.edu/oceansamp/>) and by coastal managers and indigenous communities (e.g. Bell 2009a, Bell 2009b).

Broader paleoenvironmental reconstructions could be integrated into the ideas of navigable water and our understanding of culturally constructed marine navigational landscapes; what I choose to call here the “naviscape” following Ian J. McNiven’s conceptualization of Aboriginal “seascapes” in northern Australia (2003). Although admittedly still an etic construction for scholarly discussion, the integration of a naviscape perspective into contemporary archaeological practice allows the consideration of specific ethnographic information and prioritizes modern descendent Native American community perspectives (e.g. Coombs 2003 and Peters 2002 for the Wampanoag people of Nantucket Sound, and Cordero 2006 among the Chumash people of the Santa Barbara Channel Islands in California) on their navigation practices and marine knowledge. Incorporation of the naviscape as another “scape” in our interpretive kit refines our predictive models of archaeological site locations in portions of ancient New England now underwater, and assists in situated historical interpretations of those times and places connected by water.

The human depth of vision is approximately 1.5 miles in ideal visibility from three feet off the water (Burch 1999), as sitting or kneeling in a canoe or kayak; this limitation circumscribes one’s immediate physical naviscape at any given time. Conceptualizing the naviscape is an exercise in emic versus etic descriptions of what maritime peoples do each day in both mind and body. The naviscape idea is intended to complement contemporary scholarly conceptions of indigenous homelands (Handsman and Lamb Richmond 1995, Hands-

man 2008) comprised of multiple landscapes and "tasksapes" (Ingold 1993), most recently discussed as "An extensive network of paths connected all these living sites to one another and to a network of traditional resource locations: fishing sites, groves of nut trees, burned over fields, wetlands, shellfish collecting places, and coastal beaches where stranded whales were sometimes found (Handsman 2010: 7)." The naviscape is a conceptual attempt to summarize the integration of the physical and mental acts of living with floating individuals within these layered "scapes," e.g. building, launching, paddling, and repairing a floating individual, with mental navigation, and continuous evaluation of multiple worlds on the water and at the intersections of land and water: the natural, spiritual, and social. The conservation of resources is assumed in this conception, as the navigator minimizes risk through comprehensive preparation, knowledge and skill, and to only commit maximum resources for good reasons as evaluated in the moment, e.g. to expend personal energy, reserves of luck and spiritual support, and risk to the floating individual and themselves to paddle in poor conditions or upwind into waves at speed to rescue another individual.

Navigable water to the floating individual, whose partner may paddle, pole or sail themselves, may be only several inches of water depth. The naviscape thus may extend conceptually from the shallow fresh headwaters of a given feeder stream all the way to the offshore islands in Nantucket Sound or the Gulf of Maine. The lakes, ponds and kettleholes between and among defined drainages and all the lands along these waters (e.g. Bradgon 1996:121) may be incorporated as portage routes. The naviscape is most basically a body of constantly revised collective cultural knowledge on natural and physical patterns that change over time: of landforms, winds, currents, tides, wave patterns, celestial movements, water depths and types (salt versus fresh/interior versus coastal/slow versus fast waters), shallows, snags, rapids, eddies, best landing spots, kind beaching and launching grounds, portages, fresh water locations, food sources (shellfish banks, fishing holes, anadromous fish run shallows, kelp beds etc.) and raw material sources and locations.

However, the naviscape also incorporates the navigator's perspectives, including his or her knowledge of their own skills, their floating individual partner, its abilities and limitations, and those of their crew, to define and guide the given journey. The sharing and transmission of such knowledge is understood to be through oral traditions and physical signs in ancient New England. As noted especially in Maine and Massachusetts, the use of toponyms is critical to the naviscape (Krim 1982, Prins and McBride 2007:110). The name of a place is the reason why that place is important, intrinsically and in its assistance to navigation on the way to other places (see Cook 2007 for an extensive discussion of colonial Maine canoe routes).

Perhaps the knowledge to construct a personal naviscape and share it also was limited to transmission between and among those individuals most comfortable with the water. As in our own society, not everyone in a given group wants or is able to embrace the floating life, or process themselves from land to water and back again; for example, Cook (2007: 2) refers to this lifestyle as "canoe behavior" among the Native peoples of Maine. Figuring importantly into the conception is the consideration of a gendering of floating individual partnerships and water spaces. As noted most recently by Bradgon (1996) and Clements (2010) the conventional understanding of water and gender among southern New England Native American peoples, from the Late Woodland Period (approximately 1,000 years before present) through the historic period indicates that the littoral zones were female spaces, for collecting of shellfish etc., versus the deep waters, reachable with a floating individual, reserved for men's fishing and hunting activities. However, we as scholars can easily conceptualize both female and male navigators, builders and proponents of the floating life, in which these spaces are blurred, for the land/water intersection, as well as the hull/water intersection, are places of liminality.

Multiple worlds are simultaneously incorporated into an individual's naviscape. In addition to the physical there are overlaid cultural and spiritual patterns on the lands and waters. Socially defined space (Bragdon 1996:116, 127, 2007:200, 215) is key to identity, and intersects with the definition of personal and group boundaries, and an ongoing

evaluation of power and control of physical space, most especially, as will be considered below, in the case of islands. Although the deep waters, out of sight of land, might be places of apparent physical boundlessness, these places actually may prioritize the spiritual aspect of the naviscape. As noted by McNiven (2003), in the Australian aboriginal seascape, the deep waters and islands are places of ritual interactions with the ancestors and deities, often embodied in the physical forms of pelagic creatures, important both in the context of "hunting magic" rituals and in ongoing spiritual relations. McNiven also notes the importance of littoral places as sacred because of the specific forms of the land/water intersections, and their relation to the Aboriginal Dreamtime stories, as they reaffirm connections between particular groups and places. Luedtke (2000) has similarly suggested that ancient usage of the Boston Harbor Islands balanced spiritual and functional cultural concerns.

In New England, as well, the ritual and the spiritual, as understood through oral traditions and repeated place-making are fundamental to the naviscape. Land/water intersections are understood to be liminal spaces, places where multiple worlds are conceptualized to meet, and where one may step from one existence to another, with consequent gaining, losing, shedding or acquiring occurring in those places, associated with Manitou (Crosby 1993). Likewise, polarities and balance in human relations to all things is understood to be a core value of indigenous tradition. As ever, venturing on the water requires skills, confidence and luck, and the conduct of rituals would be inherent to a balanced preparation and maintenance of spiritual assistance during a given trip.

For example, the several prominent landforms and littoral features at Aquinnah on Martha's Vineyard, such as the Gay Head Cliffs, Nomans Island, and the Devil's Bridge, are associated with the Wampanoag creation stories of Maushop and Squant (Simmons 1986) and would be integral to the naviscape of navigators fishing or coasting in that vicinity, both as visual landmarks, hazards to navigation and as places of ritual and re-connection. Similarly, the Gloo(u)skap tales in northern New England (e.g. Cook 2007, Prins and McBride 2007) share a similar link to places of navigation along the Maine shorelines and major rivers, and

thereby reinforce the spiritual and ancestral connections to places. The contrasting whiteness of coastal shell middens were visibly bright monuments (cf. Sassaman 2010) within a particular coastal naviscape.

The close association of Maushop with whales in the Wampanoag stories deserves further study in a naviscape context, as the harvesting of drift whales in the colonial period (Little and Andrews 2010) is known to have been limited to specific beaches in specific sachemships on Nantucket and Martha's Vineyard. Other pelagic creatures, such as sharks, swordfish, dolphins and seals, some of which have appeared in archaeological contexts in northern and southern New England (e.g. Andrews 1986, Bradley et al. 1998, Handley 1996), may have multiple naviscape associations, as food, status markers, and spiritual guides. The historic continuity of Wampanoag shellfishing, fishing, marine hunting and commercial whaling is an expansive research area; see e.g. Bell (2009a, 2009b), Handsman (2010), Nicolas (2002, 2005) and Peters (2006) and the sources cited in those studies.

Likewise, the naviscape associations among winds, directions, tides, colors, and seasons, for example, are inescapable. For example, the southwest is understood to be a favorable direction, the prevailing traditional burial orientation in southern New England (Simmons 1970, Vitelli 2010). Applied in the context of the Boston Harbor Islands, for example, a southwest wind is the modern prevailing summer wind direction in Boston Harbor. How far back into the past this weather pattern has held requires further study. Nevertheless, the example highlights the culturally connective possibilities of a naviscape perspective, in that this southwest wind is a good, bright wind, associated with sunny, dry, windy summer weather. It allows a downwind or cross-wind paddle from the modern drumlins at World's End in Hingham, the Weir River at Nantasket, and the Weymouth or Fore or Back River shorelines, or the Quincy Neponset River mouth to the inner or outer harbor islands. With an outgoing tide to assist, landing on the southern, shelving beaches such as at Grape Island or Peddocks Island is favored. In opposition, the northeast wind brings poor weather and is associated with bitter winter storms, and thus may be linked with disfavor.

Island hopping in the Boston Harbor Islands, where no island is more than several miles apart, and therefore always within an individual's naviscape, is inferred to be easily accomplished in favorable conditions during at least the Woodland Period, when the water/land interface would have been similar to modern period coast and island shorelines (cf. Simon 2002). For example, archaeological data from the harbor islands shows predominantly summer seasonal occupations, with no extensive overwintering. When approached in a naviscape, travel to the harbor islands, especially the outer islands such as Calf, Brewster and Green, is obviously not to be done in poor weather and sea conditions. Undertaking a summer move to the inner islands in an extended family fleet, suggested by the size of occupations, would be a normal part of yearly travel. The trip would be done during the most favorable conditions, so that the fleet would not become separated and the paddle with loaded mishoonash could be eased by not having to paddle into wind or against tides. Conversely the return fleet journey in the fall might wait on a low wind, flat water day or the beginnings of the northerly winds and an incoming tide to ease the paddle back to the mainland. Departing from the southern, leeward beaches, paddlers in laden mishoonash would be partially screened from the force of northern winds and waves by the island's wind shadow.

