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### The Archaeology of Thompson Island

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# THE ARCHAEOLOGY OF THOMPSON ISLAND

## ABSTRACT

This report summarizes the results of a 1993 survey by UMassBoston, and of previous archaeological fieldwork on Thompson Island, Boston, MA, including background research, documentary research, walkover reconnaissance, and subsurface testing with shovel test pits and 1 meter square excavation units. Despite the fact that many parts of the island have not yet been surveyed, twenty prehistoric sites are now known, an unusually high density for the Boston Harbor Islands. Components range in age from Late Archaic through Late Woodland, with Middle Woodland especially well represented. Several large habitation sites with shell middens are known, in addition to numerous small special purpose camps of various types. The report includes recommendations for protecting the sites from further erosion and from damage by human activities.

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August, 1996

## TABLE OF CONTENTS

Chapter 1 Environmental and Historical Background.....	1
Chapter 2 The Known Prehistoric Sites on Thompson Island.....	17
Chapter 3 Discussion of Survey Results.....	55
Chapter 4 Recommendations.....	63
References Cited.....	73
Appendix A Archaeology Permit Procedure.....	83
Appendix B Finding Human Bones.....	87
Appendix C Radiocarbon Dates.....	88
Appendix D List of Species Names.....	89
Appendix E Fieldwork and Collections.....	91
Appendix F Additional Information on Sites (RESTRICTED).....	93

## Chapter 1 ENVIRONMENTAL AND HISTORICAL BACKGROUND

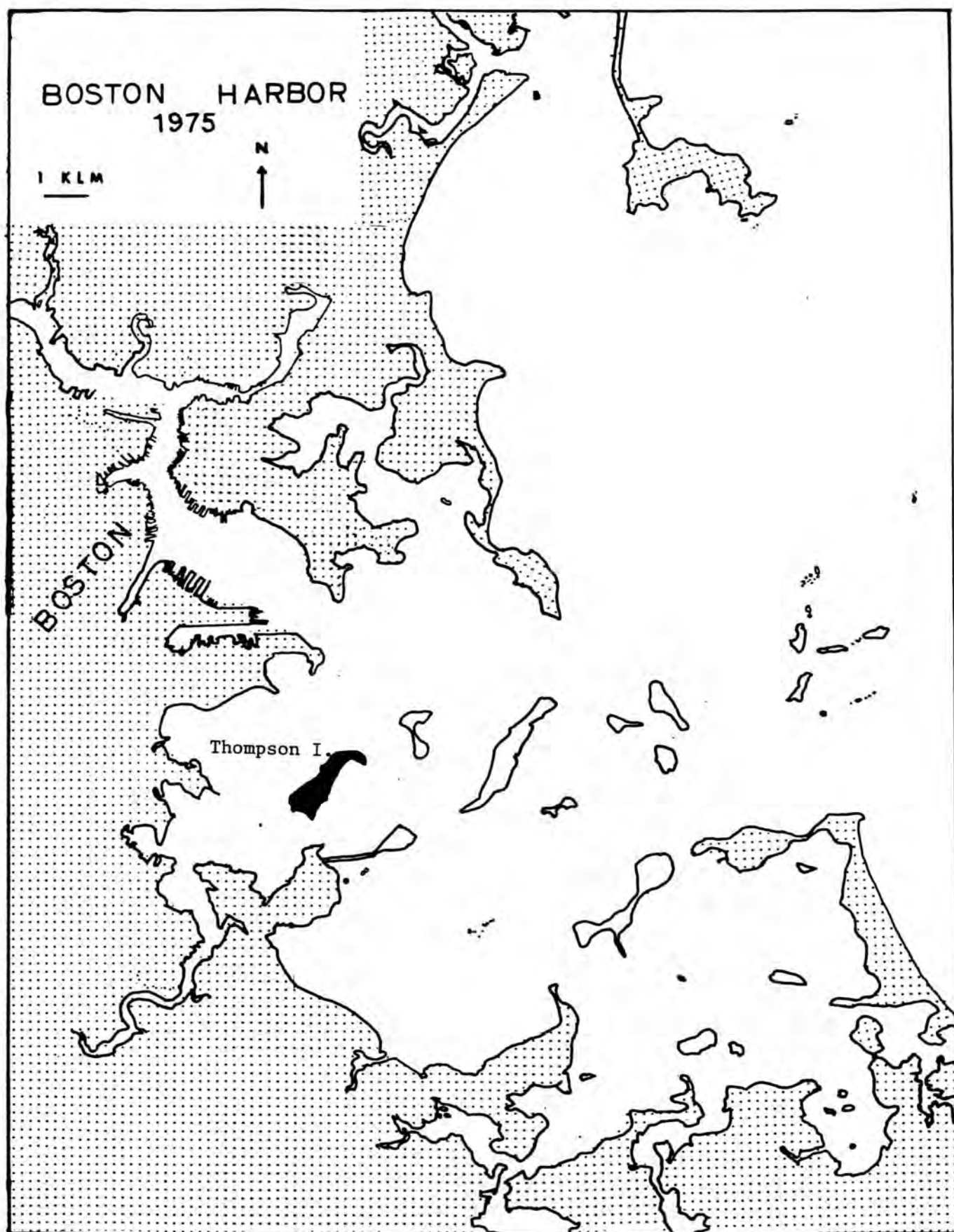
### INTRODUCTION

Of all the islands in Boston Harbor, Thompson Island is perhaps the most unusual. First, it is surely one of the most beautiful, with its flower-studded meadows, rich green marshes, shady wooded groves, and stunning views of the harbor. It is the third largest island (only Long and Deer are larger), and also one of the most accessible, which is one of the reasons it has been a focus of numerous activities throughout both the prehistoric and historic periods. It was the first of the Harbor Islands to be occupied by Europeans, and is still known by the name of that original family. Perhaps most unusual of all, it is the only one of these islands that has remained in private hands throughout its history, with the exception of 14 years during the seventeenth century. All of the other islands in Boston Harbor have long histories of use by federal, state, and local government agencies for military and civic purposes. Perhaps because there has been relatively little land modification on Thompson, many of the archaeological sites there have survived and there is a long history of archaeological research on the island. This report will attempt to summarize what has been learned through this research, and will suggest ways in which the remaining cultural resources can be protected and interpreted.

Archaeological sites are limited in number, especially in the vicinity of a metropolitan area, and they are also very vulnerable to destruction by natural forces such as erosion and by virtually any human activity that disturbs the soil. In addition, there are many people who cannot resist the lure of "digging for arrowheads", and who will thoughtlessly destroy archaeological sites, even those located on private property. Because of this danger, exact site locations are not given in the main body of the report, but are included in Appendix F along with other specialized data. This will allow the main body of the report to be widely distributed, while keeping actual site locations confidential.

### ENVIRONMENTAL BACKGROUND

Thompson Island is located at the base of Dorchester Bay in Boston's Inner Harbor (Map 1), sheltered by several other islands and headlands from the worst of the northeast storms. It is about 1.7 km



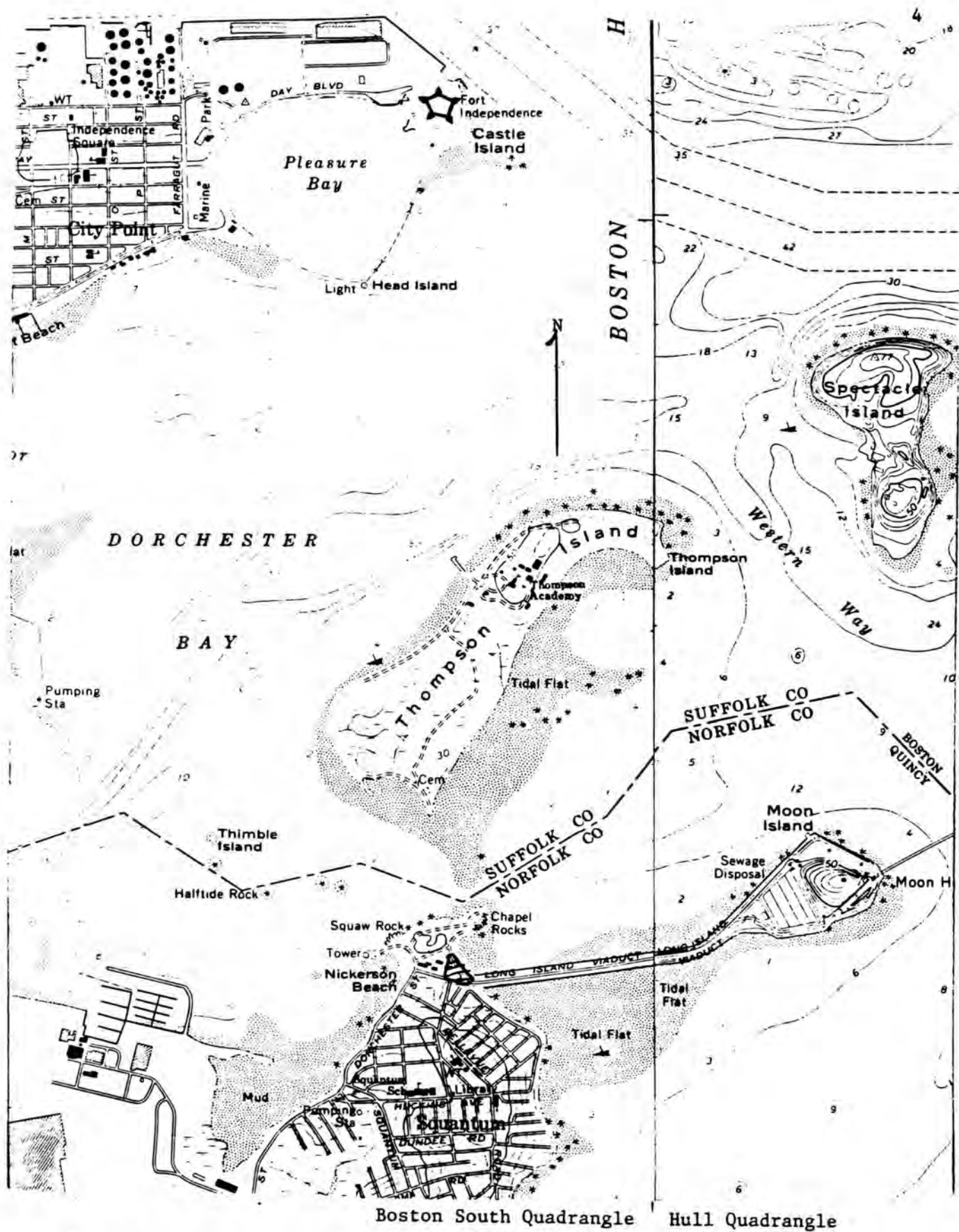
Map 1 Boston Harbor



long and less than .5 km wide (Map 2). The shape of its 63.5 hectares has often been likened to that of a young bird; the hill at the northeast end is the "head" and the adjacent sand spit is the bird's "beak". The rolling topography formed by five hills and three salt marshes forms the "body" of the bird; the long spit heading toward Squantum is its "foot", and the curved spit along the southeast edge is its "tail".

This topography is the result of a complex series of geological processes, starting with various glacial and post glacial phenomena which were probably controlled at least in part by the bedrock (Cambridge Argillite) that underlies the island. More recently, the island has been greatly affected by marine process and probably by fluvial processes associated with the Neponset River. There appears to be a deep bedrock trough to the west of Thompson Island, perhaps an old channel of the Neponset River, but it is blocked by a ridge of pre-Wisconsinan till extending roughly perpendicular to the island (Rendigs and Oldale 1990) which must surely have affected the later course of the river. The drumlin that dominates the northeast end of the island also began to form before the most recent glacial period; as with many of the other islands, a highly weathered pre-Wisconsin till layer probably of Illinoian age is visible where erosion has exposed the drumlin (Newman et al 1990: 155-156). This older deposit is capped by till of Late Wisconsinan age, probably deposited not long before the glaciers retreated from the Boston Harbor area between 16,000 and 14,000 years ago (Knebel et al. 1992: 41). Because the area was still depressed under the weight of ice, the sea transgressed in the harbor and rose to a level about 18 m above modern sea level by about 14,000 years ago (Oldale 1986: 94). At this time, all but the top of the major drumlin on Thompson Island would have been under water. The southern part of Thompson Island consists of a series of glacio-marine deposits of sand and gravel, including deltaic deposits, knobs, and kettles (Caldwell 1984: 405) and some of these may have formed in this post-glacial period. Though isostatic rebound was causing the land to rise more rapidly than melting glaciers were raising sea levels, glacio-marine muds, sands, and gravels were still being deposited at places in Boston Harbor as late as 11,000 years ago (Knebel et al 1992: 42).

By 10,000 years ago the land had risen to the point where sea level lay about 22 meters below its present level, but then rebound ended while the sea continued to transgress. By 6,000 years ago the sea level had risen to about 9 m below present and by 3,000 years ago it



Map 2 USGS Topographic Map of Thompson Island (Scale= 1:24,000)

was within one meter of present sea level (Oldale 1986: 95). As sea level rise slowed, shorelines stabilized and features such as salt marshes began to form. A date of 2,795  $\pm$  140 radiocarbon years BP (GX-3827) was produced by peat at the base of the salt marsh on Calf Island, 1.56 m below the present surface (Luedtke 1975:16). The small marsh behind the "beak" on Thompson Island produced a date of 2,500  $\pm$  113 radiocarbon years BP (Kaye and Barghoorn 1964:74). Caldwell suggests that at this time Thompson Island would actually have been two islands, one consisting mainly of the northeast drumlin and another to the south of it consisting mainly of outwash deposits (Caldwell 1984:405). Both islands would have been considerably larger than they are today, but wave action from the northeast would have eroded some of the areas unprotected by the drumlin. Eventually the two islands were connected by tombolos, with marsh and overwash deposits forming in between (Caldwell 1984:405). A wide variety of soils have formed on these varied deposits (Peragallo 1989).

Five salt marshes currently exist on Thompson Island. The largest one dominates the south end of the island and Caldwell suggests that this feature is a breached kettle pond (Caldwell 1984: 405). There are four points at which this marsh may have been connected to the sea at various points in time, and the main exit/entrance is likely to have shifted over time as coastal processes built up bars and storms breached them. The present connection to the sea for this marsh is to the west (Map 2); when the tide is ebbing the water flows so strongly through this exit that it appears to be a stream. However, as recently as 1972 (Braun 1972: 109) the major connection to sea for this marsh lay to the south through the swale between Lyman Grove hill and the long hill along the southeast side of the island. This latter exit has since been intentionally blocked off. The other potential connecting points lie on either side of the narrow ridge extending into the northeast end of the marsh. All these areas have been breached and filled at various times during the last few centuries (Lutz 1974:8).

A second marsh is located at the northeastern end of the island adjacent to the "beak"; this marsh has a maximum depth of three meters (Rosen 1984: 32). Two other marshes encircle salt ponds located in the center of the island, between the "head" and the "body", in the area that used to be sea. The eastern marsh of this pair has been extensively dammed, but this dam has been breached



in historic times. Finally, a small salt marsh has formed behind the cusped spit at the south end of the island.