In another example from the Boston Harbor Islands, the division of material culture noted by Luedtke (1997, 2000) on Thompson Island particularly, which is interpreted to mark a territorial division between northern and southern groups—suggested by the presence of lithics from the northern Boston Basin appearing at sites only on the north side of that island—may also be indicative of the particular central position of Thompson Island in the naviscapes of Boston Harbor. Thompson Island occupies a position at the tidal mouth of the Neponset River to the west, the Castle Island channel around Dorchester Neck to the north, and the Quincy Bay shoreline through a short portage at Mosswetuset Hummock and Squantum Neck, or island hopping from Moon or Long Island and the inner harbor islands.

If the prevailing winds and currents are assumed to follow the example above, paddling to Thompson Island from the Charles River is a cross-wind, tidally assisted route to land on the northern beaches, or to sweep around the northern or southern tips of the island to land on the level shelving beaches of the southern side. Similarly, from the south, the crossing is crosswind or downwind in the summer to the southern side of the island, across shorter stretches of water. Paddling north around the tips of the island from the south side has the potential to be more difficult in an adverse tide and a northerly wind which would generate steep choppy waves blowing onto the island.

These conditions suggest a seasonal asymmetry of access at Thompson Island and suggest, if this modern weather pattern can be demonstrated to extend into the ancient period, that paddling north from the south was navigationally a more favorable prospect than paddling south from the north. The prevalence of occupation on the south side of the island is suggested by the more gradual beaches and proximity to shellfish beds, noted in the historic period on the southern tip of the island (Luedtke 2000). An understanding of the seakeeping abilities of a floating individual or mishoonash, when loaded with people, gear and lithic raw materials, may assist our ability to further interpret the Thompson Island artifact collection within a given Boston Harbor Islands naviscape.

Similarly, the application of a naviscape perspective to other drainages, such as the Taunton River drainage in southeastern Massachusetts and eastern Rhode Island, begins to reinforce connections between conceptualized core areas of ancient occupation and seemingly disconnected archaeological site locations in southeastern Massachusetts (Thorbahn 1984). Conceptualizing the historically documented Wampanoag Canoe Passage ([www.tauntonriver.org/canoepassmaps](http://www.tauntonriver.org/canoepassmaps) access.htm) as a main water trail shows the northeast-southwest link (again favored cosmological directions) between the North River with access to Cape Cod Bay, and the Taunton River with access to Narragansett Bay. The feeder streams of the Taunton River, such as the Nemasket River, Town River, Three Mile River, Hockomock River and Mattapoisett River, and judicious portages, also allow north-south water connections, including to Buz-

zards Bay, by and through the larger and small lakes of the drainage: Assawompsett Pond, Lake Nippenicket, Lake Sabbatia, Stump Pond, Robbins Pond, Monponsett Pond, and Quittacas Pond.

A preliminary review of archaeological site files at the Massachusetts Historical Commission indicates that, not surprisingly, those recorded archaeological sites with long occupation histories are located at the connecting points of lakes to streams and at or near stream junctions within the Taunton River drainage, also long a focus of archaeological research and avocational archaeology in Massachusetts (Thorbahn 1984). Site-based understandings of terrestrial landscapes are conditioned by site identification and predictive modeling, which allows only a partial picture of ancient terrestrial landscapes. However, the naviscape can offer a supplemental approach by combined interdisciplinary studies of paleoenvironmental data, available existing archaeological site locational data and concurrent marine navigational landscape reconstructions, utilizing climate reconstructions, historic maps, oral histories and primary documentation to approximate the basic reference points of a given view from three feet above the water.

The integration of the particulars of a given design of floating individual, such as the given carrying capacity suggested above for people, gear and/or raw lithic materials could be productively inserted into archaeological discussions. As current literature describes indigenous southern New England pre-colonial period watercraft, the subtractive design where material is removed – described as the logboat or dugout canoe – was preferred (e.g. Plane 1991, Volmar 2006). The Nipmuc and Wampanoag people's mishoonash or mushoonash are hollowed and scraped tree trunks with shaped bows, sterns and sections. Constructed in multiple lengths from variable types of hard and soft woods (oak, elm, pine, chestnut etc.), these floating individuals are predominantly heavy depending on the type of wood used, and laterally unstable to inexperienced paddlers. As noted by Plane (1991) and Yentsch (1981), accidents and drownings associated with colonial use of log boats and dugouts, by both skilled and inexperienced paddlers, were substantially documented in the historical record.

The construction process is extensive, historically using a combination of fire, stone, shell and later metal, woodworking tools to gradually work the tree trunk to the desired shape. The art of this construction lay in choosing the appropriate tree, as a check or deformity discovered in the inner layers of the tree encountered during construction might ruin the intended hull shape. Subsequent repairs to these individuals, such as those noted on extant historic period examples (Fowler 1975, Kevitt 1968, Petzold 1961, Plane 1991), were not ever as robust as the original wood. It is understood that, because of the weight and extensive construction time, these individuals were constructed for use in particular locations and were not portaged over significant distances, instead the people and loads shifted from individual to individual. As noted by Robinson and Stedler (2011), the sinking of these individuals with stones was practiced in freshwater environments. Because of their solid construction these individuals are sturdy, and will carry forward momentum once moving, but are not maneuverable relative to other potential watercraft designs, such as those composite designs more commonly associated with northern New England and subarctic regions, those known etically as the "birch bark canoe" and the "skin boats" such as the qayaq and umiak. A detailed discussion of the names of structural parts and associated gear among indigenous peoples in their own languages would require an entirely separate article and so will not be discussed further here (see for example Dyson 1986, Golden 2006, Heath and Arima 2004, and Petersen 1986 for detailed discussions of baidarka, qayaq and umiak structure and gear in Aleut and Greenlandic).

The composite designs require a variety of organic materials to construct, utilizing multiple species of woods and wood products such as tree sap, and animal products, such as fat, skins, sinews, and bone, which are altered with stone or later metal tools, and combined into a floating individual. Floating individuals could be constructed with bark of the paper birch (*Betula papyifera*) or other barks such as elm or chestnut, over a framework of spruce and cedar, and lashed together with spruce root and waterproofed with sap (Adney and Chappelle 1983, Jennings 2002). These individuals are easily repairable, relatively light, easily

driven, portable, and maneuverable with paddle or pole in fast moving waters, and will ride lightly on ocean swells.

Skin-covered floating individuals are equally light, maneuverable and flexible, but require replacement of the entire skin covers at regular intervals. Pinniped skins, such as those from varieties of seals and walrus, were preferred by sub-arctic and arctic groups for the covering of their floating individuals. However, the utility of skin covered individuals rapidly decreases in temperate climates as the skins degrade in sunlight and warm waters, as for example the rapid degradation of the walrus skin covers of Aleutian baidarkas during their attempted use by 19th-century Russian-American Company traders in Polynesia (Dyson 1986: 56). In northern New England, alternate skin types were used, such as moosehide-covered canoes for expedient freshwater river trips from upstream hunting locations in Maine by Penobscot peoples (Prins and McBride 2007); but not for extended offshore use, for which the historic Micmac and Penobscot peoples preferred bark covered floating individuals (Jennings 2002). The extent of use of other terrestrial mammal skins in this region, such as whitetail deer or caribou is open to further research.

However, the use of caribou, seal or walrus-covered floating individuals may be inferred for early Holocene post-glacial occupations of southern New England, in which some form of boreal tundra conditions were prevalent, and glacial lakes extensive (e.g. Loring 1980). Historic parallels from Canadian Inuit groups indicate that caribou skin-covered floating individuals were used to hunt migrating caribou at river crossings (Arima 1994) in a seasonally predictable pattern. The timing of hunting may be directly correlated to the selection of pinniped and caribou skins at their preferred stages of maturity and season for the subsequent workability and robustness of the skins for production of clothing and floating individual coverings.

Although limited in southern New England, well-documented Paleoindian period occupations, such as the Bull Brook site in Essex County, Massachusetts, offer tantalizing hints of Paleoindian potential for use of skin-covered floating individuals.

The relative topographical position of Bull Brook on a flat elevation at converging navigable waterways above the Atlantic coastal plain, at the confluence of a waterway and offshore island known as Jeffrey's Ledge, and the extensive lithic assemblage (Robinson et al. 2009), suggests sufficient skilled labor and resources to construct floating individuals for efficient hunting of migrating large mammals. The layout of the Bull Brook Site and its artifact distribution is inferred to represent spatial divisions of specialization in male and female labor (Robinson et al. 2009), and based on historic parallels from arctic cultures (Golden 2006, Heath and Arima 2004, Petersen 1986 etc.), suggests that activities at this location could have included the sewing of tight, waterproof garments, and perhaps also the skin covers for floating individuals, which were a female occupation, while the hunting and fitting out of the hunting party, which may have included floating individuals, was a male purview.

As the construction for skin-covered floating individuals involves construction of a skeletal framework and the sewing of skins, both of which materials are portable, the archaeological visibility of skin-covered floating individuals is much less than either bark-covered or subtractive log-based designs. After Jennings (2002), the construction site for a bark-covered floating individual ideally is located close to sources of growing materials, and involves an extended stay, and hence a source of fresh water and a level place to set up a campsite and a construction bed. The construction bed consists of the individual's shape in plan form on a level, packed earth floor, with vertical stakes placed to hold the bark in place, and a supply of heavy stones to anchor the bark and frameworks during construction. A nearby fire to boil water for hot water bending of interior structure would also be expected. Archaeologically, such a curvilinear placement of postmolds, charcoal and large stones, could potentially be obscured in plowzone or missed within other potential occupation areas or interpreted as multiple occupation or resource processing areas. Similarly, the construction site for a log-based floating individual could include multiple charcoal concentrations, and be directly adjacent to navigable water.

The discernible presence of proxy artifacts is problematic (Rainey 2000) in the cases of compos-



ite designs, which rely on cutting tools that may normally be carried as part of personal or group toolkits, such as bone needles and knife forms. Historically, bark-covered floating individuals were constructed with minimal tools (see Jennings 2002:59-63 for a construction sequence), including a hatchet and crooked-knife or mocotaugan (<http://www.mocotauganthebook.com/>). The mocotaugan, with a curved iron blade, was potentially an evolution of a hafted beaver incisor, and is the ideal tool for shaping straight grain woods such as the spruce and cedar required for the gunwales, ribs and interior structure of a bark-covered floating individual.

Similarly, for animal parts and skin processing, the semi-circular ulu knife form of stone or metal, is the historically documented implement of choice in arctic skin-covered floating individual construction (Golden 2006, Heath and Arima 2004, Petersen 1986). These implements also have gendered associations among sub-arctic and arctic peoples, with the ulu associated with female activities, and the crooked-knife a male implement (Adney and Chappelle 1983, Jennings 2002) consistent with male and female gendered divisions of labor in floating individual construction, with the frame constructed by men and, in the case of skins, the covering prepared and finished by women. Therefore, the presence of beaver teeth, needles or stone drills, bone handles or ulu (semi-lunar) knife forms within archaeological assemblages could be inferred to suggest the potential for a composite vessel construction toolkit. However, as Rainey notes, the use of direct analogy for these associations, especially of the ulu tool form, in New England, should be tentative, and other data sources are required.

With this caution in mind, the prevalence of ulu or semi-lunar forms and ground stone woodworking tools—gouges, adzes, axes and scrapers—in Archaic period artifact assemblages in southern New England could theoretically suggest the potential for either composite or subtractive floating individual design construction during the Archaic Period. The Woodland Period in southern New England is assumed to be the realm of subtractive designs, while in northern New England the focus was bark-covered composite designs, based on extension of historic period ethnographic information

and contemporary tribal oral traditions. More specific research is required to define specific floating individual construction footprints in the archaeological record and regional ranges of raw materials such as paper birch and the extent of overlap within drainages between subtractive and composite designs.

Additional sources of site specific contextual data would be required for evaluations of potential construction locations, and especially to refine our understandings of potential trade in raw materials for floating individual construction from northern to southern New England. Experimental archaeological analysis of the construction of mushoonash at Plimoth Plantation, for example, might assist to further define the archaeological signature of a subtractive floating individual construction location, as noted in Volmar (2006). Research questions for such an analysis could include: how much charcoal is produced during construction of an average 12 to 14 foot mishoon? Is that material concentrated or evenly distributed around the construction bed? Are broken tools discarded in similar patterns or recycled?

During various levels of archaeological subsurface sampling, refinements in field methodologies may assist in recovery of artifacts, features and deposits associated with floating individuals. The following methodologies could include: close interval shovel testing of flat terrain adjacent to the historic or expected ancient period shoreline; open plan excavation and/or linear trenching of the same area to define any construction bed features in relation to occupation areas; and systematic collection of charcoal samples within these excavation units. During analyses, measurements of weights and species of charcoal may assist to infer the characteristics of subtractive floating individual construction and spatial layout of potential construction beds. Lithic artifact assemblage evaluations based on refinements of use-wear analyses could indicate the prevalence of wood-working versus skin-working signatures and potentially even differentiating wood species through use-wear patterns for composite floating individual construction locations.

Existing archaeological research designs may also be refined to incorporate an explicit awareness of

floating individuals and the naviscape concepts discussed above, with the following research questions:

- What is the nature of the adjacent water; is it navigable, fast or slow moving, fresh or salt, tidal or brackish etc.?
- Is the area at a junction of water bodies or distinct landforms?
- What terrain and water features are within a 1.5 mile radius of this area's water?
- Is this place known in folklore/oral history as a site of traditional transformational activities or as toponyms associated with resources or potential naviscape sign posts (e.g. Maushop's islands/Gloo(u) skap's moose hunt waypoints etc.)?
- Is the location at a fall line or potential fishing station or historically documented weir/ford location or terrestrial trail junction?
- Are there known resources in the area for construction of floating individuals (e.g. paper birch trees; level well-drained areas within 10 meters of navigable water) or which might require floating individuals to access (e.g. shellfish beds, fishing grounds)?
- Is the water area favorable for the prevailing winds; sheltered or exposed?
- What are the winter and summer weather conditions in this area?

- What is the tide range and slope of water access; is it a rocky or smooth shoreline?
- How has this area been affected by post-glacial sea level changes?
- If archaeological sites are recorded in the area, do they include artifacts suggestive of floating individual construction?

These research questions are easily integrated into archaeological research designs, allowing consideration of floating individuals in the ongoing practice of archaeology in New England. Whether a naviscape perspective is also of value to further archaeological theory and method remains to be demonstrated through further research. Balanced consideration of land and water in the past, regardless of approach, needs to be explicitly addressed by archaeologists in this time of rising water and decreasing undisturbed lands. The floating individual may carry our scholarship, metaphorically, for the rest of the journey of discovery.

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## A Preliminary Report on Surface Collections and Initial Recovery Efforts on an Archaic Site on the Town Forest Branch Brook, Western Danvers, Massachusetts

David P. McKenna

The site I will be discussing here lies on a gentle slope with its highest elevation of 70 feet above sea level, sloping southward to an elevation of 60 feet, with a seasonal stream running along the southwest edge, which flows into the Ipswich River meadows a few hundred yards downstream from the site. (see Figure 1) The soils on the upper portion of the site consist of a 10-11 inch (25-28 cm) plow layer of coarse sandy loam, and subsoil consisting of coarse gravel at least a meter in depth. The lower portion of the site has a substratum of fine sand at least a meter and a half deep, devoid of rocks. The field where artifacts have been found was planted in potatoes from at least the 1950s to about 1970, when agriculture stopped and the field reforested. It was cleared of trees in the late 80's and the top third of the site was developed for grave lots by the cemetery that has owned the land

since 1944. Historical data on its use before that time is still being researched, but it is believed to have been owned by the descendants of Sir Robert Goodale since the Contact Period: "In 1636 and 1638 he received grants of 20 acres each in that portion of town which became known as Salem Village, and he gradually acquired by purchase similar grants made to other early settlers, until he was the owner of a tract of land at Bald Hill comprising 480 acres, which was confirmed to him by a town grant on "7th: 11th mo. 1651."" (Bell 2008:1)

I first became aware of Indian activity at this site shortly after my family moved into the 1806 Major William Goodale farmhouse in the early 1960's. I was helping my friends pick potatoes on a field owned by the cemetery, which their fathers, James and George Watson, rented and cultivated. George

Watson found a broken blade (see Artifact 1 in Figure 2) and gave it to me, telling me they always found arrowheads when plowing and picking potatoes there.

I was hooked! Every afternoon after school, Saturdays, or any free time I did not have chores was spent walking the field, my head swiveling left to right, and pouncing on broken bits of prehistory turned to light by the plowshare. With amazing attention to detail for a pre-teen, I actually even plotted the location of each worked piece of stone I found. The collection included: Starks, Nevilles, Snappit or Squibnocket Triangles, Brewerton Side-Notched, a jasper Jack's Reef Corner-notched, a broken Genesee, Madisons; drills and awls (Figures 2-3), and two pieces of an unfinished winged bannerstone, which broke during drilling (Figure 9). (identifications based on Boudreau 2008, Hoffman/Fowler 1991, Wilbur 1978, Randall 1985)

Materials ran the gamut of rhyolite, including Marblehead and red, argillites, slate, quartz and Onondaga Chert, as well as the aforementioned red and mustard-colored jasper, similar to materials from Pennsylvania or Lime Rock, RI (Waller 1999: 22; Luedkte 1987:37-45) and a few European gun flints. A plethora of flakes (thousands) indicates that this was a tool manufacturing site. But not a single scrap of ceramic has yet been recovered. Also shown on Figures 3 & 5 is a small cylindrical piece of slate, 3.5 cm long, ground to a point at one end and the other end polished, with four flat bevels, producing a diamond shaped cross-sectioned tool, which may have been a drill (Figure 5). Coincidentally, the Jack Reef point is of the same material that Jeff Boudreau notes is a common material for said points on page 45 in *New England Typology of Native American Projectile Points* (Boudreau 2008:45).

During the 1980s I developed an interest in the science of archaeology, but had no access to the field, as it was completely forested over. In 1983 or so, the Massachusetts Historical Commission issued a permit to a team doing a site survey for an Environmental Impact Study on a nearby office park (Gorman 1985), and I showed the Project Archaeologist, Debra Randall, the pieces I had collected, which she identified as Early Archaic, with one possible bifurcated point, more likely just

damaged on the stem to appear bifurcated. She visited the site and registered it with the State as the "McKenna Site" (which I did not discover till 2009).

However, later in the 1990's, the cemetery, of which I was now superintendent, decided that they needed to expand into the area registered as the McKenna Site. Knowing that there was possibly a village or at least an area that had seen significant occupation on the site, I convinced them to remove the trees in the least invasive method possible, and to develop **only** the upper quarter of the lot where I had found very few artifacts. The enticement was that I would excavate the rest of the site archaeologically, then build it up a bit more than one meter in spots, to the elevation needed to develop it for grave lots, at no significant cost to them. While this might serve to "encapsulate the site", it would not be of sufficient depth to protect it. And it would render it inaccessible for study, beneath the modern day burials.