The shellfish beds, beaches, and sand spits that surround Thompson Island formed relatively recently, after sea level rise had slowed. Thompson Island has three sand spits, one forming the "beak" of the island, one forming the "tail", and one forming the "foot", which nearly connects the island to the mainland at Squantum. According to maps, this latter spit has been located in roughly the same place since the 1700s, but has not emerged to tie the island to the mainland because of scouring by tidal currents. Rosen and Leach (1987: 218) suggest that it is probably in balance between longshore input and tidal scour. This spit does undergo minor changes over time, though. Sweetser reported that in the late nineteenth century "one could almost wade at very low tide" (Sweetser 1882: 171), and there was a permanent channel separating the spit from Squantum when I first came to Boston in 1974. However, at this point in time the entire spit is above water at low tide and in 1993 our field crew was able to walk from the island to the mainland without getting our shoes wet.

The beaches on the north and west shores of Thompson Island are composed mostly of gravel and cobble (with the exception of the area just below the "beak", which has a sandy beach), while beaches on the south side of the island are formed of gravel and sand (Lutz 1974:3). A deposit of Boston Blue Clay exists adjacent to the marsh about half way down the southeast side of the island.

Thompson Island and the waters that surround it would have provided a bountiful smorgasbord of foods for the native peoples who first camped there. Even in recent times, Dorchester Bay has produced commercial quantities of fish, crustaceans, and shellfish (Chesmore et al 1971). Beds of soft-shell clams can be found on most of the beaches of the island, and in the nineteenth century Sweetser reported that "the bar on the south has long been famous for its delicious clams" (Sweetser 1882: 171). Clam beds could also be found around the edges of the large southwest salt marsh on Thompson Island (Chesmore et al. 1971: 27). Large and small mammals, including deer, would have had easy access to the island from the mainland, and the island was large enough to sustain populations of some species year-round. The many marshes on the island would have attracted turtles and other reptiles, and great flocks of migratory birds would have rested on the marshes in spring

and fall. Plant resources would have included berries, cattails, and a variety of nut trees such as oak and hickory. There are still large groves of trees growing on the island, but most were planted by the Farm School and they include many non-native species. The only mammals we saw on the island in 1993 were skunk, muskrat, and feral cats, but there are also numerous song birds, shore birds, and pheasants, the latter introduced in recent times for hunting.

## HISTORICAL BACKGROUND

Humans first entered New England about 11,000 years ago, at what would have been a time of rapid change in Boston Harbor. As described above, a relatively sudden drop in sea level was occurring at this time, probably resulting in considerable environmental flux. The Neponset River must have flowed past Thompson Island on either its west or its east side, though, and the Neponset PaleoIndian site (Carty and Spiess 1992), which has produced a radiocarbon date of 10,200 radiocarbon years BP (before present) (Brona Simon, personal communication) is located less than 25 km up the Neponset. Thus it seems likely that the first people to set foot on the hills of Thompson Island were PaleoIndians, though no evidence of their presence has been recorded thus far. They would have been the first of many people with a foraging adaptation who fished, hunted, and gathered seeds, and later nuts, shellfish, and other resources on Thompson Island over the next 9,000 years. Around 1,000 years ago farming was added to the economy of this region, resulting in a rich subsistence base and complex way of life that was truncated by the arrival of Europeans about 400 years ago. The long period of time before the arrival of Europeans will be the subject of the bulk of this report, so will not be discussed further here.

Europeans began visiting the New England coast by at least the middle of the sixteenth century, but none left a record of having set foot on Thompson Island. That honor belongs to Miles Standish, who on September 18, 1621, set sail from Plimoth Plantation with a small group of men to explore Boston Harbor and to trade for furs with the Massachusett (Bradford 1962: 79). Standish and his men anchored in "the bottom of the bay" and appropriated lobsters gathered by natives "under a cliff", possibly Squaw Rock on Squantum (Mourt 1963:77). In a deposition made many years later, Standish testified that he landed on Thompson Island during that visit and named it "Island Trevoyre" after William Trevoyre (also Trevore or Trevour), one of his shipmates (NEHGR 1855: 248). He also commented that he

saw no sign that Indians had ever lived on the island. Standish was obviously trying to justify a claim to land that surely belonged to the Massachusett, but it is also likely that the terrible epidemic of 1616-1618 had killed all the natives who usually farmed and camped on the island, as it did so many others in southern New England (Spiess and Spiess 1987). Thus Thompson Island may indeed have been unoccupied for several years prior to the arrival of the English.

William Trevore himself testified that he claimed the island in the name of his friend David Thompson, an English trader of Scottish extraction who was associated with Ferdinando Gorges (Thompson and Thompson 1979). In 1622 the Council for New England granted to "...David Thompson, his heires and assignes, for ever, Sixe Thousand acres of land, and one Iland lyeing & being in & upon the coaste of Newe England aforesaid, with divers Royalties, immunities priveleges franchises and liberties.." (Levermore 1912: 827). The 6,000 acres lies at the mouth of the Piscataqua River in what is now New Hampshire, and there are several islands adjacent to that land. However, descendants of David Thompson were able to convince the Massachusetts General Court that this ambiguous statement did indeed refer to Thompson Island (Thompson and Thompson 1979: 145).

As with most of the other early English settlers in this area, it is difficult to track David Thompson through the fragmentary records that have survived. Though he may have visited New England earlier (Thompson and Thompson 1979), he certainly arrived at Piscataqua in the early spring of 1623 (Bradford 1962:99). There he established a plantation at Odiorne Point, on the southern shore near the mouth of the Piscataqua River in what is now Rye, NH. This was apparently a substantial colony located on the crest of a hill with a spring and harbor nearby. It included a main house, a fort, and a blacksmith shop, plus houses for servants (Stanley 1965: 18). A few other records of Thompson's travels and activities exist; he visited Plymouth in the summer of 1623 (Winslow 1802: 276), and in 1625 he helped Samuel Maverick fortify his house at Winnisimmet (Johnson 1910:64). In 1626 he traveled with William Bradford and Edward Winslow to Monhegan Island to buy trade goods, much to Bradford's annoyance, as he feared competition would drive the prices up (Bradford 1962:127).

Later that same year Thompson moved his family to Boston Harbor, joining a number of other "Old Planters" living in the area who had



come over with Weston, Gorges, Wollaston, and other unsuccessful entrepreneurs. Among these was the infamous Thomas Morton, who mentions discussing the origins of the native Americans with Thompson (Morton 1972: 22). Thompson is said to have been attracted to the island that bears his name by the fact that it possessed a "river" and a "harbor" for boats to pull into (NEHGR 1855:248); this surely must refer to the large salt marsh and the flow through its outlet, which resembles a stream at ebb tide. However, the island's proximity to the natives living along the Neponset River and nearby Massachusetts Fields in Quincy must have been an added inducement. David Thompson probably died in 1628; in June of that year his widow Amias is mentioned without her husband on a list of those contributing money for the deportation of Thomas Morton. Amias married Samuel Maverick not long after and left the Island, which was seized by the General Court in 1631 and granted to the town of Dorchester in 1634. Dorchester leased the island to its residents for pasturing cattle, and used the money to support public schools.

In 1648 David Thompson's son John sued Dorchester for possession of the Island, and the Court ruled in his favor. In 1650 he introduced depositions from Miles Standish, William Trevore, William Blackstone, and the Sagamore of Aggawam to solidify his claim and to convince the stubborn people of Dorchester to vacate the land (NEHGR 1855: 248). He was successful, but soon lost the island to his creditors. The island was then owned by a series of absentee landlords who leased it to tenant farmers (Cook 1993 6:7). Like many of the other islands in the Harbor, Thompson was the scene of military action during the Revolutionary War. In 1775 a house and barn were burned to keep them from British hands, and cannons mounted on the northeast head were fired at the British fleet as it evacuated Boston in 1776.

In 1832, the Boston Farm School Society was organized, and Thompson Island was purchased to establish a school for "the education of boys belonging to the city of Boston, who, from extraordinary exposure to moral evil, require peculiar provision for the forming of their character, and for promoting and securing the usefulness and happiness of their lives; and who have not yet fallen into those crimes which require the interposition of the law to punish or restrain them" ( *Beacon* 1887: 1[1]1). Two years later the Farm School merged with the Boston Asylum for Indigent Boys, which had been founded in 1814 in part to care for boys orphaned by the War

of 1812. At least one building existed on the island when the school moved there in 1833, and others were soon erected. The boys at the Farm School were taught the standard academic skills, but also received training in farming and allied skills such as carpentry. The school was renamed Thompson Academy in 1956 when it became a preparatory school; farming ended entirely after the main barn burned in 1963 (Lutz 1974). The school finally closed in the early 1970s, and in 1975 the Trustees reorganized as Thompson Island Education Center (White et al 1991: 29) which functioned as a non-profit organization with an emphasis on environmental education. In 1986 the Trustees voted to enter a partnership with Outward Bound, another organization devoted to environmental education, and in 1988 the Thompson Island Outward Bound Education Center was established. Thompson Island Outward Bound is still dedicated primarily to educating young people, though the general public is also allowed to use the island for retreats, meetings, and picnicking.

No hospitals, forts, prisons, or city landfills were ever situated on Thompson Island, as they were on so many of the other Boston Harbor Islands, but nevertheless the activities of the post-colonial period did have an effect on the shallow archaeological sites of the island. The major agent of change was farming; as the Farm School student newsletter states, "In the one hundred and sixty-seven acres comprised in the area of our Island there is practically no land which is not available either for tillage or grazing, and used for one or the other of these purposes." (*Beacon* 1897:2:2:1). There were said to be no trees on the island when it was purchased in 1833 (*Beacon* 1897:1:8:1), and most of the existing trees were planted by the Farm School over the next century. The school also diked and drained most of the marshes so that they could be used for grazing cattle.

Colonial period inhabitants of Thompson Island also built houses and structures, some of which are still standing and others of which are not. The first of these would have been the structure or structures built by David Thompson for his trading post. No contemporary documents say where David Thompson's house was located or what it looked like. Nevertheless, a detailed tradition has arisen regarding this house, apparently beginning in the late 1800s when part of the bank on the southern side of the island eroded into the sea and revealed a house foundation. A picture of this foundation shows dry wall construction, as well as numerous eroded bricks. An article on the dedication of a memorial for "the first house built in Boston" from the Sunday *Boston Globe* of May 16 1937 states that "Supt W. M.



Meacham of the Farm and Trades School, now located on the island, gave an interesting history of how the old mansion of David Thompson was discovered in 1889 when part of the bank on the southern side of the island fell into the sea. The house was positively identified as having been built in the early Puritan period by the peculiar shape of the bricks used in its construction. They measured, in inches,  $2 \times 4 \frac{1}{2} \times 9$ , showing that they had been baked in England over three centuries ago."

Unfortunately, none of these bricks (or the pipe fragments said to have been found with them) have survived, and brick sizes are now known to have varied considerably throughout the colonial period and into the nineteenth century (Abelsma 1995). In fact, the dimensions reported for the bricks from the Thompson Island foundation are suspiciously close to the size that was legislated for bricks made in Boston beginning in 1679 (Abelsma 1955: 45). A recent survey of the area near the eroded foundation by historical archaeologists did not find any artifacts dating to the seventeenth century, though several items of eighteenth century age were recovered (Cook 1993: 27). Cook points out that a 1704 map shows a structure near this area (Cook 1993: 22), and maps of Boston Harbor made around 1775 also show a house in this general area. It seems very likely that the foundation that eroded into the sea in 1889 belonged to this eighteenth century structure. David Thompson's house may also have been located in this area, but it may just as easily have been located elsewhere. There is no definite evidence supporting either of these possibilities.

Early maps also show structures on the other side of the island near the present dock area, where the Farm School barn was located. None of these structures are still extant, and there has been considerable subsequent construction in this area. A large stone house foundation is still visible on top of the major southern hill. This building, which was still in use when the Farm School started on the island, burned in 1943 (Lutz 1974). The Boston University survey found artifacts dating to the nineteenth and twentieth centuries in the vicinity of this foundation (Cook 1993).

## PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

The first person to pick up an archaeological artifact on Thompson Island was surely one of its native inhabitants; erosion has probably been depositing artifacts on the beaches for thousands of years. The

first records of such finds, however, date from the Farm School days. For example, the Thompson Island *Beacon* of 1897 (Vol. 1:2) has the following short paragraph by Leo T. Decis: "Indian Relics are found in abundance on our Island, especially at the south end. We have found hatchets, hammers, plummets, drills, arrow and spear-heads, and various other implements. Any relic that is sufficiently perfect is put with the School's collection, with the name attached of the boy who found it. The collection is kept in the reading-room and is especially valuable and interesting because of the light it throws on the early history of our Island." The *Beacon* of 1910 (Vol. 14 (4)) has a report by William B. Laing: "One proof that our Island was inhabited by Indians is the relics hewn out of stone which are occasionally found. The kinds of relics are arrow-heads, spear-heads, corn pounders or pestles, war clubs, tomahawks, and sometimes gun flint. Chips of jasper from which implements were made are very common and easy to find. Broken arrow-heads are found quite easily at the north end of our Island. The time and place to find these relics is in the spring when the soil is plowed, because the plowed pieces are the best places to find them."

Years later, Edward Rowe Snow commented, "Myles Standish believed, and Shurtleff contended, that the Indians never made their home at this island, but a well-stocked museum at the school proves that they were mistaken. Mortars, pestles, axes, plummets, spearheads, and arrowpoints that were dug on the Island are in the collection..." (Snow 1971:100). A local archaeologist who attended Thompson Academy in the 1950s confirms that this collection was "extensive, varied, and impressive" (Stokinger, personal communication). The collection was apparently housed in the School administration building, which was destroyed by fire in 1971. Some of the artifacts from this collection were reportedly given to Henry Leschernier, a collector who lived in Quincy (Dincauze 1971), but others are said to have been left in the rubble of the burned building.

Although Leschernier appears to have been the person who collected most regularly on Thompson Island, other amateur and professional archaeologists also visited the island including William Fitzhugh, then a student at Harvard, who kayaked out to Thompson Island in 1969 and noted several shell middens on the south end (Dincauze 1970).

The first formal archaeological survey of the island was conducted by Dena Dincauze as part of her survey of sites in the Greater Boston

area from 1969 through 1972 (Dincauze 1970/71, 1973, 1974). One of her students, David Braun, collected samples from several of the middens on Thompson island as part of the research for his Senior Honors Thesis, which dealt with changes in shellfish utilization patterns in Boston Harbor (Braun 1972, 1974).

In 1978, as a result of persistent rumors of uncontrolled digging on Thompson Island, I sent a letter to the Thompson Island Education Center stressing the need for them to be responsible guardians of the important cultural resources on their property. Private ownership had probably protected Thompson Island from the massive development that affected many of the other Harbor Islands, but at this point in time it was depriving the island of the legal protection that existed for archaeological sites on public land. Frank White, the Executive Director that time, responded that the trustees were indeed aware of their cultural resources, and would appreciate help in developing a plan to manage them. Sometime later I helped prepare a list of archaeologists interested in the Harbor area, representing a wide variety of area institutions, and these people became the Thompson Island Archaeology Advisory Committee (TIAAC). This Committee met for the first time on November 23, 1981, and it met several times a year until 1987.

TIAAC had lofty ambitions, including compiling all the information known about archaeology on Thompson Island and then helping its owners to develop a management plan which would ensure the long-term protection of its archaeological sites. Many of the Committee's goals were not met, but it did establish a procedure for handling requests to do archaeological work on the island. This procedure (described in Appendix A) is essentially the same as the present permit system for work on public land, so it is familiar to all archaeologists working in the region. It has worked successfully since it was accepted by Thompson Island in 1985.