About the same time I discovered the existence of the Massachusetts Archaeological Society and its Northeast Chapter, and immediately joined both, learning a great deal about the art and science of archaeology.

Thus I began a systematic removal and sifting of the plow layer, which recovered a few other broken bifaces and a well polished and shaped artifact, which another avocational former Chapter member thought might be a sinew stone; but has others puzzled, especially professional archaeologists, (Figure 6) and any opinions are welcome.

Curiously enough, one broken biface which I found while screening had an unusual triangular cross section that looked familiar. Sure enough, looking through my boxes of broken pieces, I came up with the other half (found some thirty years earlier), broken when some long-ago artisan attempted to remove a wicked stack, and it broke in two (Figure 7). Another broken tool was found in 3 pieces at various times (Figure 8).

After removing the A Horizon, starting in the area where I had found the greatest concentration of artifacts, I scraped with a short-handled hoe and trowels to reach the B Horizon, the soil undis-



turbed by the plow, looking for any abnormalities. Eureka! Last autumn I discovered what appears to be a hearth in the third test pit, a deposit of silty soil in an area that is otherwise all loose gravel (Figure 4). It contained bits of charcoal, and what appeared to my unprofessional eye to be fire-blackened stones.

It was time to call for trained, professional assistance. I enlisted the expertise of Eugene Winter, Suanna Selby-Crowley and Eric Metzger of the Northeast Chapter, and then Dianna Doucette, the Senior Archaeologist at The Public Archaeology Laboratory, Inc. (PAL) one of the Chapter's guest speakers, all of whom were very excited about the finds, especially when told that it was believed the site extended into the Danvers Town Forest, in an area that appeared never to have been plowed. Flakes found in a dirt-bike path there were still razor sharp; not blunted like those that had been tumbled by the plow in the tilled field. Three broken points were also found in that area. Figure 2 shows two of them (Items #8 and #10).

In October of 2011 a formal survey was begun, a grid was laid out, and excavation of a few shovel test pits was conducted, which produced a few flakes in the areas one would have expected to find such materials based on past surface collecting reports. In the spring of 2012 it is hoped that excavations will commence in earnest, especially the fire-pit, which was covered with landscape fabric and a foot of sterile silt to protect it from the winter elements. The dig will be organized by the Northeast Chapter, hopefully leading to new insights into the lives of those who lived here thousands of years before we came to dig.

There is also a spot a few hundred meters away where cemetery staff dug two graves (for current day interments, not to be confused with Native American burials), close together in an area of alluvial silt near another brook, and discovered a 1 inch (2.5 cm) layer of what appears to be wood ash, roughly 3 feet (1 meter) below grade, just below a very deep topsoil layer. Samples have been sent out for chemical testing to determine if it is in fact wood ash, or just leached organic staining. (The material does have that "greasy" feel that one gets when handling a half burned piece of wood.) Was this a possible dugout canoe-making site? Or

perhaps was it just a spot where wood ash or simple organic matter collected? A broken knife-blade was found on the bank of the brook nearby, but nothing has yet been found in conjunction with the ash layer. The adjacent brook, while barely navigable today, could well have been in centuries past, and was only 150 meters from the Ipswich River, which "served as a Native American and colonial era travel highway." (Goff 2011:1, 5)

As an aside, a few hundred meters away in the area of the Town Forest there is a cliff face overlooking the stream with a three-foot-deep overhang. The hillside in front of it is a litter of frost-fractured talus of blue shale. Could this have been a rockshelter for some nomadic hunting people at some distant time in the past that has collapsed under the weight of time? Perhaps this could be another investigation for future archaeologists.

Additionally, just a couple hundred meters away, the site of an ancient grist mill, operated by the Buxton Family around 1640, has been identified (Tapley 1923). There are the remains of an earthen dam and a couple of square depressions that would likely have been the location of the mill. A plot plan of the site has been recorded with the Danvers Town Archivist. Perhaps a historic archaeological survey could be done there as well. The good news is that the site lies on town-owned conservation land, and is thus protected from development.

The serendipitous part of all this is that as a teenager I had the insight to keep detailed records of my finds on this site, creating Bullen-type "silhouette" drawings (Bullen 1941) of each artifact I found, numbering each, and plotting the location of each find on a plot plan (Figures 10,11). Having had no training whatsoever, nor ever having seen Bullen's work, I kept the documentation in order to know where I should concentrate my search for more points; but it turned out well in the end, despite the selfish initial intent.

Danvers has several areas where artifacts have been found in great quantities, especially along the tidal rivers where quantities of ceramic sherds have been collected and curated at the Danvers Historical Society headquarters. Danvers was

home to both the Agawam, led by Sachem Masconomet at the time the English Colonists arrived, and the Naumkeag led by Sagamore George, one of the sons of Masconomet. (Webber 1877:181,201, and Perley 1912:4, 48) Both appear to be part of the Pawtucket nation. (Russell 1980:22-23) The tidal Danvers River apparently was the tribal boundary in more recent times, but who were the peoples who left these bits and pieces of their lives behind in this vale after the Great Ice receded, for us to puzzle over eons later? How did they live? What did they feel? What can we learn about and, more importantly, from them?

Had it not been for the fortuitous chance of George Watson giving a broken blade to a young boy, this site would likely have been bulldozed and destroyed by now. Instead, there is a chance to excavate and study it before it is developed for cem-

etry lots.

### Conclusion

The evidence collected to date would lend itself to indicate to this untrained observer, a site that was occupied for at least 6,000 years, possibly from the Middle Archaic to the Contact periods. The discovery of what appear to be hearths may provide adequate charcoal for dating the site. So far no evidence of postholes has been discovered, but that potential still remains, as does the possibility of finding organic material in the hearth. The total lack of ceramics is a surprise to the author, given the apparent range of occupation, unless any ceramic sherds were totally ground up by the action of modern plowshares. Perhaps potsherds will come to light when the hearth is excavated.

Future study will be conducted in a more systematic manner, and the results will be scientifically documented, reported in this publication, and placed on file with the archives of the MAS and

MHC.

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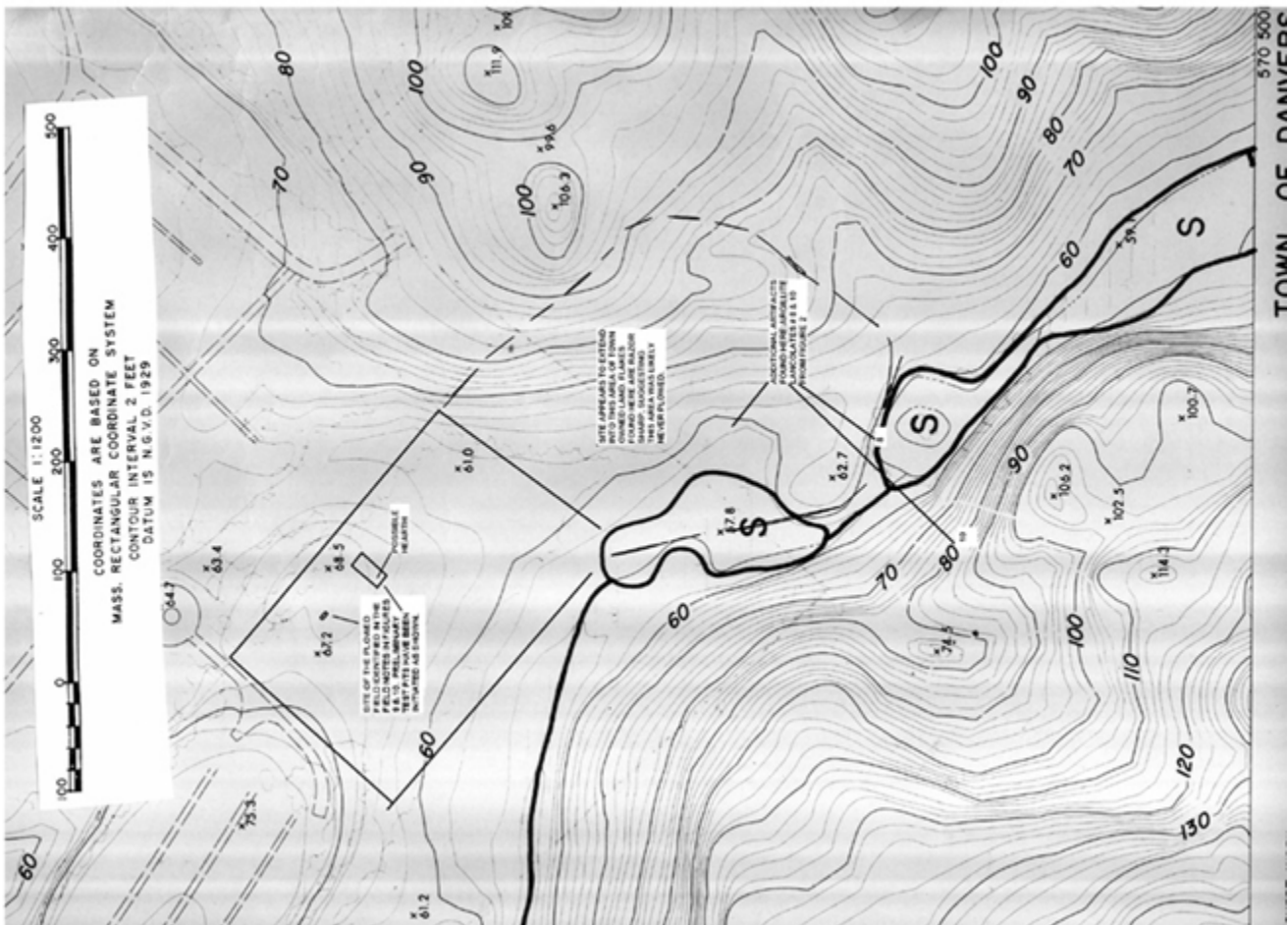


Figure 1. Site locus

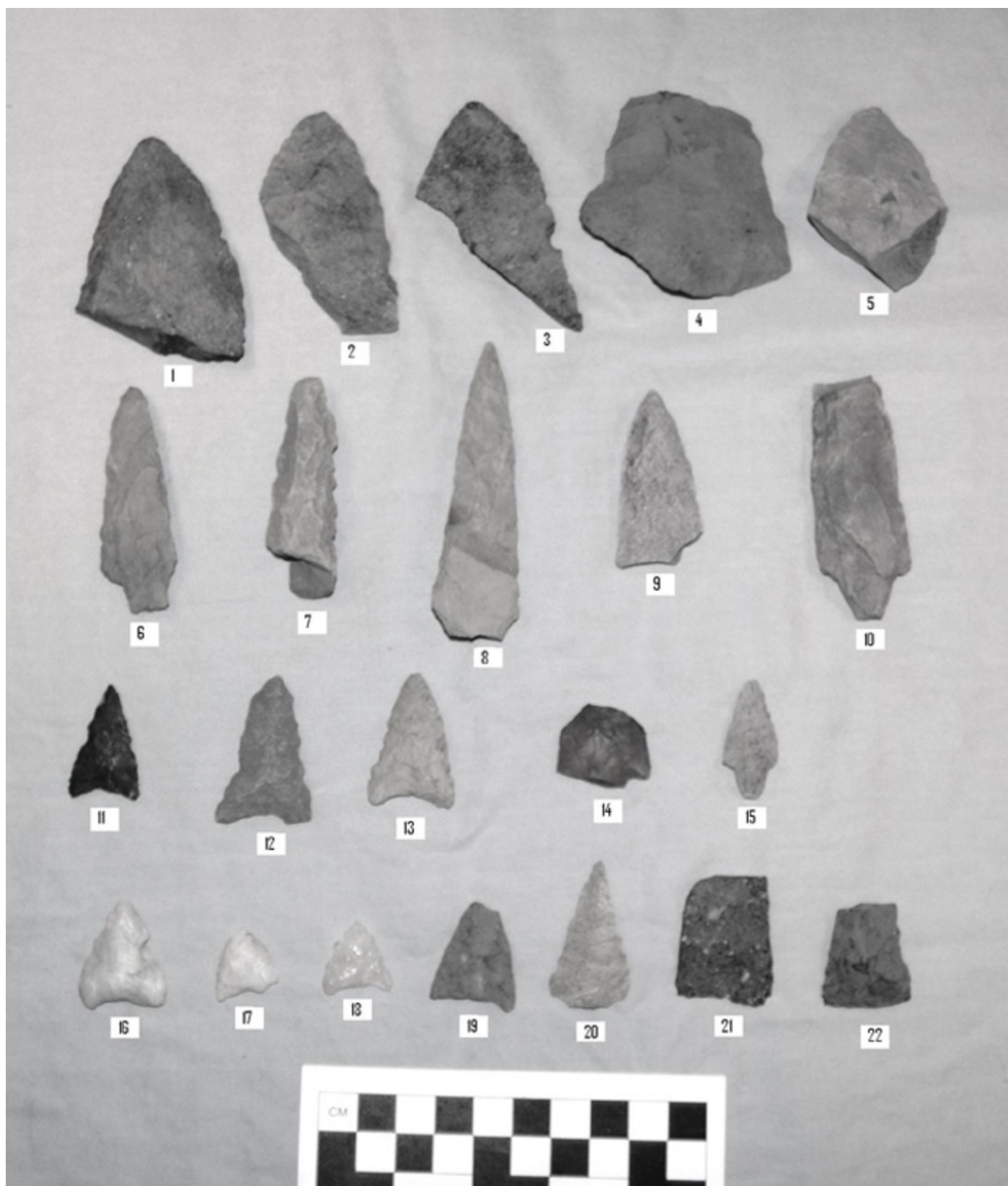


Figure 2. 1-5 - rhyolite blades (#1 was the one given me by George Watson). 6,7,8,10 - argillite points, 9 - quartzite, 11-13, 19 - felsite Triangles; 14 - red/mustard jasper Jack's Reef corner-notched; 15 - Small Stemmed; 16 - quartz Triangles; 20 - broken stemmed point; 21,22 - square based felsite blades.

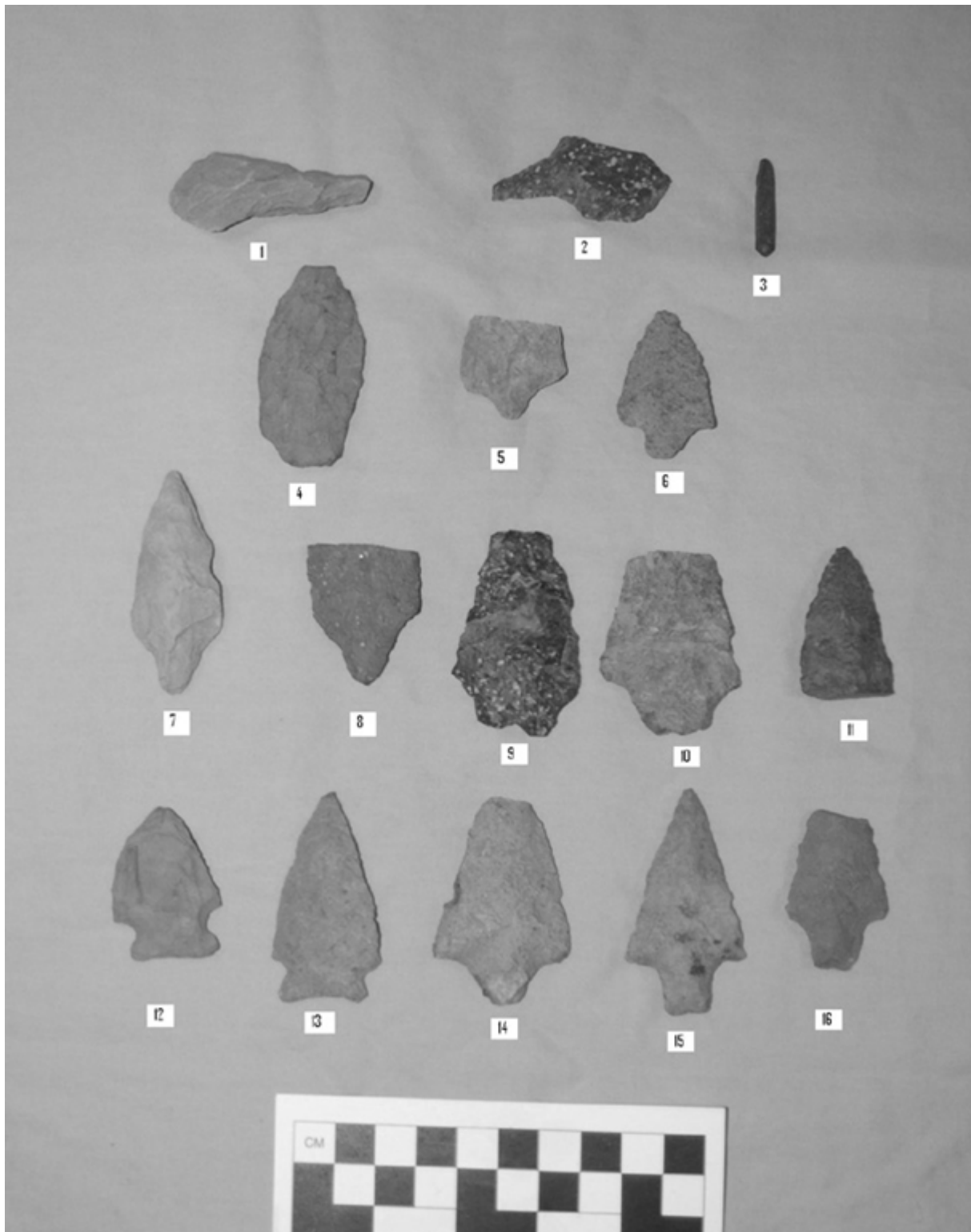


Figure 3. 1 - argillite drill; 2 - Marblehead felsite thumb awl; 3 - slate drill (see figure 5 for closeup); 4 - ovate blade of possible quartzite; 5, 6 - possible felsite Nevilles; 7, 8 - Starks, 7 - argillite, 8 - red felsite; 9 - Marblehead felsite possible Bifurcate base, but more likely just damaged; 10, 14 - Atlantics of felsite; 11 - red felsite tip; 12, 13 - Susquehanna Broads, 12 - argillite, 13 - felsite; 15, 16 - Nevilles, 15 - brown metamorphosed sandstone, 16 - red felsite



Figure 4. Section of Trench Showing Soil Horizons

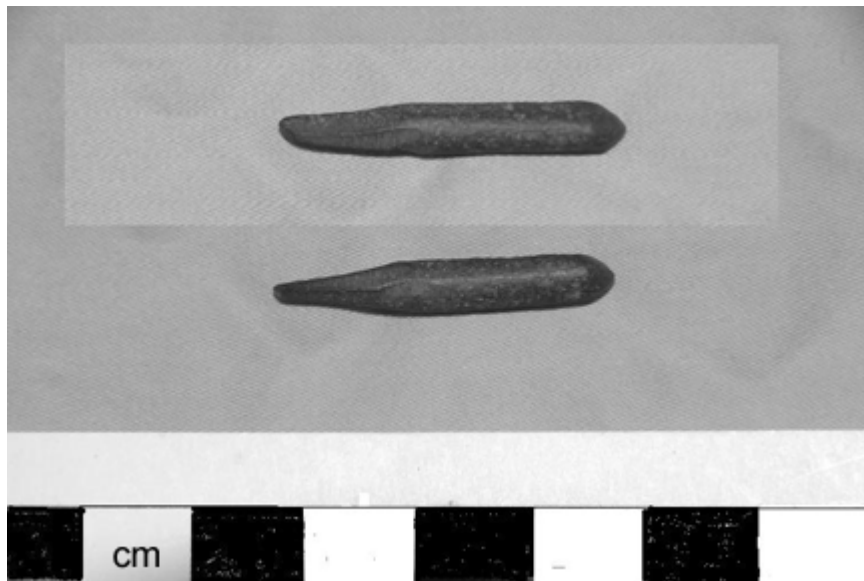


Figure 5. 3.5 cm drill roughly 0.5 cm diameter; one end beveled approximately 1 cm into a diamond shaped cross-sectional point.