TIAAC also sponsored fieldwork on the Island. The first of these projects was an archaeological field school conducted by Harvard University in 1982 with Russell Barber as Project Director and Leslie Shaw as Field Director (Barber 1983, Shaw 1986). The primary goal of this project was to determine the status of sites on those parts of the island that appeared to be suffering the most severe erosion, especially along the northwest and southwest beaches. A second Harvard field school, again under Barber and Shaw, took place in 1983. This project had the general goal of gaining an understanding

of the settlement pattern on Thompson Island by conducting a stratified survey of the various ecological zones present there; specific goals included defining the site boundaries for 19-SU-33 and 19-SU-31 (Shaw 1984). In 1984 Mary Beaudry of Boston University directed background research and archaeological survey of the historic sites on the island (Cook 1993).

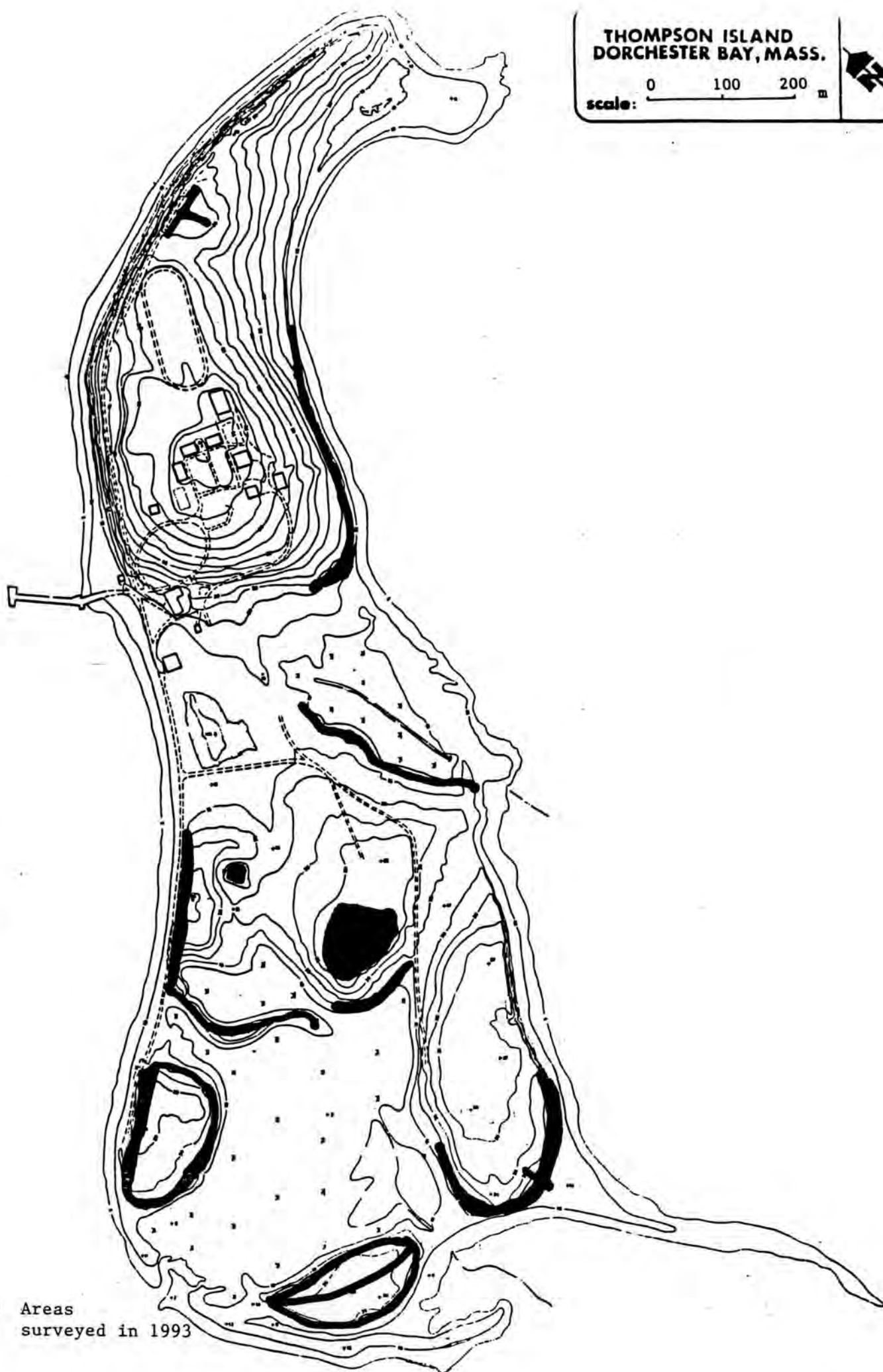
In 1986 several members of the Committee came out to the island to test in the vicinity of 19-SU-37 with soil augers, in order to determine whether there were additional features or midden that might erode out (Shaw 1987). Upon finishing this task, they discovered that the part of the site located under the Ropes Course had been scraped by a bulldozer; ironically enough, this had happened while the operator was attempting to build a brush barrier to protect the site. Shell fragments and artifacts were exposed over the entire scraped surface, so a few weeks later several TIAAC members came back to map that area, set up a grid, and surface collect all artifacts exposed by the bulldozing (Luedtke and Kerber 1987). In April, 1987, TIAAC members again came to the island to test in an area slated to become the leaching field for a new septic system. Other informal archaeological projects undoubtedly occurred over the years, but no written records have been left to document them.

The University of Massachusetts, Boston (UMB) archaeological project of 1993 was intended to bring the work of the TIAAC to some sort of closure. Our goals were to survey the major areas of the island that remained unexamined by earlier projects, and to attempt to synthesize data from all of the various archaeological projects that have taken place on the Island. Our work was performed under permit number 1305 issued by State Archaeologist Brona Simon and Boston City Archaeologist Steven Pendery, as per our agreement with Thompson Island (Appendix A).

Map 3 shows the areas surveyed in 1993. Some of these are areas highlighted by other investigators as likely to be sensitive (Shaw and Cross 1987), while others were chosen on the basis of my knowledge of site locations on others of the Boston Harbor Islands. Our survey procedure involved the excavation of 50 x 50 cm shovel test pits (STPs) at 10 or 20 meter intervals along transects. Transects were usually aligned parallel to the coast or to marshes, but a few were perpendicular to the coastline. In most areas two parallel transects were tested, one 10 meters inland from the other, but in a few



scale: 0 100 200 m



Map 3 Areas  
surveyed in 1993



locations only one transect was tested. STPs were excavated with shovels, removing the soil in 10 cm arbitrary levels and screening all soil through 1/4 inch hardware cloth. In all, we excavated 228 STPs along 25 transects.

Following the initial survey phase of the fieldwork, we excavated 27 one meter square excavation units (EUs) to further test some of the sites we had discovered. Excavation of EUs was performed using trowels and hand tools, and soil was removed in natural levels unless such levels exceeded 10 cm. In middens, soil was removed in 5 cm levels. Again, all soil was screened through 1/4 inch hardware cloth. Soil samples were saved from all features for flotation, and column samples were taken from some squares for this same purpose. Lab work included washing, cataloging, measuring and weighing all materials. Additional analysis was performed on some artifacts and biological materials.

Information about the sites discovered or tested by the UMB crew will be summarized in the next chapter, along with all available information about sites found in previous archaeological surveys on Thompson Island. It must be stressed that the focus of this report is on the prehistoric sites; information on the historic sites is available elsewhere (Cook 1993).

## Chapter 2 THE KNOWN PREHISTORIC SITES ON THOMPSON ISLAND

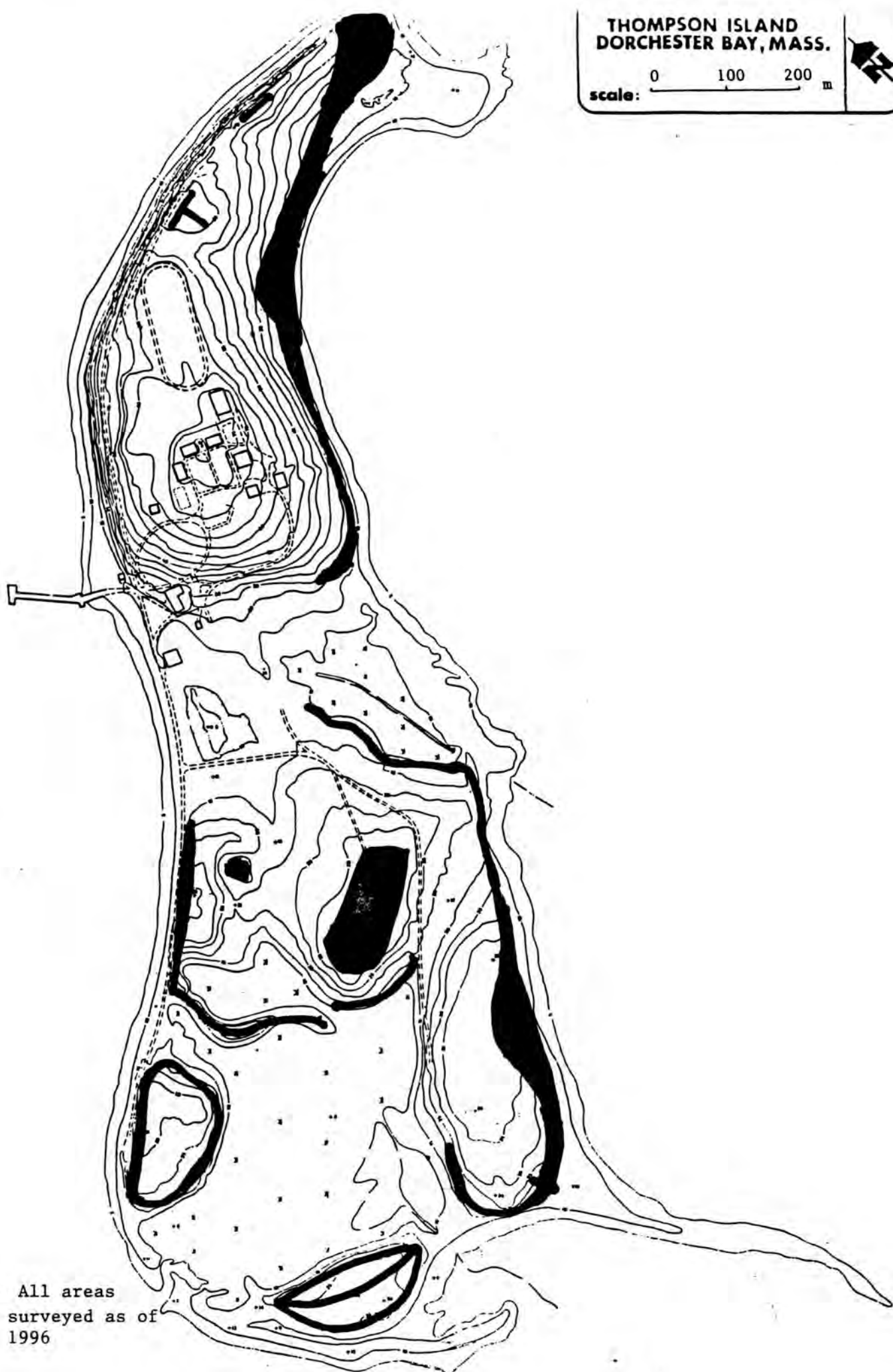
### INTRODUCTION

Traces of human activity can be found almost anywhere one digs on Thompson Island. Most of these traces consist of fragments of brick, ceramics, glass, and metal dating to the eighteenth and nineteenth centuries, and they will not be described in detail here because previous summaries are available (Cook 1993). However, it should be noted that the efforts of the Farm School to keep the island neat and unlittered (White et al 1991: 13) were remarkably effective; other than in trash dump areas, we found surprisingly few artifacts that dated to the Farm School period. One slate pencil, two clay marbles, two glass marbles, and a Boy Scout knife are the only artifacts we found that are likely to have belonged to the Farm School boys themselves.

Traces of the Native American peoples who used Thompson Island in earlier periods can also be found in many places. In fact, the entire island appears to have been used, for various purposes and with varying degrees of intensity. The density of such remains varies tremendously; in some areas a single 50 cm square shovel test pit (STP) produces large quantities of artifacts, waste flakes, and shell, while in other areas several such STPs would have to be excavated to produce a single flake. Nevertheless, there are not very many areas that produce no prehistoric remains at all. This same pattern has been found on others of the harbor islands where there has been thorough survey (Luedtke 1984, NRN 1985). It would not be useful to call the entire island a site, so it has been necessary to establish somewhat arbitrary criteria for defining sites. For purposes of this report, a site will be defined as any area where prehistoric remains were found in two or more contiguous STPs. Moving away from a known site, a boundary was assumed to exist when no materials were found in STPs for a distance of at least 20 m.

It must be emphasized that these are not all the prehistoric sites existing on Thompson Island, but only the ones that have been discovered thus far. Not all areas of the island have been checked (Map 4), and many of the sites we found are quite small, suggesting that other similar small sites may also be found in other locations or in between our testing intervals.

scale: 0 100 200 m



Map 4 All areas  
surveyed as of  
1996

Types of sites and settlement patterns by period will be discussed in Chapter 3. This chapter will describe each of the known prehistoric sites, using a standard format. Sites are described in order by Massachusetts Historical Commission site number: names and designations used by previous investigators are included in Appendix F. Next, locational characteristics are given, including aspect (i.e. the direction the site faces and the directions from which it is sheltered), elevation, soil type (as per Peragallo 1989) and distance to fresh water. The latter is extremely difficult to determine because most of the Boston Harbor Islands originally had springs that no longer exist because of changes in the water table. There are two places on Thompson Island where courses of old streams or springs are obvious, and distances were measured to these. However, it is entirely possible that other springs existed closer to most of the sites, so the distances given should be taken as maximum values. Finally there is an estimate of the size of the site, based on the testing done thus far; this number should also be considered approximate.

Next the history of investigations at each site is given, followed by a summary of what has been found, including the stratigraphy (description of soil layers, types of soil disturbance evident, etc.), artifacts (tools, sherds, and other items made by people), biological remains (bones, shell, and carbonized wood or seeds), and features (stains in the soil where fires were made, trash was disposed of in pits, etc.). Common names of all plant and animal species are used here; their scientific names can be found in Appendix D. In a few cases, differences may be noted between finds reported here and those described in the preliminary reports. These discrepancies result from later re-analysis of the data either by the original excavators or by me.

The period or periods during which the site was occupied is given next, as determined from radiocarbon dates, styles of artifacts, and sometimes the types of shellfish used. Next the site function is given. Some sites are interpreted as "habitation sites", where groups of people camped for some time and engaged in a wide range of activities including food processing, cooking, eating, tool manufacture, and sleeping. Habitation sites are often located in especially favorable locations near a wide range of resources, and were often used repeatedly for millennia. Other sites are described as "special purpose", because they appear to be locations where a small task

group or a few individuals engaged in a limited range of activities, such as collecting and processing one type of food. Finally, an assessment of the site's condition and any specific recommendations for its protection are given. More detailed information about each site is given in Appendix F.

## 19 - S U - 17

Locational characteristics: On top and coastal slope of hill that overlooks extensive intertidal flats with shellfish beds. Salt marsh also nearby.