Figure 6. Dark polished stone 7x4x3 cm with several well defined grooves running diagonally. Both ends are broken, but it appears there may have been another knob at the "top" end.

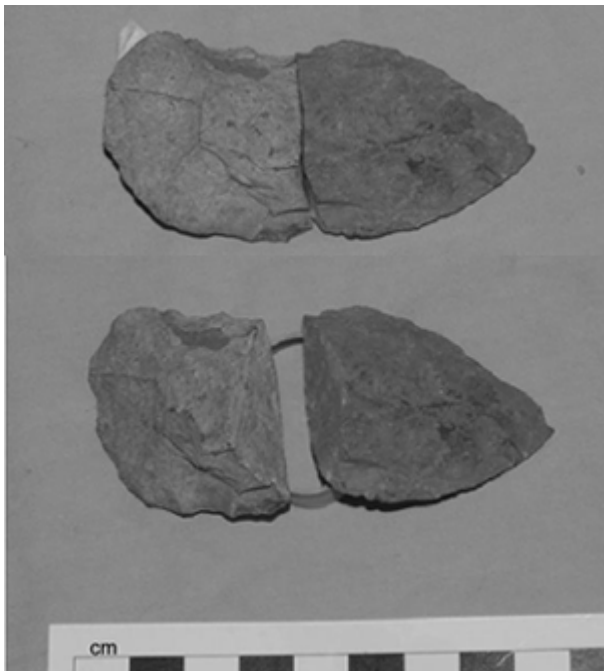


Figure 7. Biface found in two pieces 30 years apart, but fairly close on the locus (plotting is still in process). Apparently broke when the artisan tried to remove a stubborn stack or knob. Note unusual triangular cross-section.



Figure 8. Biface found in three pieces at three separate times



Figure 9. Bannerstone would have been as much as 22-26 cm wide if whole; apparently broke while drilling, after shaping the wings.

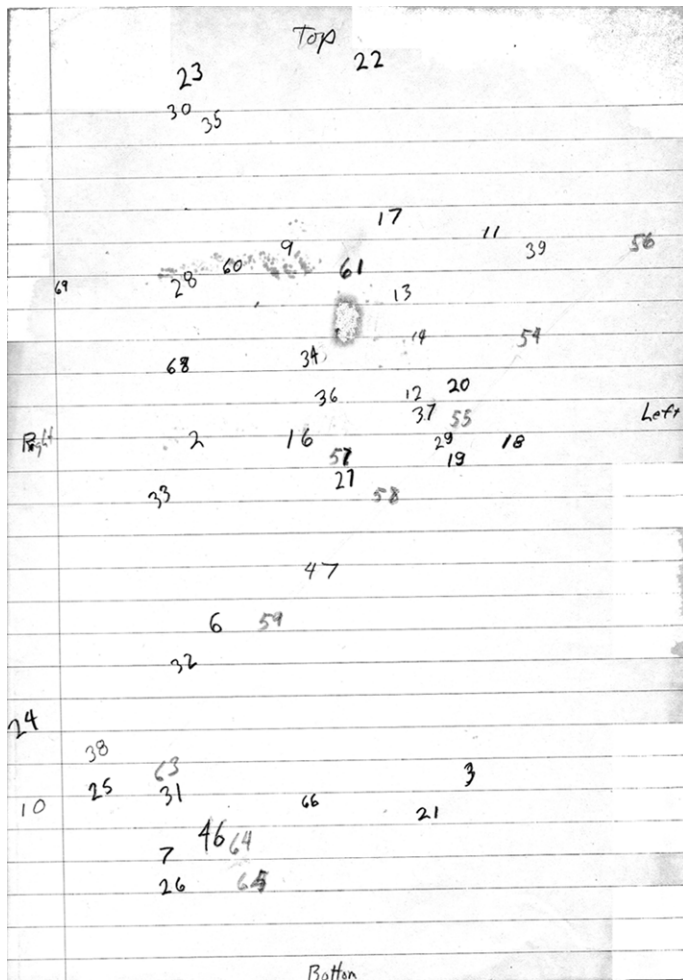


Figure 10. Site of Potato field: Top is to the Northwest as delineated in Figure 1.

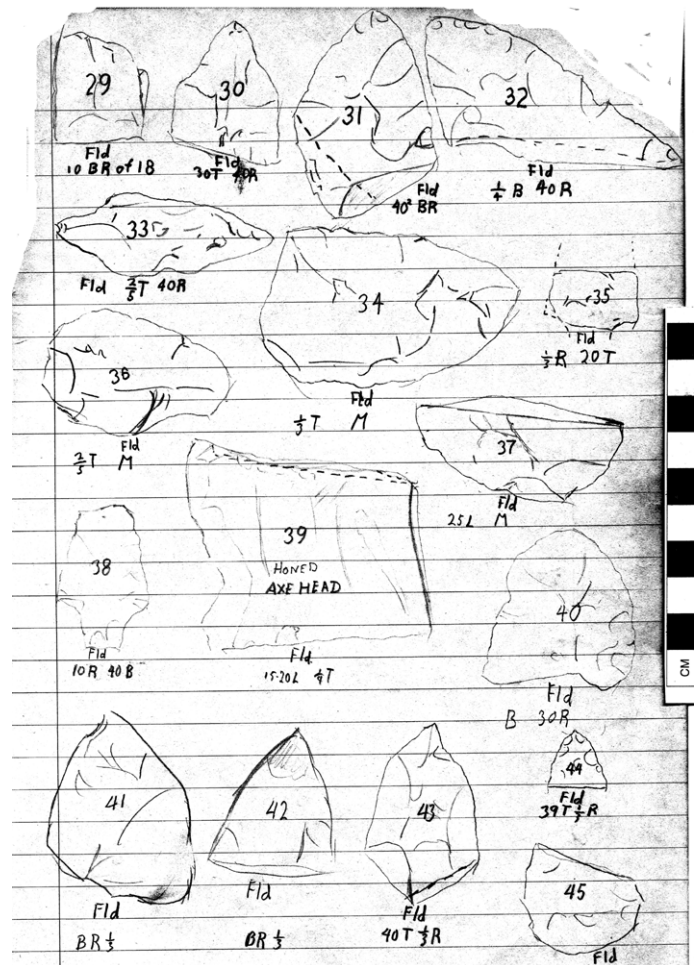


Figure 11. Sample of Bullen-like sketches of the artifacts collected in the 1960s.



## Whaletail Pendants

William B. Taylor

### Introduction

Included in this article are some additional unique artifacts from the Edward G. Bielski collection. His territory for collecting ranged from Marshfield to Plymouth and Carver.

The most common materials used to make whaletail pendants were red, black and green slate or argillite. The basic form resembled a whale's tail, and often had fanciful colored markings (e.g., white stripes) along the flukes. Usually, notches are positioned along the center portion of the pendant (Fowler-1966; Hoffman-1991). This whaletail form is thought to have been used for personal adornment and worn around the neck. Two Bielski examples are shown in Figure 1. A third whaletail pendant was in this collection but over 85% of it was restored and thus was not considered worthy of inclusion in this article.

Some whaletail pendants are found in red ochre deposits associated with the Transitional Archaic Period (ca 3700 to 2700 B.P.). One of the most popular beliefs is that some examples were used in the performance of a ceremonial rite (Fowler 1966). Figure 2 shows a highly polished specimen without central notching. No. 3658 (Robbins 1967) was found by my father on 7/4/1949 at the Titicut Site, within a pit containing red ochre. Also included with this pendant were a classic plummet and a small piece of graphite (plumbago). This group of artifacts points to a possible deep sea fishing industry during the Transitional Archaic Period (Fowler 1966). This artifact measures 5 inches long (12.7 cm) by 1 ½ inches wide (3.8 cm) and is ½ inch thick (1.3 cm). This pit was found in Section D, Map 8, Feature No. 116 (Robbins 1967).

Another large red ochre deposit based on a strong fishing industry is the Caddy Park feature (19-NF-467) containing 256 artifacts. This remarkable discovery was found in 1999, while building a new

Tot-Lot park at Wollaston Beach in Quincy, Massachusetts. This feature was entirely covered with red ochre in several pockets, which held tight clusters of tools relating to the fishing industry. These tool kits contained six plummets, a whaletail atlatl weight, a broken whaletail pendant, a whale effigy gouge, a stone polishing kit, and four large felsite blades, the longest of which measured 13 inches (33 cm). There were also seventeen quartz edge tools. All of these artifacts could have been used to hunt and process swordfish, whales, seal, sturgeon, walrus, etc., found along our coast, by using canoes in shallow waters. Many of the artifacts are thought to have been placed in bags, baskets or containers, all with red ochre sprinkled over these artifacts. This brings us to the question of the purpose of this large deposit. Were these tools cached for future safekeeping or to be retrieved during another season? Perhaps this was only a ceremonial deposit to honor lost fishermen during a sea tragedy (Mahlstedt and Davis 2002).

Jeff Boudreau told me (personal communication 2010) of witnessing another possible use of the whaletail pendant. He watched a demonstration where the whaletail was attached to a 5 foot spear shaft, for sanding the shaft with sandpaper. The shaft was spun using a leather strap to rotate it while tied to the top was a whaletail pendant, which balanced the shaft and kept it in alignment while acting as a fly-wheel to keep a steady and smooth rotation during sanding. Perhaps a whaletail pendant could also have been used for sanding a 5 to 7 foot atlatl dart. Modern replicas are sanded in this manner (Berg 2010).

Figure 3 shows three smaller whaletail pendants from the Titicut area. All are notched and were found on the south side of Green Street, in the Conant Garden Site in Bridgewater, Massachusetts.

## Conclusion

These whaletail pendants are rarely found complete on the surface, because of their delicate manufacture. The examples shown here are well made and deserve closer study.

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(c) William B. Taylor, 2012



Figure 1. No. 1 is made of brown slate and measures  $5 \frac{7}{8}$ " (14.9 cm) long by  $1 \frac{3}{8}$ " (3.5 cm.) wide and  $\frac{5}{16}$ " (0.79 cm) thick.  $1 \frac{3}{8}$ " (3.5 cm) of one fluke was restored by William S. Fowler. No. 2 is made of gray slate with white streaks thru the flukes. It measures  $6 \frac{1}{2}$ " (16.5 cm) long by 1" (2.5 cm) wide and is  $\frac{1}{4}$ " (0.64 cm) thick. One fluke was restored by William S. Fowler.



Figure 2. Whaletail Pendant No. 3658, dug at the Titicut Site in 1949 in a ceremonial red ochre deposit.

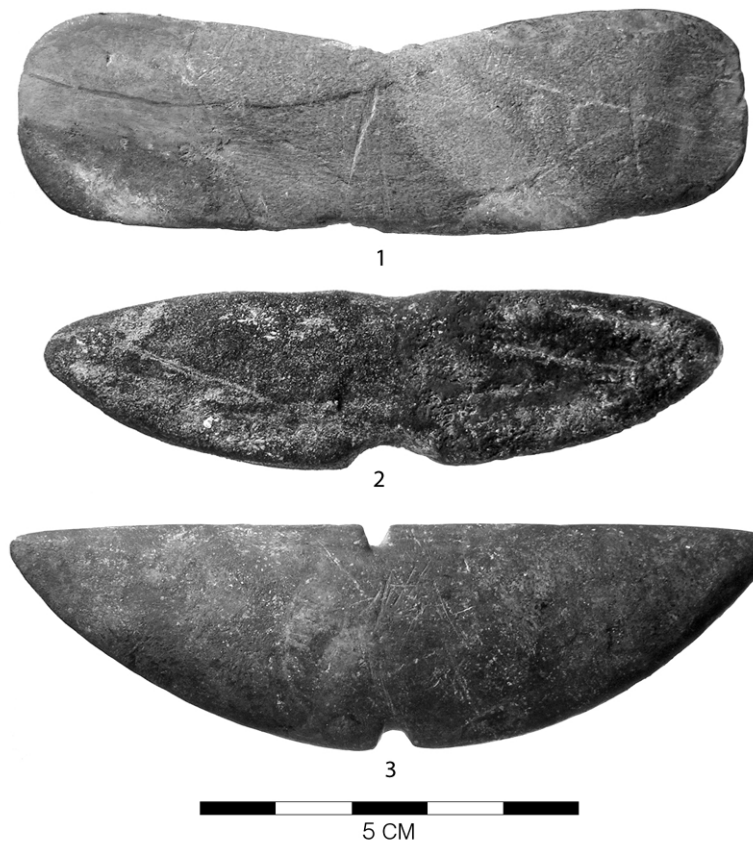


Figure 3. No. 1 is  $3\frac{3}{4}$ " long (9.5 cm) by  $1\frac{1}{8}$ " (2.8 cm) wide and  $\frac{1}{4}$ " (0.64 cm) thick. There is some restoration on both flukes. Material is argillite. No. 2 is  $3\frac{1}{2}$ " (8.9 cm) long by  $\frac{15}{16}$ " (2.4 cm) wide and  $\frac{1}{4}$ " (0.64 cm) thick. One fluke is restored. Material is black gneiss. No. 3 is 4" (10 cm) long by  $1\frac{3}{16}$ " (3.4 cm) wide and  $\frac{3}{8}$ " (0.95 cm) thick. Both flukes have some restoration. Material is black slate.

## A Place of Respect for the Robbins Museum

Victoria Rourke-Rooney

*(Editor's note: This article was originally given as a paper presented at the World Archaeological Congress in Indianapolis IN in 2011. Funding for the author to attend the meeting was provided by the MAS Board of Trustees.)*

### Introduction

This article has resulted from research that the author conducted in order to make commentary on the section of NAGPRA (The Native American Graves Protection and Repatriation Act of 1990, 43 CFR10.15(b)) which involves human remains, grave goods, sacred items, and objects of cultural patrimony where there has been a failure to claim and no repatriation has occurred. It is my belief that the Place of Respect (as described later in this article) provides a means of honoring the sacred journey home for these remains and artifacts while awaiting due process. It places them in an appropriate location while their descendants and owners are coming forward and allows time for any disputes or difficulties to be resolved. The Place of Respect acknowledges process, but does not hurry it.

The Robbins Museum of Archaeology is the result of many years of paid professional and dedicated volunteer effort. MAS spends many hours educating the populace of New England about archaeology and the ancient legacy that those rocky, once glaciated soils contain. The Robbins and MAS have made strong efforts towards inclusivity of the Native American community in their activities and in matters of curation and ethics. The staff and volunteers have worked hard to place Native Americans as both keepers of heritage and vibrant, living people. Two exhibits at the museum, The Doyle Doll Collection - an extensive assemblage of Native American dolls - and an exhibit of modern day portraits of New England Native Americans in regalia, emphasize that the Abenaki, Wampanoag, Mic Mac, Penobscot and other tribes are not just names in the history books but are living people and communities.

Some years back, while beginning the process of repatriation in compliance with NAGPRA, a prob-

lem arose. There were several artifacts housed in our collection that clearly met the criteria that required their return to the Native American community. We were aware that we should remove these materials from display, but how and where should they be housed while awaiting due process? We were, as individuals and as an institution, sensitive to the deep significance of our actions. We were not simply participating in a process of legally mandated de-accessioning, we were participating in a human rights revolution. Some years back a PBS documentary stated that NAGPRA is for the Native American community what the Civil Rights movement was for the African-American community- that is to say that NAGPRA is pivotal to justice.

I will never forget the testimony given to the Senate Subcommittee that created NAGPRA, by a Native Alaskan person discussing the damage done by archaeologists when they excavated, what was for them, a treasure trove of scientific data. This "treasure trove" was a cemetery, a cemetery that had been in continuous usage by Native Alaskans for centuries, up to and including the present. It is worth noting that "continuous occupation" is a sacred cow of archaeology. For example, Jericho has been occupied for millennia, built and rebuilt; it is an archaeologist's dream of cultural succession data, needed to study cultural evolution in one place over time. This graveyard supplied similar data. This data had a terrible price. As I mentioned earlier, the graveyard had been used through the present time and **all** bodies had been excavated, including that of a child who had been buried only a short time before her exhumation. Her parents sought the return of her body. The inhumanity of this so-called "scientific excavation" is breathtaking. One has only to imagine the remains of a child in one's own family being treated so cavalierly to feel and to understand the horror those parents felt.

## A Room of Respect

The archaeologists at the Robbins/MAS were operating from a far more sensitive position. We wanted to show the members of New England's Native American community that we truly cared about them. Some of us felt the need to address the institutional wrongs of archaeology in a meaningful way. At this time we believed that all human remains in our collection had been voluntarily repatriated (This would later prove false as fragmentary remains were later discovered in the collection. They are slated for repatriation.) We wanted to do the proverbial right thing. But what **was** the right thing? It wasn't merely storing grave goods in a cardboard box. It needed to be something more.

At this time in the Robbins' history we were in the process of moving into a new location. MAS had been donated a building that had once been a factory. It is a fairly large wooden structure with a very large open space on the first floor. We were in the process of dividing that space into offices and display areas, a library/research area, etc... I realized that we had adequate space to dedicate some room to NAGPRA. I thought that creating a sort of in-house mausoleum was in order. I felt that the mainstream society had designated spaces for the dead and in some cases their grave goods, in the form of morgues, cemetaries and mausoleums. The Native American community deserved no less. Certainly a cemetery wasn't appropriate, the final disposition of these grave goods, sacred objects and remains was not ours to decide. But how they were treated in this transitional period was under our keeping. The morgue/mausoleum model was the best option. So I suggested that we should create a special room to remove these artifacts and remains from both the public eye **and** the perusal of MAS members. My colleague, archivist and archaeologist Thomas Doyle, took the idea to the MAS Board of Trustees and it was voted into being in 1994.