Aspect: Faces SSE, sheltered from N and W

Elevation: 7.6-9 m (25-30 ft)

Soil type: Merrimac fine sandy loam (MmB)

Distance to fresh water: Adjacent

Size: 19,000 m<sup>2</sup>

History of investigations: Much of the Farm School collection was apparently from this site (Beacon 1897:1[2]), and Henry Leschernier reported to Dincauze that most of his collection also came from this area. William Fitzhugh kayaked out to the island in 1969 while he was a student at Harvard and noted a shell midden in this area, which he named the Kayak site. Dincauze visited the site in 1970 and 1971 and differentiated three different areas of shell, which she called areas 15a, 15b and 15c. Area 15a was the northernmost, located north of the ravine, and had oyster and clam shell in midden in plowzone. Area 15b was 100 yards away, south of the ravine, and consisted of mass wasted shell spread along the cliff face. Area 15c was 50 yards further south along the coast, and consisted of pulverized shell (Dincauze 1970/71). This site has produced human burials; Leschernier said that in 1969 he salvaged a flexed burial at the southern end of the site, under shell midden, and reburied the bones in the island cemetery. In 1971 he found the distal end of an adult humerus, broken at the diaphysis, in area 15b (Dincauze 1971). Braun apparently considered this site to be a continuation of 19-SU-31 and reported that several pits and shellheaps were exposed in the eroding scarp adjacent to it (Braun 1972: 104). He took shellfish samples from two of the shellheap features (Braun 1972: 105).

Both Harvard field schools tested in this area. In 1982 Barber excavated ten STPs in this area, and reported "diffuse shell midden" distributed in two general areas. He called the more southerly of



these site 1 and the northern area site 2 (Barber 1983:4). His crew also salvaged a pit feature, labeled 2A, which was eroding from the north area. In 1983 Shaw tested to determine site size, integrity, and age. Her crew excavated four STPs between the coast and the top of the hill. The Boston University crew also excavated 29 STPs at 10 m intervals on a transect along the coast, and surface collected along the adjacent beach (Cook 1993). John Shea came out with the BU crew and excavated an eroding feature "in the embankment at the row of trees", presumably those near the north end of site (Cook 1984:12).

**Stratigraphy:** Shaw reports a variety of soils in her STPs, but most generally brown sandy loam from 0-27 cm, then yellow to orange sandy loam usually pebbly or rocky to 40 cm, grading into tan sandy clay. She and Cook both agree that most of the site has been plowed.

**Artifacts:** Projectile point types reported from this site include small stemmed points, Atlantic and Wayland notched points, the base of a possible Boats point, a side-notched point, a Jack's Reef corner-notched point, and Levanna points. Other chipped stone tools include an Atlantic biface scraper, unifaces, blades, cores, and numerous flakes. Pecked and ground stone tools found here include heavy plummets, small plummets, a celt, flaked and ground axes, net weights and hammerstones. Fire cracked rock was found, as well as sherds from both grit tempered and shell tempered pottery vessels.

**Biological materials:** Soft-shell clam predominates, though oyster, razor clam, and mussel are also reported (Braun 1972: 105). Bones of deer, turkey, cormorant, dog, and possible rabbit have been found, in addition to many fish vertebrae. Human bones have also been found at this site.

**Features:** Barber salvaged a trash pit feature at this site (Fea 2A), and Shea salvaged an eroding feature that probably also represents a trash pit (Cook 1984:12).

**Age:** Artifact styles dated to the Late Archaic and Terminal Archaic have been found, along with sherds and point types representing the Early, Middle and Late Woodland periods.

**Site function:** The size of this site and diversity of artifacts found suggest that it was a habitation site. Fishing and wood working may have been important activities here, especially during the Late

Archaic. Barber suggested that on-site butchering of deer took place here during the Middle Woodland, based on the variety of body parts in Fea 2A (Barber 1983: Table 2).

Recommendations: Dincauze noted serious erosion and evidence of looting at this site when she first visited it in 1970. This site has also been severely affected by recent storms, especially the Blizzard of 1978, which is said to have removed from one to three meters of coastline from this area (Caldwell 1984:408). Although Barber saw eroding shell and suggested that the site might be largely intact, he also admitted that the shell midden he saw might be the landward remnant of a much larger site (Barber 1983: 5). The fact that so few artifacts have been found in STPs during subsequent surveys would support the latter interpretation. When the UMB crew checked the area in 1993 no shell midden or features at all were visible in the erosional scarp, and large chunks of undermined turf lying on the beach attested to the ferocity of the erosion taking place. Nevertheless, a brief inspection in August of 1996 revealed three areas where pockets of shell had recently eroded out, suggesting that although the main midden is gone, intact features may still exist. The non-midden portion of the site apparently extends up on to the top of the hill, as well. The fact that this site has produced human burials makes it especially sensitive. The area should be monitored for further eroding features, and land alteration should be kept to a minimum in this area.

## 19 - S U - 31

Locational characteristics: On gently sloping land near coast, adjacent to salt marsh, clam beds, and clay deposits.

Aspect: Faces S, sheltered from W

Elevation: 3-4.5 m (10-15 ft)

Soil type: Several soil zones come together in this area, and the site may include some of each type. From E to W they are Walpole sandy loam (WaA), Pittstown silt loam (PtB), and Merrimac fine sandy loam (MmB).

Distance to fresh water: 300 m

Size: 2500 m<sup>2</sup>

History of investigations: This area was farmed, so the site was probably known to the Farm School boys. However, it was first officially recorded by Dincauze in 1971. She excavated three test

pits and also salvaged artifacts eroding from two features exposed in the erosional scarp. The Harvard field crew excavated four STPs here in 1982, and the Boston University crew excavated 19 STPs at 10 m intervals through this area, in an unsuccessful effort to find traces of David Thompson's house. The UMassBoston crew excavated STPs along a transect adjacent to the western edge of salt marsh, but no prehistoric artifacts were found in the area where this transect should have crossed the site.

**Stratigraphy:** Dincauze reported plowzone extending to 40 cm. Shaw reports considerable variability in soils, probably reflecting the different soil types mentioned above. To generalize, she found plowzone consisting of dark brown sandy loam with small pebbles to 25 cm, yellow-brown sandy loam with pebbles to 38 cm, and then yellow-gray sands and gravels. Most artifacts were in the plowzone or in features.

**Artifacts:** One small stemmed point, a slate end scraper, the base of a corner-notched point, sherds of thick coarsely tempered pottery, flakes, and fire cracked rock have been found in excavations at this site.

**Biological materials:** Shell was encountered by Dincauze but the type is not mentioned. Dincauze reports no bones in her test pits (Dincauze 1971). Shaw reports one unidentifiable bone and a few shell fragments from the Harvard STPs.

**Features:** Dincauze found two features, both apparently pits, about 70 m apart eroding from the scarp along the coast.

**Age:** Tools diagnostic of the Middle Woodland period have been found at this site, and it may have been used during the Late Archaic as well.

**Site function:** The function of the site is unknown, although fire cracked rock is more abundant here than at most of the other Thompson Island sites, suggesting processing of some resource, perhaps shellfish or fish.

**Recommendations:** This site has been truncated by an erosional scarp, and in 1993 large chunks of undermined turf could be seen where they had collapsed on the beach. In addition, the site has been plowed, though features may still exist beneath the plowzone.

It is possible that erosion and plowing have completely destroyed this site, but features may still erode from it on occasion. The area should be protected from further erosion as much as possible.

## 19 - S U - 32

Locational characteristics: On coast at base of slope, adjacent to shellfish beds and to salt marsh.

Aspect: Faces NNW, sheltered from NE

Elevation: 3-6 m (10-20 ft)

Soil type: Canton fine sandy loam (CaB)

Distance to fresh water: 450 m

Size: 550 m<sup>2</sup>

History of investigations: This site was first officially recorded by Dincauze, who noted a thin spread of shell exposed at the base of the root zone in a road cut, in addition to a feature (Dincauze 1970). Two derelict barges beached on the adjacent shore gave the site its name. Henry Leschernier reported to her that the shell used to extend the full width of the road, and that he found artifacts on the beach. At the time of the UMassBoston survey, a thin scatter of shell could still be seen eroding out of the road cut, but testing along transects 1 and 2 produced no flakes or other prehistoric artifacts. A single hornfels flake was found at the shore-ward end of the small ridge immediately to the west of the site, perhaps indicating that the site once extended that far.

Stratigraphy: Dark brown silty loam with few rocks to 30 cm, overlying yellow brown sandy silt. Top layer is plowzone, and most artifacts were apparently found in this zone or in features.

Artifacts: Dincauze reported that she saw a small quartz point in Leschernier's collection from this site. The UMassBoston crew recovered only one flake.

Biological materials: Dincauze reported primarily soft-shell clam, plus mussel and razor clam from this site. No biological materials were found in the UMB test pits.

Features: Dincauze noted a shell-filled pit with heat-reddened peripheries, containing primarily soft-shell clam with small amounts



of mussel and razor clam (Dincauze 1971). Presumably, this was a roasting pit.

Age: The shell types present would suggest a Middle or Late Woodland age for this site, but other periods may also have been present originally.

Site function: So little of this site remains that it is impossible to determine whether it was a habitation or a special purpose site, though the latter is most likely. The shell-filled pit might indicate that processing of shellfish took place here.

Recommendations: This site appears to have been largely eroded away at this point in time, though it is possible that features may still exist and could be exposed by erosion, especially after storms.

### 19 - S U - 33

Locational characteristics: Along base of gentle slope above broad cove, adjacent to soft-shell clam flats and to a sandy beach.

Aspect: Faces SSE, sheltered from N, NE and W

Elevation: 3-9 m (10-30 ft)

Soil type: Newport silt loam (NpB)

Distance to fresh water: Adjacent

Size: 8,000 m<sup>2</sup>

History of investigations: This site was surely known to the Farm School boys, as its midden is quite noticeable in the erosional scarp that truncates this site. It was first officially recorded by Dincauze, who excavated two small test pits at the south end of the site and one 1 x 1 m pit near the middle of it in 1971 (Dincauze 1971). Braun obtained a sample of shell from the larger test pit and he also took four 15 cm square column samples, one of which was located south of the stream that runs through the site. The 1982 Harvard field school excavated nine STPs and five EUs at this site. Barber called the area north of the stream bed site 3 and the area south of the stream site 6. He also used soil coring tools in an effort to determine the boundaries of the midden. Eleven more 1 x 1 m squares and six more STPs were excavated here by the Harvard field school in 1983. Cook and Beaudry surface collected along the beach adjacent to this site in 1984. In 1986 part of this site's surface was scraped off by a bulldozer, and members of the TIAAC conducted a controlled surface



pick-up of the disturbed area (Luedtke and Kerber 1986). In 1993 the UMassBoston crew sought to clarify the southern boundary of the site by excavating STPs along two transects beginning at the green stairway and proceeding south along the coast. Six of these STPs produced prehistoric materials.

**Stratigraphy:** Like other large multi-component shell midden sites, this site shows considerable horizontal variation in its stratigraphy. Braun reported finding 10-15 cm of sterile topsoil overlying a single layer of shell refuse-5-15 cm thick lying on glacial till (Braun 1972: 111). Dincauze's excavation in 1971 encountered 3-4 cm of sterile topsoil, then topsoil with pockets of shell in it. She then encountered microstratigraphy consisting of at least four layers of shell, each 2 to 4 cm thick and separated by similarly thin layers of soil; the shell layers dipped to the SE. These thin shell layers were not encountered when Harvard excavated in this area in 1982, and Dincauze has suggested that the microstratigraphy might have been "an earthworm construct of short duration" (personal communication 1993). However, Shaw does report microstratigraphy in her 1983 excavations at the site, and she suggests that the stratigraphy is clearer inland. The section of the site closer to the coast appears to be more disturbed, perhaps because of heavy trampling and other disturbance by prehistoric inhabitants of the site (Shaw 1984). Barber suggested that the presence of fragmented and well-sorted shell indicated some vertical transport, and he also believed that some of the site had been plowed (Barber 1983). However, the strongly localized occurrences of flake and shell types found by the TIAAC crew in the area they surface collected after the bulldozer scraping episode suggested to them that this area of the site had not been plowed (Luedtke and Kerber 1986). Obviously, the stratigraphy varies across this site. Prehistoric materials are found from ground surface to 45 cm below the surface, but appear to be concentrated from 10 to 30 cm below ground surface.

**Artifacts:** There is also considerable variation in the artifacts found by different investigators. While all the projects that tested at this site found many flakes, sherds, bifaces, and fire cracked rock, the raw material types and ceramic types varied considerably (see Appendix F). Projectile points include small stemmed points, Atlantic points, and Levanna points. Also found were numerous biface fragments, worked stone, utilized flakes, a fragment of a slate gorget, an adze butt, and two hammerstones. Five sherds of thick ceramic with both interior and exterior cordmarking probably date to the

Early Woodland, but the vast majority of the sherds represent Middle Woodland and Late Woodland styles, in differing proportions depending on what part of the site was being excavated.

Biological materials: Soft-shell clam is the predominant shellfish remain, except in the northwest corner of the site, where scallop, quahog, oyster, and razor clam were found on the surface and in cores. Excavations have produced bones of deer, cormorant, sturgeon, vole, rabbit, Norway rat, and sheep. The latter two are clearly intrusive and probably date to the nineteenth century. Fish vertebrae, sturgeon remains, and one cod otolith were also recovered. Flotation of soil from this site produced no seeds at all, causing Barber to wonder whether small items had been washed downslope (Barber 1983: 13). Shaw reports finding one corn kernel in an STP, though she suspected it might be historic (Shaw 1986).

Features: Dincauze reported a concentration of burned rock underlain and overlain by shell midden in the 1 m square she dug in 1971, which may represent a feature. Barber found no features in 1982 (Barber 1983), but numerous features were found during the 1983 field season, including post molds, several shallow trash pits, one fire pit and a bell shaped pit (Shaw 1984). UMassBoston testing at the south margin did not encounter any features.

Age: Artifact styles and shellfish types suggest Late Archaic, Terminal Archaic, and Early, Middle and Late Woodland occupations at this site. There may be limited horizontal separation of some of these components. Projectile points and ceramic styles suggest that the major period of occupation may have been the late Middle Woodland to early Late Woodland period.

Site function: Based on her initial research, Dincauze believed this site was primarily a summer village, and she and Braun speculated that the area north of the spring was the primary habitation area. The area south of the stream, which had more whole shell in a series of heaps, was thought to be a shellfish processing area (Dincauze 1972). Barber also interpreted this as a habitation site and suggested that ceramics may have been made here, based on the presence of clay coils and unfired lumps. Shaw suggested that a wide range of domestic activities may have occurred near the coast, while specialized activities such as shellfish processing may have taken place further inland. One of the students on her crew sectioned four quahog shells and found that all had died between

summer and early winter, suggesting that the Middle Woodland camp may have been occupied during this season (Seidner 1983).

**Recommendations:** This is a difficult site to deal with because it is one of the most important on the island, it is extremely visible, and its location is integral to many activities of the Education Center today. The site has surely been affected by erosion, parts of it have been plowed, and other areas have been disturbed by tree throws, nineteenth century construction activities, and the play activities of generations of children. However, the area has also been a woodlot for over a century, and parts of it may remain largely intact. These undisturbed areas, plus the large size of this site and the fact that it has been occupied for so long make it very important. Thompson Island Outward Bound should be very careful about activities associated with the Ropes Course, which traverses part of this site. Any proposed changes to this course should be evaluated for their potential to disturb the ground. Adding a layer of woodchips to the areas where shell fragments are visible on the ground surface would help to control the erosion that is currently taking place along paths and on bare ground surfaces. This site is also highly vulnerable to looting; the shell fragments on the ground surface and in the erosional scarp are a clear indication to anyone with a modicum of archaeological expertise that a site exists here. Therefore, the Education Center should keep a close eye out for looters at this site. The signs currently posted in the area prohibiting unauthorized activities, though probably intended for other reasons, are actually helpful for this purpose as well. In general, sensitive management of this area should allow a wide range of activities to take place while still protecting this important and interesting site.