Archaeologist Eugene Winter remembers the creation of the Place of Respect in this way: "We established a small Room of Respect, it is about 10 feet square. It didn't have to be big. We consulted with Indian people and they suggested they that we should have in it for furniture, a round table,

not a square table, you know, that there would be no 'head' indicated by the furniture itself. There would be a few chairs and shelving, otherwise called a bookcase. The idea was, that as objects showed up in our inventory, possible objects for return under NAGPRA, or any other reason, to Native people that these objects would automatically be placed within the rooms on the shelves, along with identification. Some items showed up on inventory and we could put these items on the shelf. Other items that were from burials, we didn't need documentation, we automatically put these items in the room. We can't put everything that is under consideration in there all at once. We have to do a little research to confirm that they were associated with burials or other reasons for repatriation. The people that use the room are all Native American. In other words, the museum people do not use the room, except to put items in there for consideration by Native people."

A visitor to the museum today will possibly not even notice the Place of Respect when walking past it. There is only a simple wooden door, and a modest placard labeled "the Room of Respect". What is unobtrusive to the average museum visitor, has proven very meaningful to both the archaeological community and the Native American community alike. In November of 2010, I conducted a series of interviews in which I solicited opinions and anecdotes regarding the Place of Respect. The responses in both communities were favorable. Only one individual, a Native American elder, felt that the Place of Respect was in any way negative:

"The Place of Respect is not needed. It is time for all bodies, grave goods and sacred objects to be returned. Now!"

I am not unsympathetic to this view. NAGPRA is now decades old. I know full well the many difficulties that the Robbins Museum and MAS as well as many other institutions have experienced in NAGPRA compliance. In an ideal world the process would have been implemented immediately; but, for many valid reasons, that has not been the case. Once the process of inventory and repatriation has been implemented, the going can be slow. In the case of the Robbins, this is due in part to the fact that it is largely a volunteer organization. With all difficulties to this institution acknowl-

edged, this elder's view that the time for change has come is correct, and even lawful! Given the number of broken treaties, and literal and proverbial bad blankets given to this continent's indigenous people by the powers that be, an attitude of mistrust and suspicion is understandable and even in part warranted.

Returning to the November interviews, all other responses were remarkably positive from both communities. Overall, the Place of Respect was seen as an opportunity. For the archaeologists it was a pressure relief valve. It gave them a place to put the remains and artifacts undergoing inventory and repatriation. Beyond that, it was an opportunity to extend an invitation to the local Native American community, an invitation for prayer, remembrance and dialogue.

MAS President Frederica Dimmick made a simple and insightful comment in discussing the Place of Respect: "This room gives the opportunity for feelings to be expressed quietly without inflammation. It also gives the Society a place to have things kept, which should not be seen at certain points or revealed. It's a place of safety and perhaps also a place of opportunity."

The remembrances brought forward by two of my Native American informants, Paul Johnson (traditional singer/drummer of Abenaki heritage) and Edward O'Keefe (Native historian/activist of Abenaki heritage) show just how deeply the opportunity created by the Place of Respect runs, not just in the action of housing artifacts but in building badly needed trust between the Native and non-Native communities in New England. To summarize, Paul Johnson informed me that the Place of Respect was important because it acknowledges that the bodies of Native Americans in New England have been poorly treated, which in his mind and his family's experience, is linked to the American eugenics movement. His story essentially stated during the early 1900's. Indigenous Canadian members of his family had to leave Canada because the children of a Native Woman and a white man were no longer considered Native by governmental entities. In order to preserve their heritage they emigrated to Vermont. Sadly, within a few years eugenics came to prominence

in that state and indigenous people were targeted. Sterilization of Paul's family members was demanded, and those who didn't comply could have been shot. Instead, they fled Vermont. Native performers have written and recorded songs commemorating this terrible time. Ed O'Keefe later corroborated Paul's accounts, adding that such institutionalized racism on the part of the Vermont government continued until the 1940's.

MAS Vice President Fred Robinson explained: "This is a place for our Native American friends to keep their things safe for as long as they want. It has created a better understanding of the spiritual needs and spiritual identity of certain sacred objects to a non-Native American like myself. I think that it is a good educational tool for the Museum. I hope that it shows that we are sensitive to the needs of the Native American and whatever objects it might be, be they grave-goods or funeral objects and the like...I've been here about five years and it (the Place of Respect) keeps us in touch with our Native American partners and friends too...We are able to keep the relationship going through this room...I do believe that is something that other museums throughout the country should consider building"

Fred also went on to anticipate that the Place of Respect is a potential problem solver for future situations involving new acquisitions to the Museum's collection and the ongoing need for NAGPRA compliance:

"We have had collections donated to us and the people donating said, by the way, that collection contains some human remains or bones. We would then go through the proper channels to comply with the NAGPRA act. It gives our Native American Friends peace of mind that there is a place for these bones and objects. We don't enter. When a Native American tribe member comes to us, this is **their** room. We as a Society have no problem putting in handicapped access or complying with fire codes, why can't something as simple as this (meaning a small room like the Place of Respect) be done? I agree that logistics could be difficult but they can be overcome too."

In further discussion, Fred and I agreed that while NAGPRA currently has only a few sections left for

commentary, it may be beneficial for the Department of the Interior to amend NAGPRA to include the requirement that museums build a Place of Respect so that ongoing and future human remains, grave goods and objects of cultural patrimony can be handled in appropriate and sensitive manner. Archaeology is not static, it is a process; and creating a built-in physical mechanism to deal with future needs would be wise and of serious diplomatic value in easing tensions between the Native and non-Native communities. A vehicle for funding such construction might be included in an amended NAGPRA.

One of the areas that is in flux in Native American law is Federal Tribal Recognition. As there are many tribes seeking recognition, there are many potential repatriation requests still possible, indeed probable given this situation. Native informant Ed O'Keefe explained: "Nanempashemet was a sachem, correctly pronounced Sockem, a land chief of the Pawtucket and also possibly of Massachusetts ancestry. A place like modern day Natick and here in Lowell (Wamesett) were under his governance." O'Keefe then showed a series of deeds and other archival documents. "Passaconaway later took leadership. So these genealogies most likely then continue on in Southern Maine with the living descendents of these people anywhere from Southern Canada to Maine, to places in Massachusetts. Some of the Native people used Mashpee on the Cape as a refugee place. So when we are dealing with Contact Period remains, we could possibly trace down direct lineal descendants." O'Keefe then went on to explain that only the Wampanoag have Federal recognition at this time in Massachusetts and the Wampanoag have a clear preference to have remains, grave goods and objects of cultural patrimony returned to them. This is not necessarily for the best as there are probably better claimants for some of these remains and artifacts. Perhaps using the Place of Respect for remains and artifacts that might better be returned to closer descendants who are in the application process for Federal recognition might be in order. I would add that similar situations exist nationally.

The Place of Respect has also proven to be an expedient place to house some artifacts that may

be subject to NAGPRA but are controversial from an archaeological standpoint. An interview with Ted Ballard revealed this: "What we have here is an effigy stone, it was excavated in a dig...south of here near the Rocky Ridge area...With a Native American with them, archaeologists selected a rock pile and excavated it and clearly found a significant set of things. The Native American said that 'this is of Native American construction.' This effigy stone clearly has ears on top which were pecked, it is a stone basically ovoid in shape and it is a carving that clearly represented something, it weighs about 10 pounds,...it was set up in a specific area in a pattern and with intent .... So I brought this effigy to the Place of Respect voluntarily, it was not part of the Robbins' collection... When the avocational archaeologist who found it passed away, I discussed it with his daughter and brought it here...Nobody has talked about repatriating it, the time just hasn't come."

Perhaps the reason that this effigy hasn't been repatriated is because it hasn't been officially recognized by professional archaeologists as an artifact. Ballard went on to say, "this site is significant to aracheoastronomy. The Natives here don't have permission to identify sacred places to non-Natives from their powers that be. That is changing with development and they are beginning to start dialogues with archaeological organizations, and we may learn more about the importance of this effigy as time continues. The Place of Respect will give us a venue for these discussions."

## Conclusion

To summarize, the Place of Respect has proven to be an excellent diplomatic tool. It recognizes the need for change and affords the Native American community a chance to prayerfully and privately participate in the NAGPRA process. By creating an in-house mausoleum in museums we can continue progress in science and more importantly in Civil Rights. I would like to close with the words of Paul Johnson who took part in the voluntary repatriation of the remains of an individual identified as a young native American man. This individual's bones were found in a barn in New England. Paul performed a song during the reburial of this person.

"The song is called the Wind Song, it was performed for me by Junior Peter Paul, a Mic Mac from Canada. It is my belief that he is the actual writer of the song, and we performed it as way of sending a young man's spirit off to the next

world... I just stood beside the grave site and sang the song." Paul then sang the song in the Mic Mac language. He sang in a sweet resonant tenor. The song is poignant, melancholy and moving:

*"Wey oh hey hey a ya ho, ya e ya a yaho, ye oh hey!"*

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## Contributors

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TONYA LARGY is an archaeological consultant specializing in the analyses of both plant and animal remains from archaeological sites and is on the staff of the Zooarchaeology Laboratory of the Peabody Museum, Harvard University. She also is Past President of the Massachusetts Archaeological Society.

DAVID MCKENNA is an avocational archaeologist, and a member of the MAS Board of Trustees and Vice Chair of the Northeast Chapter.

JONATHAN PATTON is a staff archaeologist at the Massachusetts Historical Commission.

VICTORIA ROURKE-ROONEY holds an M.A. degree in Museum Studies from NYU. She is a former member of the MAS Board of Trustees.

WILLIAM B. TAYLOR is a long-time member of the MAS. He has been an ardent collector of Indian artifacts in the Titicut area for more than sixty years. He is a frequent contributor to the *Bulletin*, and serves on the MAS Board of Trustees.





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