## 19 - S U - 34

**Locational characteristics:** On top of hill along coast.

**Aspect:** Faces N, sheltered from W.

**Elevation:** 14-15 m (45-50 ft)

**Soil type:** Newport silt loam (NpD)

**Distance to fresh water:** 210 m

**Size:** 400 m<sup>2</sup>

**History of investigations:** This site was first recorded by Dincauze, who visited it in 1971 and noted a spread of shell for 6 to 10 feet along the bank at the highest point of the erosional scarp (Dincauze

1971). No collections were made at that time, and the site has not been tested further by subsequent investigators.

Stratigraphy: Dincauze noted that a plowzone was present, but stratigraphy is otherwise not described.

Artifacts: None found.

Biological materials: All the shell is reported to have been soft-shell clam (Braun 1972:108).

Features: None reported.

Age: The age of this site is unknown, though the predominance of soft-shell clam suggests a late Middle Woodland or Late Woodland age (Braun 1974).

Site function: Dincauze reported that this was probably a small midden that had nearly been destroyed by plowing and cliff erosion. Further erosion subsequent to her visit has apparently removed what little she saw. The only activity represented by our existing information is shellfish collecting, suggesting that this was a special purpose camp.

Recommendations: Little can be done about this site, other than keeping an eye out for eroding features.

## 19-SU-36

Locational characteristics: On coast behind small marsh adjacent to sand spit. Before beach deposits developed, would have lain on the east shore of a shallow cove, adjacent to extensive clam flats.

Aspect: Faces SSE, sheltered from N and NW

Elevation: 3-4.5 m (10-15 ft)

Soil type: Newport silt loam (NpB)

Distance to fresh water: 180 m

Size: 1,900 m<sup>2</sup>

History of investigations: Dincauze first noted shell on the surface of this area in 1971, and Braun made a surface collection of shellfish remains. He also noted that shell could be seen along 25 meters of the shoreline and up to 14 meters inland (Braun 1972:103). The



Harvard field school dug three STPs there in 1982. Shell was still visible on the surface in 1993, when the UMassBoston crew walked over this area but did not test it.

Stratigraphy: Shaw reports variable soil profiles. One STP had 47 cm of dark brown sandy loam full of shell overlying 8 cm of dark brown sandy loam without shell, on top of tan compact sandy clay. Just 13 meters to the northeast she found 39 cm of brown sandy loam with shell overlying sandy yellow soil with many pebbles. Uphill, the topsoil was only 28 cm thick (Shaw 1986: 15-16). All artifacts and biological remains appear to be in the first soil zone, which is probably a plowzone.

Artifacts: Flakes, a quartz biface, and fire cracked rock have been recovered from this site, but no artifacts diagnostic of a particular time period have been found as yet.

Biological materials: Braun's surface collection of shell contained about equal quantities of soft-shell clam and quahog, along with smaller amounts of oyster, scallop, and mussel. Barber's STPs produced primarily soft-shell clam. Mammal bone has also been found here (Dincauze 1971, Shaw 1987).

Features: None encountered.

Age: No diagnostic artifacts have been found as yet, but the types of shellfish found suggest occupation had begun at least by the Early Woodland or early Middle Woodland, and probably ended when the beach ridge formed and cut off access to the shore. Salt water peat from about 12 inches beneath the surface of the peat in the beach produced a radiocarbon date of 2500 +/- 113 radiocarbon years BP (Humble O-1119) (Kaye and Barghoorn 1964:74), suggesting that the beach ridge formed after that date.

Site function: Dincauze suggested that this site might be a continuation of 19-SU-33, but Barber's testing found that it was spatially separate from all other sites in this part of the island (Barber 1983). Braun suggested this was probably a small habitation site (Braun 1972:103), and this interpretation still seems likely.

Recommendations: This site has been disturbed by plowing, but there is a strong possibility of intact features below the plowzone. There has been relatively little testing of this site, and it is probably

relatively well protected by its location. However, TIAAC members have reported heavy construction equipment in this vicinity scooping up beach gravel to spread on roads and trails, and such activities could easily destroy part of this site. We recommend that gravel collecting be done at other less sensitive beaches, rather than in this area.

## 19-SU-37

Locational characteristics: At base of slope along coast, adjacent to clam flats.

Aspect: Faces E, sheltered from W

Elevation: 1.5-3 m (5-10 ft)

Soil type: Newport silt loam (NpD)

Distance to fresh water: 300 m

Size: 2,900 m<sup>2</sup>

History of investigations: This site was surely known to the Farm School boys and to the amateur archaeologists who collected on Thompson Island. Barber was told that in the 1920s a thick deposit of shell was present at this site, and that a human skeleton eroded from the bank (Barber 1984:414). No source is given for this information, though in another article Barber attributes the information about the burial to personal communication from Louise Randall (Barber 1983). Henry Leschmier also told Dincauze that at some point in the past a number of human femurs were found eroding from the erosional scarp; ultimately, five flexed and one extended burial were salvaged and reburied in coffins in the school cemetery (Dincauze 1971).

The site was first officially recorded by Dincauze, who visited it in 1971. She reported a small midden, 1 x .15 m, exposed in the erosional scarp among the tree roots below an old plowzone. Braun took a column sample from this "shell heap", probably a shallow feature (Braun 1972:107). In 1982 the Harvard field school salvaged a feature eroding from the scarp (Fea. 5) and dug three STPs above it. The latter produced no prehistoric materials. Members of the TIAAC conducted further testing of the area with soil coring devices in 1986, but no prehistoric materials were found (Shaw 1987). Barber believed that the site was entirely gone (Barber 1984: 414). However, the UMassBoston field school discovered yet another feature eroding from the scarp and salvaged it in 1993.

**Stratigraphy:** Shaw reports brown sandy loam to about 25 cm overlying orange to tan sandy loam (Shaw 1986: 16-17). The UMassBoston excavations found dark brown (10YR3/3) topsoil extending from the surface to about 27 cm, interpreted as a plowzone. Below that the soil was loose and yellow brown (10YR5/6), becoming rocky and grading into tan (10YR6/6) gravelly soil at about 47 cm in depth. In recent years, artifacts have been found only in association with features at this site.

**Artifacts:** Excavations at this site have produced flakes, fragments of fire cracked rock, and a broken pestle that had been placed upright along the side of a feature.

**Biological materials:** Soft-shell clam is the predominant species found at this site, with small amounts of mussel, moon snail, and whelk present as well. Fish remains include sturgeon skates and bones from cod or other gadids. No bones of mammals or birds have been reported by excavators.

**Features:** In the last few decades, only features have been found at this site. All of these features appear to be shallow pits, all about the same size, for the disposal of food refuse and other debris.

**Age:** Dincauze noted that the lack of grave goods in association with the skeletons found at this site suggested a Late Woodland date for the burials (Dincauze 1971). Barber also believed that the site dated to the Middle or Late Woodland (Barber 1984: 414). A radiocarbon date of 340 +/- 50 radiocarbon years BP (approximately AD 1445-1660) on charcoal from the feature salvaged in 1993 confirms that at least part of the site dates to the later part of the Late Woodland period (Appendix C).

**Site function:** This appears to be the remains of a once much larger site, and the loss of so much of the site makes interpretation difficult. The features that have been excavated in recent decades are all remarkably similar and would suggest that this was a specialized camp for processing fish and shellfish. Barber suggests the site was used for this purpose primarily in the late summer (Barber 1983). However, the reported presence of burials at this site suggests that either burial of the dead was a second specialized activity that took place here, or that this was originally a habitation site where a wider range of activities took place, including burial of the dead.

Recommendations: Erosion has damaged this site severely in the past and is still the most serious threat to it. In addition, a path to the beach runs through the edge of the site, and the site has been plowed. Nevertheless, features similar to the ones found in recent years may remain intact below the plowzone and may continue to be exposed by erosion along the scarp or in the path. It is less likely that further burials will be found, primarily because the shell midden that would have protected the bones from dissolution in the acid soils is gone. However, it is possible that additional burials could be exposed by erosion, making this site very sensitive indeed. Should any such possible burials be noted, the procedures described in Appendix F should be followed. Efforts to minimize erosion in this area would be welcome.

## 19-SU-64

Locational characteristics: On top of hill near coast.

Aspect: Faces N, not sheltered.

Elevation: 15-16.8 m (50-55 ft)

Soil type: Newport silt loam (NpD)

Distance to fresh water: 60 m

Size: 500 m<sup>2</sup>

History of investigations: This site was discovered by the UMassBoston field school, when flakes and/or shell were encountered in six STPs along a transect parallel to the shore. Another transect located perpendicular to this one produced no flakes or other prehistoric material for 50 m inland, suggesting that this site is indeed separate from 19-SU-33 or other nearby sites.

Stratigraphy: Dark brown sandy loam is found to a depth of about 35 cm, overlying light yellow to tan sandy gravelly soil. Plowzone is present. Prehistoric materials were found from 10-50 cm, with most artifacts from 40-50 cm. Historic artifacts were found to a depth of 40 cm.

Artifacts: Only flakes were found. Historic artifacts such as ceramics and kaolin pipe fragments were also encountered in all the STPs.



**Biological materials:** One fragment of soft-shell clam was found, but no bone or charcoal. Shell fragments were also noted on the surface of the nearby road.

**Features:** None encountered.

**Age:** This site has not produced any artifacts of known age. Flake materials include both quartz and hornfels; quartz was commonly used during the Late Archaic and hornfels during the Woodland, but both materials could have been used at any time.

**Site function:** This site appears to be largely a flake scatter, and may have been an area where stone tool manufacture or resharpening took place.

**Recommendations:** The site has been plowed and is truncated by a steep erosional scarp, suggesting that much of it may have been destroyed by erosion. It would not appear to require any special treatment, although it should be monitored if activities such as road-widening or construction are planned for the area.

## 19 - S U - 65

**Locational characteristics:** At base of slope near coast, adjacent to shellfish beds and salt marsh.

**Aspect:** Faces SE, sheltered from N, NE and NW

**Elevation:** 4.5-6 m (15-20 ft)

**Soil type:** Newport silt loam (NpC)

**Distance to fresh water:** 440 m

**Size:** 1,700 m<sup>2</sup>

**History of investigations:** This site were first recorded in 1993 by the UMassBoston project, which excavated eight STPs and one EU in this area.

**Stratigraphy:** This site was disturbed everywhere we tested, probably by multiple factors including plowing, planting of trees, construction of a nearby leaching field, and by periodic damming of the original exit to the nearby salt marsh. Small fragments of shell can be found in the soil almost everywhere one digs in this area, but we were not able to isolate a shell layer, and some of the shell may represent slopewash from the hill above. In the excavation unit, we

excavated through muddy black (10YR2/1) topsoil with few pebbles to a depth of 30 cm below ground surface, with shell beginning at 15 cm and continuing to 30, where the soil turned to gray clay. The square became flooded with ground water at this point, and was abandoned. Historic and prehistoric artifacts were found throughout, suggesting considerable disturbance.

**Artifacts:** A number of especially fine artifacts were found on the highly disturbed surface of this site. They included one carefully made Jack's Reef pentagonal projectile point of what appears to be gray Onondaga chert from New York State; two biface knives, one of which was made of a black chert that also may be from New York; a core/abrader; two utilized flakes and one unutilized flake. Unfortunately, our excavation units and STPs produced only flakes.

**Biological materials:** Numerous fragments of soft-shell clam were found, along with small amounts of quahog, razor clam, mussel, and moon snail. Most of the bones appear to be of nineteenth century origin, including several sawed bones of large domestic animals. However, some mammal bones may be prehistoric, including vertebrae and foot bones of a medium sized mammal. Fragments of wood charcoal were also recovered.

**Features:** None encountered.

**Age:** This site probably had a major Middle Woodland component, based on the artifact styles, the shellfish types, and the presence of stone tools made on exotic raw materials.

**Site function:** This is one of the most fascinating and frustrating sites we encountered. The unusual and beautifully made artifacts intrigued us, but despite considerable testing we were unable to find an undisturbed area. Because of the extent of disturbance, it is also impossible to tell whether this was a habitation site or a special purpose camp.

**Recommendations:** This site is already badly disturbed, but it is still possible that some part of it may remain intact. Therefore, further disturbance of this area should be avoided if possible.

## 19 - SU - 66

Locational characteristics: On coast at the base of a slope, adjacent to clam beds and salt marsh.

Aspect: Faces NE, sheltered from SW

Elevation: 3-4.5 m (10-15 ft)

Soil type: Canton fine sandy loam (CaB)

Distance to fresh water: 500 m

Size: 1,100 m<sup>2</sup>

History of investigations: This site was first recorded by the UMassBoston field crew. It was discovered by the director and her field assistant, who were excavating the very first STP of the survey as a demonstration for the students in the field school. Six STPs and three excavation units were subsequently excavated at this site.

Stratigraphy: Dark brown (10YR4/3) topsoil forms a plowzone to 26-30 cm, overlying yellowish brown (10YR6/6) sandy soil. A 15 cm thick layer of gravel representing a road runs through part of this site, mostly at a depth of 10-30 cm. Prehistoric materials were found from 0 to 50 cm, with most found at 30-40 cm. Historic materials were found in the plowzone.

Artifacts: The site produced a small fragment of worked steatite, sherds of shell tempered ceramic, core fragments, a utilized flake, a hammerstone, and fire cracked rock. In addition, numerous flakes representing a wide range of raw materials were recovered.

Biological materials: Fragments of soft-shell clam were found in apparently undisturbed context, but all other shell was from surface levels and is apparently associated with field trash or beach gravel on paths. Several fragments of wood charcoal were found, as well as several fragments of calcined bone, one of which appears to be turtle.

Features: Two small shallow charcoal concentrations and one small charcoal pit with shell in it were encountered. No artifacts were associated with these features.

Age: The artifacts suggest that this site was occupied during more than one time period. The steatite fragment is too small to tell if it is part of a bowl or of some other object, though the one exterior surface visible on it appears to be flat. A steatite bowl would

probably date to the Terminal Archaic, but a steatite pendant or gorget would probably date to the Middle or Late Woodland. Jasper flakes were found, and these are good markers for the late Middle Woodland, (Luedtke 1987). The ceramics would appear to date to the Late Woodland (Luedtke 1986).

Site function: The site is in an atypical location for habitation sites, and the lack of shelter from the northeast and westerly winds would also suggest that this was a special purpose camp rather than a habitation site. There was a brisk wind blowing one of the days we tested here, and our excavators can attest to the fact that the location became quite unpleasant under those circumstances. Stone tool manufacture, cooking, and perhaps shellfish collecting are the only activities apparent from our testing.

Recommendation: This site has been damaged by the road through it and by erosion, but its unusual location and range of artifacts suggest that it might be an interesting and significant site. The area can be rather easily spared from further disturbance, and this should be done if at all possible.

## 19 - S U - 67

Locational characteristics: On north through northeast sides of kettle hole, which may have been a permanent pond at one time or may have occasionally filled with water after rains.

Aspect: Facing S, sheltered from all directions

Elevation: 3.7-4.5 m (12-15 ft)

Soil type: Canton fine sandy loam (CaB)

Distance to fresh water: Probably adjacent

Size: 100 m<sup>2</sup>

History of investigations: This site was located during the UMassBoston survey. Four STPs were excavated here.

Stratigraphy: Dark brown loamy soil to a depth of 50-60, overlying yellow brown loamy soil. The depth of the topsoil suggests that there has probably been a great deal of slopewash here. Prehistoric artifacts were found in the lower levels, from 30 to 50 cm.

Artifacts: Two flakes were recovered, as well as one sherd of grit



tempered pottery. Fragments of historic glass, metal, and ceramics were also found.

Biological materials: A few fragments of soft-shell clam that may represent field refuse were found, but no bone or charcoal.

Features: None encountered

Age: The ceramic sherd is probably of Middle Woodland age.

Site function: It is possible that the artifacts found here washed in from uphill, or they may represent items dropped by people who came to use the fresh water that probably existed at one time in the kettle hole.

Recommendation: The site does not appear to be endangered at this time, and no special precautions need to be taken to protect it.

## 19 - S U - 68

Locational characteristics: On top of hill.

Aspect: Faces WNW, not sheltered from any direction

Elevation: 11m (36 ft)

Soil type: Canton fine sandy loam (CaB)

Distance to fresh water: 450 m

Size: 800 m<sup>2</sup>

History of investigations: This site was first discovered during the UMassBoston survey. Prehistoric materials were encountered in five STPs along two transects.

Stratigraphy: Dark brown loamy sand to 28 cm is interpreted as a plowzone, overlying gravely yellow sandy soil. Prehistoric materials were found from 0 to 50 cm.

Artifacts: Four flakes, one cobble that appears utilized, one fire cracked rock, and a sherd of shell tempered pottery were found.

Biological materials: Fragments of soft-shell clam and sea snails were found, but most were in plowzone and probably represent field trash. One small fragment of charred wood is the only other biological remain.

Features: None found.

Age: Based on the pottery, this site was used during the Late Woodland. Use during other periods is certainly not ruled out, however.

Site function: This site may simply represent a flake scatter, but it may also have been a special purpose site of some other type. Given the age, farming may have taken place here.

Recommendation: This site has been plowed and may have been truncated by erosion on its northern side, but it is possible that intact features exist below the plowzone. The site does not appear to be in any danger at this time, and no special care needs to be taken to protect it.

## 19 - S U - 69

Locational characteristics: On top of large, broad hill overlooking salt marsh.

Aspect: Faces SW, but not sheltered from any direction

Elevation: 7.6-11m (25-36 ft)

Soil type: Hinckley loamy sand (HfD)

Distance to fresh water: 240 m

Size: 14,000 m<sup>2</sup>

History of investigations: The 1983 Harvard field school excavated five STPs here and found flakes and fire cracked rock. In 1984, the Boston University crew excavated 27 STPs 10 m apart along two transects running N/S and E/W across the site. Besides a large quantity of nineteenth century field trash, they found a few prehistoric artifacts. They also dug three 1 x 1 m test pits in the vicinity of the house foundation. One of these latter was sterile and the other produced bottle and window glass, cut and wire nails, and other artifacts indicating a nineteenth century date for the farmhouse (Cook 1993:26). A patch of asparagus and an area of raspberry canes between this foundation and the root cellar probably represent the remains of the farm garden. The UMassBoston field school excavated STPs along a transect running roughly north to south, and found prehistoric material in two of them. In addition, six EUs were excavated.

Stratigraphy: Soil colors are remarkably similar over this site, but texture and depths vary. Topsoil is dark brown (10YR3/3) silty loam, rocky in some areas but generally free of rocks. This topsoil usually extends to 25 cm, but in some areas on the top of the hill, it extends to 40 cm. Below this plowzone is yellow brown (10YR5/8) silty loam which becomes paler with depth. This soil also varies from fine to gravelly. Artifacts were found from ground surface to the base of excavations, but most prehistoric materials were found near the base of the plowzone or at the top of the unplowed zone, between 20 and 30 cm in depth. A ridge runs across the site, perhaps representing the trace of an old road.

Artifacts: One small stemmed point, a biface, cores, two worked cobbles, a hammerstone, grit and shell tempered pottery sherds, fire cracked rock, and numerous flakes have been found at this site.

Biological materials: The Boston University crew found a scatter of shell. UMB testing recovered charcoal fragments, a small amount of soft-shell clam, and one uncalcined mammal bone that was from the plowzone and may be historic.

Features: No features of definite human origin were found, though we did encounter one rodent burrow and one feature complex that probably represents tree roots that burned in place.

Age: The small stemmed point may indicate that this site was first used during the Late Archaic, though this style was also used in later periods. The ceramics would suggest use during the Middle and Late Woodland periods.

Site function: It is difficult to determine what people did at this site, due to the lack of features or of clear patterning to the distribution of artifacts. None of the various tests done at this site, including those of the UMassBoston field school, were able to detect a "core" area where materials were concentrated, suggesting that the site was not a major habitation site. The area may have been used for a variety of special purposes. Flake quantities in our EUs varied from 0 to 26, but pits fairly close together had very different quantities. The quantities of flakes found are not great enough to suggest that stone tool manufacture was important here, though tool retouch and resharpening certainly occurred. Farming may have occurred at this

site during the later part of the Late Woodland period, as the soil in this area is good.

**Recommendations:** This site has been thoroughly plowed, but artifacts and perhaps features remain below the plowzone and it is otherwise more or less intact. Erosion does not appear to be a problem for this site, and it should be easy to protect with minimal effort.

## 19-SU-70

**Locational characteristics:** At base of slope of hill, adjacent to salt marsh that may have supported shellfish beds.

**Aspect:** Faces S, sheltered from NE

**Elevation:** 3 m (10 ft)

**Soil type:** Hinckley loamy sand (HfD)

**Distance to fresh water:** 200 m

**Size:** 800 m<sup>2</sup>

**History of investigations:** This site was found by the UMassBoston field school in the course of excavating STPs along a transect running parallel to the margin of a salt marsh. Shell midden containing a mixture of historic and prehistoric artifacts was encountered in four STPs, and one 1 x 1 m EU was then excavated to learn more about the site.

**Stratigraphy:** Dark brown sandy loam (10YR3/3) extending to 40 cm represents either plowzone, or slopewash, or both. The underlying yellow-red (10YR5/6) sandy loam becomes less rocky with depth. Prehistoric artifacts were found from the surface to 50 cm, with most between 30 and 40 cm. Historic artifacts were found from the surface to 30 cm.

**Artifacts:** A number of historic items such as pipe stems and ceramic sherds were found, all apparently dating to the nineteenth century, plus four flakes and two fragments of fire cracked rock.

**Biological materials:** Considerable quantities of shell were found, consisting primarily of soft-shell clam with small amounts of quahog and oyster. In addition, numerous burned hickory nut shells were found, along with charcoal fragments.



Features: None found.

Age: A radiocarbon date of 1,160 +/- 50 radiocarbon years BP (approximately AD 774-998) obtained from the burned nut shells suggests that the shell midden dates primarily to the Middle Woodland period.

Site function: This is likely to have been a special purpose camp, probably occupied during the fall for purposes of collecting shellfish and nuts.

Recommendations: This site was disturbed during the nineteenth century, perhaps by plowing, but at this time it is not in danger from erosion or other threats. It can easily be protected from further damage.

## 19 - SU - 71

Locational characteristics: On top of hill, near coast.

Aspect: Faces N, sheltered from SW

Elevation: 9 m (30 ft)

Soil type: Merrimac fine sandy loam (MmB)

Distance to fresh water: 480 m

Size: 600 m<sup>2</sup>

History of investigations: This site was discovered by the UMassBoston field school in the course of testing a transect running adjacent to the shoreline over the top of the hill. Three STPs produced flakes and one produced quite a bit of shell, and therefore a 1 x 1 m EU was excavated to learn more about the site. Unfortunately, this EU produced nothing definitely prehistoric.

Stratigraphy: Medium dark brown (10YR3/4) topsoil extending to 25 cm is clearly a plowzone. The underlying soil is yellow brown (10YR5/6) and very rocky. Artifacts and shell in STPs were found between 20 and 30 cm in depth.

Artifacts: One hammerstone and several flakes were recovered.

Biological materials: Considerably quantities of soft-shell clam were found in one STP, along with a few fragments of mussel shell and two fragments of charcoal.

Features: None found, though the shell found in the STP may have been a feature or lens.

Age: Shellfish types suggest that this site was used during the late Middle Woodland or Late Woodland.

Site function: Its location and the lack of artifacts suggest that this was a special purpose camp.

Recommendations: This is probably the remnant of a much more extensive site that was truncated by erosion and by bulldozing to create a trash dump. There may be only pockets of shell remaining, but the area should be treated carefully in case more remains.

## 19 - S U - 72

Locational characteristics: On top of hill, not far from coast.

Aspect: Faces NW, not sheltered from any direction

Elevation: 9 m (30 ft)

Soil type: Merrimac fine sandy loam (MmB)

Distance to fresh water: 500 m

Size: 600 m<sup>2</sup>

History of investigations: This site was discovered by the UMassBoston field crew during the survey phase. While excavating a STP on a transect running across the hill, alert crew members noted a layer of rocks and charcoal that they suspected might be a feature. The STP was therefore covered up again so that the entire feature could be excavated later. Three EUs were subsequently excavated, and the entire feature exposed. Flakes were also found in four nearby STPs.

Stratigraphy: Medium brown (10YR4/3) packed soil extends to 20 cm. This is probably a plowzone, compressed by close proximity to a path where heavy vehicles sometimes drive. Below that, the soil was grayish yellow (10YR6/4) gravely sand to the south of the feature, and a redder yellow-brown (10YR5/6) silty sand to the north of the feature. Prehistoric artifacts were found from 0 to 30 cm, with most in the 20 to 30 cm level in association with the rock feature. Historic artifacts were found to a depth of 20 cm, in the plowzone.

**Artifacts:** One small stemmed point was found just above the feature; flakes and numerous fire cracked rocks were also found in the area. A small quartz crystal that appears to be water-worn was also found, but it is impossible to tell whether this was left by people or occurred naturally in the soil.

**Biological materials:** Numerous charcoal fragments were found, but no calcined bone. A few fragments of shell were found in the upper level, but these probably represent field trash.

**Features:** One rock platform was found; the very top appears to have been disturbed by plowing, but it was otherwise intact. Marked reddening of soil to the north of the feature might indicate that this platform was part of a larger feature, or that this was an area where resources were processed by smoking or roasting.

**Age:** A radiocarbon date on charcoal from the center of the feature produced an age of 3,240 +/- 65 radiocarbon years BP, or approximately 1674-1395 BC. This date is in agreement with the small stemmed point, and would suggest Late Archaic use of the area.

**Site function:** The location and the presence of a rock platform feature at this site suggest that it was a special purpose site, perhaps where plant or animal food of some sort was smoked or processed.

**Recommendations:** This site appears to be in no danger from erosion, and should be easy to protect from damage by human activities.

## 19 - SU - 73

**Locational characteristics:** On terrace overlooking marsh, with coast and shellfish beds nearby.

**Aspect:** Faces S, sheltered from NE

**Elevation:** 6 m (20 ft)

**Soil type:** Merrimac fine sandy loam (MmB)

**Distance to fresh water:** 550 m

**Size:** 600 m<sup>2</sup>

**History of investigations:** This site was found by the UMassBoston crew while testing along a transect extending parallel to the marsh.

Two STPs produced prehistoric materials, so one 1 x 1 m EU was also excavated.

Stratigraphy: Medium brown (10YR4/2) sandy soil, probably representing a plowzone, extends from the surface to 40 cm, overlying yellow brown (10YR6/4) subsoil. In most areas the soil is fine, loose, and free of rocks. Artifacts were found from the surface to 50 cm, but most were found from 40 to 50 cm.

Artifacts: One small stemmed point and several flakes were found.

Biological materials: Three fragments of soft-shell clam, a fragment of moon snail, charcoal, and one calcined bird bone fragment appear to be from undisturbed levels of the site.

Features: A small pit with charcoal in it was encountered.

Age: Small stemmed points are most often associated with the Late Archaic period, but were also used during later periods.

Site function: Again, the unusual location and scarcity of artifacts suggests that this was a special purpose camp, but it is impossible to tell from the present evidence what that purpose was.

Recommendations: This site has been plowed, but intact features exist below the plowzone. At this time it does not appear to be endangered by erosion, and it is also not in any apparent danger from cultural activities.

## 19-SU-74

Locational characteristics: At edge of salt marsh, adjacent to shellfish beds.

Aspect: Faces S, sheltered from NE and NW

Elevation: 4.5m (15 ft)

Soil type: Merrimac fine sandy loam (MmB)

Distance to fresh water: 500 m

Size: 600 m<sup>2</sup>

History of investigations: This site was first recorded by the UMassBoston field crew. Shell fragments were noted eroding out at the base of a slope in this area, and testing along two transects



through this area encountered midden and/or flakes in six STPs. An EU was therefore excavated, approximately in the middle of the site, in order to obtain more information. In addition, auguring was done in four directions away from the EU in order to determine the site boundaries.

Stratigraphy: Medium brown (10YR3/2) rocky soil extends to 40 cm, and then black (10YR2/1) soil with shell midden extends to 52 cm below ground surface. The underlying soil is yellow brown (10YR5/6) rocky sand. All soil layers slope to the south. Artifacts were found from 10 to 75 cm, but most were in the midden level. No historic materials were found below 20 cm from the ground surface.

Artifacts: A partially grooved maul or hammer, hammerstones, and a core were found, along with flakes and fire cracked rock. In addition, one shell tempered sherd and a fragment of worked bone were excavated.

Biological materials: The site produced large quantities of shell, the vast majority soft-shell clam, in addition to a few fragments of mussel. Charcoal fragments were also found, as were numerous fish bones, most probably cod, and a few bones of mammal and bird.

Features: None found.

Age: A radiocarbon date on charcoal from this site produced an age of 695 +/- 50 radiocarbon years BP, approximately AD 1251-1397. This would indicate a Late Woodland age for the site, which is also compatible with the ceramic and shellfish evidence.

Site function: This is apparently a Late Woodland special purpose shellfish processing camp; the lack of artifacts associated with other activities suggests that the habitation site was elsewhere.

Recommendation: This is the only site found by the UMassBoston crew that was completely undisturbed, presumably because of its small size, its location, and especially its depth below ground surface. The latter may be due in part to slopewash from plowed fields above. There may be other small special purpose camps like this one, and for this reason any construction around the edge of the salt marshes should be monitored. This site can and should be protected without difficulty.

## 19-SU-75

Locational traits: At base of sand spit, adjacent to clam beds.

Aspect: Faces S, sheltered from N

Elevation: 3-4.5 m (10-15 ft)

Soil type: Beach sand (Be), Merrimac fine sandy loam (MmB) and Hinckley loamy sand (HfD)

Distance to fresh water: 200 m

Size: 1,200 m<sup>2</sup>

History of investigations: Leslie Shaw noted shell on the ground surface in this area during her 1983 field season but she did no subsurface testing here (Shaw 1993 personal communication). Therefore, the site was first formally recorded by the UMassBoston field crew, and it became the focus of our most intensive testing during the 1993 field season. Transects 11 and 23 crossed this site from west to east on the terrace, while transect 16 traversed it at the base of the slope and transect 25 crossed the spit 10 m south of transect 16. Transect 15 crosscut the site from north to south, near its apparent middle. A total of 39 STPs were excavated, in addition to nine 1 x 1 m EUs. We considered the possibility that this was originally part of nearby site 19-SU-17, but our testing revealed a break in the distribution of flakes and other prehistoric materials that justifies treating this as a separate site.

Stratigraphy: This is a complex site, for several reasons. First, part of it located on a geologically active landform, the sand spit. Rather large volumes of sand can easily be deposited or removed from such areas by a single storm, and this complicates the stratigraphy of the area. Second, there has been considerable historic modification of the site. The Farm School cemetery is located on part of the site; we did not test in the cemetery itself, of course, but we did test with a soil coring device on the beach side of the cemetery, and found shell midden there. In addition, geologists have found shell in auger holes through the beach in front of the cemetery (Peter Rosen, personal communication). Several parts of the site have also been severely disturbed by trenches for utilities, including telephone lines, electric cables, and a water main. In fact, we encountered wires in one STP and one EU. Soil from these trenches has sometimes been piled on other parts of the site, just to further complicate the situation. For all these reasons, it is difficult to generalize about the soils at this site

and I have chosen to describe the major sub-areas of the site separately.

There are two marked breaks in slope in this area; from high ground much disturbed by construction there is a drop down to a level area referred to here as the terrace, and another drop to the base of the sand spit. Shell midden and artifacts were found in both the terrace and the spit areas, but there are differences in the shellfish and the types of artifacts present. Therefore, these two areas are described separately below. The actual geological origin of the "terrace" area is unknown, but it is apparently not a remnant of an older spit, because the sediments that form it are too fine and well sorted (Peter Rosen, personal communication).

In the terrace area, dark brown (10YR3/3) topsoil extended from the surface to about 30 cm, overlying about 5 cm of even darker soil (10YR2/1). From 35 to 65 cm this nearly black soil was full of shell fragments. Yellowish brown (10YR5/8) sandy soil extended from 65 cm to 1 meter or more below ground surface; in one EU, shell lenses continued to appear in this soil as deep as 120 cm below surface. Soils were fine sandy silts, becoming increasingly rocky with depth. All soil levels sloped slightly to the south. Prehistoric materials occurred throughout the sequence, but especially from 35 to 65 cm.

On the spit, soils consisted of dark greyish brown (10YR3/2) fine sandy topsoil from the surface to 10 cm, overlying very dark brown (10YR2/2) silty soil, sometimes rocky, to 20 cm. From 20 to 45 cm the soil was black (2.5YR2/1) and very rich with organic matter, becoming rockier with depth. Shell midden was found in this layer in some STPs and EUs, but it was not present in others, suggesting that it exists as a series of lenses or patches. Prehistoric artifacts were also concentrated in this layer. From 45 cm to the base of excavation, usually 60 cm, the soil was yellowish brown (10YR5/6) coarse gravelly beach sand. As on the terrace, soil layers sloped slightly to the south. Toward the east end of the spit, charcoal, flakes, and shell lenses were found in numerous thin layers to a depth of well over a meter, suggesting that soil is being deposited in this area. This area is also consistently downwind from the rest of the site, which probably explains the large quantities of charcoal found there at every depth.

Artifacts: One Levanna point and a number of small stemmed points were recovered from the terrace area, including representatives of

all four varieties of the latter (MHC 1984). Other chipped stone tools from this area include a knife, perforators, bifaces, biface fragments, cores, utilized flakes, and many unutilized flakes. Ground and pecked stone tools include a pestle, hammerstones and a possible pendant or plummet fragment. Three bone points were recovered, and four fragments of worked bone. Finally, numerous sherds representing 14 shell tempered vessels and 15 grit tempered vessels were recovered.

From the spit area we recovered one small stemmed point, Jack's Reef corner-notched points, and a Fox Creek point. Other chipped stone tools from this area include perforators, scrapers, knives, bifaces, biface fragments, cores, utilized flakes, and numerous unused flakes. Pecked and ground stone tools include one partially made tool, one pestle, and several hammerstones. One bone needle and a bone point were also found. Sherds representing 10 shell-tempered vessels and 1 grit tempered vessel were also recovered.

**Biological materials:** The terrace area has a thick shell midden composed largely of soft-shell clam in the upper levels but including lower levels dense with oyster, quahog, scallop and mussel. Oysters in the lowest levels were small, suggesting they had just become established in the area. They apparently became larger over time; one oyster shell from a somewhat higher layer measured 19 cm in length. This midden also produced small numbers of moon snails, slipper shells, surf clam, small sea snails, and even one fragment of ribbed mussel. Bones of deer, dog, raccoon, beaver, seal, turtle, and duck were identified, and numerous bone fragments attributable only to mammals or birds were also found. Fish remains were rare, but goosefish was recognized. Other than charred wood, one hickory nut shell fragment represents the only identified plant remain. The disarticulated bones of a dog were also encountered in a clearly disturbed part of the site. We suspect that a pet burial was disturbed during construction of the utility trenches, and the bones later re-buried.

The shell midden on the spit consisted predominantly of soft-shell clam, with lesser amounts of mussel, razor clam, moon snail, and slipper shell sea snail, and land snail. A few stray fragments of quahog, scallop, and oyster may have fallen or been tracked in from the adjacent terrace section of the site. Bones were not as abundant here as they were on the terrace, because they are generally preserved only where shell is present to neutralize the acidity of the



soil. Remains of deer, dog, beaver, and goose were identified, as well as bones attributable only to bird or mammal. A few fish bones were found, of which some were identified as cod. Again, only one fragment of a hickory nut shell was recovered, in addition to numerous charcoal fragments.

Features: The terrace area produced four trash pit features, most containing shell, dark soil, and flakes. Three of these were in two adjacent pits that also produced the great majority of the sherds from this site area, and it is possible that the features were in some way connected with ceramic manufacture or use.

The spit area produced only one feature, a trash pit containing shell, charcoal, and fire cracked rock.

Age: Both projectile point styles and a radiocarbon date suggest that the terrace area was occupied first during the Late Archaic. A date of 3,730  $\pm$  55 radiocarbon years BP was obtained from charcoal associated with a layer of oyster shell in EU 19, suggesting that it was deposited between 2285 and 1949 BC. To the best of my knowledge, this is the earliest radiocarbon date associated with shellfish use in Boston Harbor, although several other dates in the 2000 to 2300 year BP range have been obtained on oyster and quahog shells elsewhere in the Harbor (Braun 1974: 591, Luedtke and Rosen 1993:7). It is possible that the charcoal is from driftwood that was considerably older than the associated shell, but oyster shell continued to be present in lenses at least 50 cm below the one from which this date was obtained, suggesting that shellfish use began even earlier than this date. Also, Late Archaic shellfish use is well documented both north (Bourque 1995: 34) and south (Ritchie 1969:216) of Boston Harbor, so it is not anomalous here. Small stemmed points were used during the Late Archaic and into the Early Woodland, and the presence of ceramics with interior/exterior cordmarking also indicates occupation during the latter period. Ceramic styles and the Levanna point indicate Middle and Late Woodland occupations on the terrace as well.

The spit area has produced primarily Middle and Late Woodland artifacts and shellfish types. Only one small stemmed point and a few stray fragments of quahog and scallop were excavated there, all of which could have been tracked in from above. This suggests that the marked slope between the terrace and the spit has been stable for some 1,500 years. Evidence for Middle Woodland occupations on

the spit include Jack's Reef and Fox Creek stemmed points, as well as sherds of stamped and grit tempered ceramics. In addition, a date of 1,135  $\pm$  55 radiocarbon years BP (approximately AD 780-1016) was obtained on charcoal in association with a variety of typical Middle Woodland stone tools. This area will be the subject of a separate report (Luedtke nd). Late Woodland ceramic styles and another radiocarbon date attest to Late Woodland use of the spit area as well. A date of 490  $\pm$  55 (approximately AD 1326-1484) radiocarbon years BP was obtained from charcoal in association with sherds from Vessel 6 in a layer 43-48 cm deep at the east end of the spit. This is the area described above with very deep layering of shell and charcoal. A second date from a depth of 110 cm below ground surface was intended to date the beginning of use of this area, but the date obtained was 35  $\pm$  45 radiocarbon years BP, or essentially modern. This sample appears to be contaminated, which is unfortunate but not surprising; once EU 25 reached a depth of 75 cm or so, it became very difficult to climb in and out without accidentally knocking in materials from the ground surface, including charcoal fragments. I suspect this was the reason for the anomalous date.

Site function: The range of artifact types and food remains suggests that this was a habitation site during at least some of the periods of its use. It is located near a variety of resources, including fresh water, at an inherently pleasant part of the island. In Boston Harbor, winds generally blow from the southwest from May to November, and from the west during the rest of the year, which would suggest a consistent breeze blowing across this spit (Lutz 1974: 6). The UMB field school found this to be the case, and noted that the shady parts of this site stay cool even on hazy, hot, humid summer days.

Shellfish collecting apparently began here during the Late Archaic, and the presence of species that like brackish water, especially oyster and ribbed mussel, suggest that the estuary of the Neponset River was nearby at that time. Shellfish collecting and processing probably continued to be important during Early Woodland period, also. This site was especially heavily used during the Middle Woodland, and a variety of activities including shellfish collecting, hunting, fishing, and the manufacture of stone and bone tools took place here then. Evidence of seal hunting occurs at this site, the first in my experience of excavation at Boston Harbor Island sites. Seals were still common on the rocks around nearby Squantum as late as

the mid-1800s (Holly 1992: 22), and may have frequented this area in earlier centuries as well. Processing the seals some distance away, and downwind, would have disturbed the seal colonies as little as possible. Seal hunting might have been especially attractive in the spring, when their meat and fat would have been especially welcome and when the infants were being born. Adult seals can weigh up to 200 lb. (Sweetser 1988:38), and infants would probably have been far easier to kill.

Recommendations: Though this site has been heavily damaged by utility trenches and by the excavation of the cemetery, much of it remains intact. This is an especially important and interesting site, so its protection should be a high priority. Erosion does not appear to be a threat to this site at this time. The spit area is well protected by a layer of sediment, and a recent (8/8/96) visit noted a fresh layer of sand and gravel presumably deposited by storms during the last few winters. However, sand can just as easily be removed from such geologically active areas, and this area should be monitored for such drastic changes. The terrace area appears to be geologically stable, and is only threatened by human activities. Spreading woodchips over the shells visible on the bare ground surface would help conceal the site and protect it from further erosion by foot traffic.

Perhaps the most likely scenario for serious disturbance would involve the need to dig up and re-lay some of the utilities that pass through this site. State and federal permits will probably also be required for such work, as the utilities run underwater to the island. If any work of this type becomes necessary, Thompson Island Outward Bound should notify me as well as the State Archaeologist and the City Archaeologist, so that we can discuss the project with you and devise a plan that will minimize damage to this site.

An additional reason to protect this area is the presence of the island cemetery, which was dug through part of this site. The location of this cemetery, far from the main school buildings, has made it very vulnerable to vandalism, and this is said to be the reason the gravestones themselves were removed some time ago and placed in the basement of the Administration building that later burned down. Currently, the cemetery's location is marked only by a border of white-painted bricks outlining an area about 5.6 by 7.8 meters in size. Inside this border are the bases of five stones, and another base lies just outside the border. However, the actual graves may extend far outside this border. In fact, one of our EUs, placed at what

we thought was a safe distance from the cemetery, was found to have areas of disturbance that appear to be two cross-cutting grave shafts. This should not be surprising; there are records of at least 16 people being buried in this cemetery (Lashbrook 1993), and quite a number of native burials that eroded out elsewhere on the island were re-buried here. There would clearly not be enough room for all of these in the small area encompassed by the white brick border. In other words, the likely presence of an unknown number of unmarked graves in this general area provides additional incentive to be extremely careful with any future activities in this part of the island.

## 19-SU-76

Location: On hill near coast, adjacent to salt marsh and shellfish beds.

Aspect: Faces S or SE, not really sheltered from any direction

Elevation: 7.6-8.5m (25-28 ft)

Soil type: Merrimac fine sandy loam (MmB)

Distance to fresh water: 420 m

Size: 7,200 m<sup>2</sup>

History of investigations: Henry Leschernier is said to have found a human burial on the "SE shore near former drainage channel from southern salt pond" (Dincauze 1971). It is possible the burial was found at this site, but it is far more likely that the burial came from a site on the other side of the channel, or even from an unmarked grave near the Island cemetery. The Boston University team did a surface pick-up along the shore adjacent to this site and found only nineteenth and twentieth century artifacts, especially in the vicinity of a trash dump at the extreme southwest edge of the hill.

Therefore, the site was first recorded by the UMassBoston project, which excavated STPs along three transects. One of these transects ran along the edge of the hill parallel to the shore, one along the edge of the hill parallel to the salt marsh, and the third ran across the top of the hill. Ten STPs, from all three transects, produced prehistoric artifacts and scatters of shell.

Stratigraphy: Soil profiles generally consisted of dark brown loam to 25 cm, though this topsoil, probably a plowzone, was thinner on the top and thicker on the sides of the hill, probably due to slopewash. Below the plowzone was yellow brown soil, sandy on the north side



and rocky on the south. Artifacts were found from the surface to 40 cm, but most were found in the top 10 cm.

Artifacts: A possible hoe, a core, and a quartz crystal were found, in addition to a number of flakes and fragments of fire cracked rock.

Biological materials: A few fragments of soft-shell clam were found in levels beneath the plowzone, along with a few fragments of charred wood.

Features: None found.

Age: No artifacts were found that were diagnostic of any particular time period, though the tool identified as a hoe would be most appropriate for the Late Woodland. Shellfish types are also appropriate for that period.

Site function: This may have been a farming field, perhaps associated with nearby habitation sites or with a small farming hamlet. The relatively thin scatter of flakes may represent resharpening flakes from farming activities.

Recommendations: This site has been plowed, and a road has been cut through one side of it, leading to an erosion problem along the scarp. Several deep holes, both square and round, suggest some other type of historic period construction has taken place here. Nevertheless, there could be features intact below the plowzone at this site, and further disruption of this area should be avoided if possible.

### Chapter 3 DISCUSSION OF SURVEY RESULTS

While the various archaeological surveys described in Chapter 1 have probably not discovered all of the archaeological sites on Thompson Island, they have produced information about a large sample of these sites. We probably know the locations of the major habitation sites, and of many of the small special purpose camps.

Unfortunately, large portions of both types of sites appear to have been lost to erosion before archaeologists could examine them. As the sea rose relative to the land after the end of the Ice Age, massive erosion must have occurred along the shores of Thompson Island. Though sea level rise has slowed considerably, it still continues and erosion is still a threat to many of the Thompson Island sites.

We are also handicapped by the fact that all the artifact collections made before 1970 have disappeared or been dispersed. This is one of the major disadvantages to casual artifact collecting; though the person who made the collection may know where every item was found, and may take loving care of them, the odds are very great that after the collector's death the collection will be lost, sold, or given to the grandchildren. A great deal of information is lost along with such collections. This is another reason archaeology should only be done by those willing to commit themselves to cataloging and curating the artifacts, and to preparing reports of what was learned.

Nevertheless, from the data available, we can say a little about how and when Thompson Island was used, the so-called "culture history" of the island. During the 11,000 years that people have lived in New England, artifact styles and ways of life have changed, often gradually and with considerable overlap. Archaeologists have divided this continuum into time periods based primarily on the artifact styles in use. The age ranges given below are for the most part those used by Snow (1980), and are obviously both broad and approximate.

#### THOMPSON ISLAND CULTURE HISTORY

**PaleoIndian period** (11,500- 10,000 years ago): Thus far, none of the typical artifacts of this period have been found on any of the Boston Harbor Islands. Of all these islands, Thompson is perhaps the most likely to produce such artifacts because the Neponset

PaleoIndian site lies just 25 km up the Neponset River. The people who camped at this site surely passed over the hills that now make up Thompson Island as they hunted and gathered the resources of the grasslands and woodlands along the river. However, if any of the PaleoIndians stopped to camp here, or dropped any of their distinctive tools while hunting, these remains have either eroded away, or were collected by the boys from the plowed fields of the Farm, or have yet to be uncovered.

**Early Archaic period (10,000-8,000 years ago):** One tool characteristic of this period has been found on one of the other Harbor Islands (Luedtke and Rosen 1993), but in general sites of this period are rare. During this period, people's food gathering activities appear to have focused especially on inland wetlands and rivers (Dincauze 1990). No evidence of this period has been identified in any of the existing Thompson Island collections.

**Middle Archaic period (8,000-6,000 years ago):** Tool styles typical of this period have been found on several of the other Harbor Islands, often at sites that would have been along the rivers flowing toward the coast, which lay a short distance to the east of the current harbor (Luedtke 1975, 1984; NRN 1985). The Neponset River must have flowed past Thompson Island, so it is rather surprising that no evidence of this period has been found in the existing collections. Erosion may have destroyed the Middle Archaic sites on Thompson Island, but it is also possible that we have not recognized them. Elsewhere in New England, sites that did not produce tools distinctive to this period have nevertheless produced radiocarbon dates of the appropriate age (Robinson et al 1992). Perhaps some of the flake scatters identified on Thompson Island actually date to this period.

**Late Archaic period (6,000-3,700 years ago):** Sites of this period are very common on the other Harbor Islands (NRN 1985), and in fact throughout southern New England. The environment was rich during much of this period, and population density was high (Dincauze 1990: 24). Existing collections from Thompson Island do not contain Late Archaic styles such as Brewerton points or Squibnocket triangles, but they do contain numerous small stemmed points. This latter style is known to have been used by people of later periods as well, but two of the Thompson Island sites at which they were found also produced radiocarbon dates of Late Archaic age. In addition to these two sites (19-SU-72 and 19-SU-75), five other sites (19-SU-17, 19-SU-31, 19-SU-33, 19-SU-69, and 19-SU-

73) produced small stemmed points and were also almost certainly used during the Late Archaic. Some of the smaller flake scatters may also belong to this period.

The locations of these sites suggest that the entire island was used, including the prime habitation areas as well as the tops of hills, where activities such as food smoking or processing apparently took place. As mentioned previously, evidence of Later Archaic shellfish use was documented for the first time in Boston Harbor at 19-SU-75. The deepest oysters at this site are rather small, suggesting that they had recently become established in the estuary of the Neponset, but in higher levels they achieve considerable size, including one nearly 19 cm in length. Quahog, scallop, and soft-shell clam were also collected by Late Archaic people on Thompson Island. Numerous bone fragments of mammals and birds were found in the levels of this site likely to date to this period, and deer, duck, goosefish, and raccoon(?) were identified. These identified food remains hint at the wide range of resources probably exploited by the Late Archaic inhabitants of Thompson Island.

**Terminal Archaic period (3,700-2,700 years ago):** Projectile points typical of this period have been found at two of the major habitation sites, 19-SU-17 and 19-SU-33; the former site appears to have been especially popular during this period. Unfortunately, the collections from this site are lost, so very little more can be said.

**Early Woodland period (2,700-1,600 years ago):** As shore lines stabilized and coastal resources became more abundant, settlement began to shift to coastal zone. Though sites of this period are often difficult to identify, ceramics or projectile point styles typical of the Early Woodland have been recovered at 19-SU-17, 19-SU-33, and 19-SU-75, all major habitation sites. The distinctive "early suite" of warm water species such as oyster, quahog, and scallop were still present in Boston Harbor, and their presence at 19-SU-36 suggests that this site was also used during this period. Little more can be said about activities during this period, as it has not yet been possible to separate remains dating to this period from those left by later inhabitants of these sites.

**Middle Woodland period (1,600-1,050 years ago):** A total of nine Thompson Island sites (19-SU-17, 19-SU-31, 19-SU-33, 19-SU-65, 19-SU-66, 19-SU-67, 19-SU-69, 129-SU-70, and 19-SU-75) appear to have been occupied during this period, more than can be dated to



any other period. Several other sites that did not produce diagnostic artifacts are very likely to date to this period as well. The major habitation sites were all occupied, and in addition several special purpose camps were used. At least two sites of this period produced evidence for use during the fall. Shellfish were gathered and processed, hickory nuts were collected, and deer and other animals were hunted. Stone tools and bone tools were made and/or refurbished. The presence of a few tools and flakes made on raw materials that came from New York and Pennsylvania suggest that trade could have occurred here as well. In general, Thompson Island appears to have been used for many and varied purposes during this period.

**Late Woodland period (1,050-450 years ago):** This is also a period during which the island was used heavily, and eight sites can be dated securely to this period (19-SU-17, 19-SU-33, 19-SU-37, 19-SU-66, 19-SU-68, 19-SU-69, 19-SU-74, and 19-SU-75). Again, several other sites, especially 19-SU-76, are also very likely to have been used now. During this period, farming was added to the range of economic activities in southern New England, and it is very likely that fields were cleared on the hills of Thompson Island. Two sites (19-SU-33 and 19-SU-76) have produced tools that appear to be hoes. Hunting, fishing, and shellfish gathering still remained important activities, and stone and bone tools were made. Farming people would need to live on the island throughout the planting season, and this increased sedentism may have resulted in use of some areas for burying the dead. The burials reported to have eroded from 19-SU-17 and 19-SU-37 probably date to this period.

**Contact period (450-380 years ago):** It is very likely that Thompson Island was still being farmed in 1614 when John Smith entered Boston Harbor and described, "...the Countrie of the Massachusetts, which is the Paradise of all those parts. For, heere are many Iles all planted with corne; groves, mulberries, salvage gardens, and good harbours.." (Smith 1910:204). Some of the thin ceramic sherds from 19-SU-69 and 19-SU-75 could date to this period, but their small size makes it impossible to be certain. Burials dating to this period are also rather common around the shores of Boston Harbor (Dincauze 1974), and it is possible that some of the burials that have eroded from the scarps of Thompson Island were of this period. None of the distinctive trade goods often interred with Contact period burials can be found in existing collections, though. In 1616, the native peoples of the Boston Harbor area were severely

affected by an epidemic, probably brought inadvertently by French or English trading ships, and native occupation of the island apparently ended about then. Miles Standish testified that he saw no signs of native dwellings or fields when he visited the island in 1621.

**Historic period** (380 years ago to present): As discussed in Chapter 1, the location of David Thompson's trading post, the first European structure on Thompson Island, is still unknown. Early maps suggest that the tenant farmers who lived on Thompson Island through the remainder of the seventeenth and eighteenth centuries had houses near the present dock area and on the southeast shore, where the BU survey found artifacts dating to the eighteenth century (Cook 1993). The foundation of a nineteenth century farmhouse can still be seen on the broad hill near the center of the island, and it is very likely that many nineteenth century remains would be found if archaeological testing were done near the present school buildings. Traces of the Farm School can be found everywhere, most obviously in the form of abandoned farm equipment along the edges of the large marsh. In addition, nails and bits of wire attest to fencing and other farming activities, and an unusually large horseshoe found at 19-SU-75 probably belonged to one of the Farm draft horses. The boys of the Farm School left few obvious traces; we recovered only two clay marbles, two glass marbles, a slate pencil and a Boy Scout knife. Ceramic sherds include some fine decorated wares that probably were used by the teachers and administrators who lived on the island, and a good deal of "institutional china" that was probably used by the boys. Finally, a number of the boys and other inhabitants of the island are buried in the island cemetery.

## RESEARCH POTENTIAL OF THOMPSON ISLAND ARCHAEOLOGICAL SITES

Archaeological research on Thompson Island has already produced a number of interesting findings, several of which deserve special mention.

- 1) The first definite evidence of shellfish use in Boston Harbor during the Late Archaic period has been found on Thompson Island. Though not unexpected, as evidence for shellfish use during this period has been found both north (Bourque 1995) and south (Ritchie 1969) of Boston, it is still a first for this area. In addition, the data from Thompson Island provide strong support for Braun's theories about changing patterns of shellfish use in Boston Harbor (Braun 1974). He

attributed changes in the shellfish species found at archaeological sites to environmental change, rather than to changes in people's preferences or harvesting capabilities, and suggested the timing of these changes based on his preliminary data. Subsequent research has confirmed his findings: sites at which the warm water species (oyster, quahog, and scallop) predominate always produce early dates and/or artifacts of Late Archaic or Early Woodland age. During the Middle Woodland period these species gradually disappear while the proportion of soft-shell clam increases dramatically. Late Woodland sites do not have these warm water species, but instead are dominated by soft-shell clam, with smaller amounts of mussel and razor clam. These cold water species are the same ones that live in Boston Harbor today.

2) An unusually large number of sites are known from Thompson Island, despite the fact that many parts of the island have not yet been surveyed. Twenty prehistoric sites are known from an island 157 acres in size, for a density of about 1 site per 8 acres. For comparison, the southern part of Long Island produced a density of about 1 site per 18 acres (Luedtke 1984), and World's End in Hingham has a known site density of 1 site per 25 acres (Luedtke 1990). The reasons for these differences in site density are not obvious. All three areas were surveyed by teams under my direction, so the data should be roughly comparable. Like Thompson Island, not all of the land at World's End has been surveyed, but the southern half of Long Island was quite thoroughly surveyed. Thompson Island was far more easily accessible to native peoples than Long Island was; people could probably walk to Thompson Island at low tide, but would have needed canoes to get to Long Island. However, the islands that made up World's End were easily as accessible as Thompson Island. Large parts of Long Island have been disturbed by construction, probably resulting in the loss of some sites, but World's End has experienced roughly the same level of disturbance as Thompson Island. All in all, it seems most likely that a variety of factors, including location within the harbor, accessibility, proximity to shellfish beds and fishing areas, presence of numerous salt marshes, and presence of other resources such as freshwater springs may have made Thompson Island unusually attractive to people for millennia.

3) While the major habitation sites were found in "typical" locations on level ground near the coast, a number of sites were in surprising locations. In particular, six were on hilltops, which have not usually



been carefully surveyed in previous archaeological projects on the Boston Harbor Islands. Limited testing was done on the tops of drumlins at World's End, but no sites were found. Though all parts of the southern half of Long Island were intensively surveyed (Luedtke 1984), construction associated with the road running along the tops of the hills of this island probably destroyed any sites that existed there. One hillside site was found on Long Island, and was interpreted as a possible farming hamlet. If the best or most easily farmed soil was on hilltops, and if people needed to build their houses close to their fields to protect them from birds, deer, and other pests (Luedtke 1988), then they might choose to camp on hills rather than in the more optimal sites close to the coast. However, at least one of the hilltop sites on Thompson Island dates to the Late Archaic, and some of the others may be earlier as well. It is possible that the proximity of the Neponset River explains part of this preference for unusual locations, and it may also be the case that hilltop locations were chosen because the winds were especially good for smoking or sun drying food on top of the hills of Thompson Island. In any event, data from Thompson Island suggest that hill top locations should be checked on the other Harbor Islands, as well.

The full research potential of Thompson Island has barely been tapped, though. For obvious reasons, previous research has focused on locating sites, defining their boundaries, and determining their time periods and conditions. Such testing gives only a small sample of each site; excavations of broader areas are necessary to separate the components of a site and define the activities taking place there at different points in time.

There are many reasons why Thompson Island sites would be very likely to produce information relevant to current and future archaeological research questions. Many of the sites on Thompson Island are relatively intact, and therefore contain a great deal of information in the form of features, lost and discarded tools, and broken pottery sherds. Furthermore, many have shell deposits, and this means that the bones from the animals eaten there are preserved. Bones do not preserve well in New England's acid soils, so vital information about people's foods and economies is often lacking at archaeological sites away from the coast. The presence of shell neutralizes the acidity of the soil, and results in the preservation of bone tools and of bone refuse.



Finally, the large number of sites on Thompson Island, representing many different time periods, should allow studies of changes in settlement pattern and land use over time. Decisions as to where to camp would have been affected by a large number of factors, including the major activity planned for the campsite, the size of the group that would be living there, the length of time they would be there, the availability of fresh water, proximity to other resources, the slope of the land, the direction it faces (and resulting sunniness or windiness), whether the soil is well-drained or marshy, proximity to areas where canoes could be beached, whether the area is shady or exposed to the hot sun, and whether there are other locations close by with better characteristics.

In addition, choices about site locations may have been affected by ideological factors, such as beliefs that certain landforms were associated with good or bad spirits, and by social factors, such as access to trading partners or the presence of rival claimants to the land. I hope to follow up on this latter point in further analysis. Preliminary analysis suggests that many of the sites on the southwestern part of Thompson Island have large quantities of flakes made of hornfels and other stone materials from quarries south of the Boston Basin, while several of the sites on the northeast end of the island are dominated by stone types from the northern part of the Boston Basin. This raises the interesting possibility that the island may have been shared by two different groups; if so, it may be no coincidence that the two sites with evidence of trade in "exotic" stone from a distance are both located at what was probably the boundary between these areas. Further analysis of the ceramics may shed further light on this hypothesis.

Though this report has focused on what we have learned, there is far more still to be learned about Thompson Island's past. Many of the sites from which we can learn these things are still substantially intact, and with a little effort can be preserved for the future. The next chapter will provide general recommendations for ways to accomplish this.

## Chapter 4 RECOMMENDATIONS

In recognition of their significant archaeological resources, most of the Boston Harbor Islands, including Thompson Island, are listed on the National Register of Historic Places as an archaeological district. This report is intended to help Thompson Island Outward Bound to be conscientious guardians of their portion of this district. This chapter will use a question and answer format to help address some of the likely questions about the best ways to achieve this goal.

### **How do you suggest we use this report?**

It is hoped that the majority of this report can be duplicated and provided to anyone with an interest in the island. Only Appendix F, which contains information on actual site locations, is intended to be confidential with restricted distribution. It should be made available only to those with a legitimate need to know actual site locations. Full copies of the report complete with Appendix F have been given only to Thompson Island Outward Bound, to TIAAC members, to the Massachusetts Historical Commission, and to the Boston City Archaeologist.

### **Are the archaeological sites described in this report the only ones we need to worry about?**

No. As Map 4 indicates, many parts of the island have never been surveyed. In addition, some small sites may have been missed by the sampling strategies used in the surveyed areas. Furthermore, this report has focused on the prehistoric sites, although Thompson Island also possesses interesting historic period sites. The sites described in this report probably represent only a portion of all the sites that have ever existed on Thompson Island, and a somewhat larger proportion of the sites still in existence. I would doubt that there are more large shell midden sites to be found, but have no doubt that additional small sites will be found in future years.

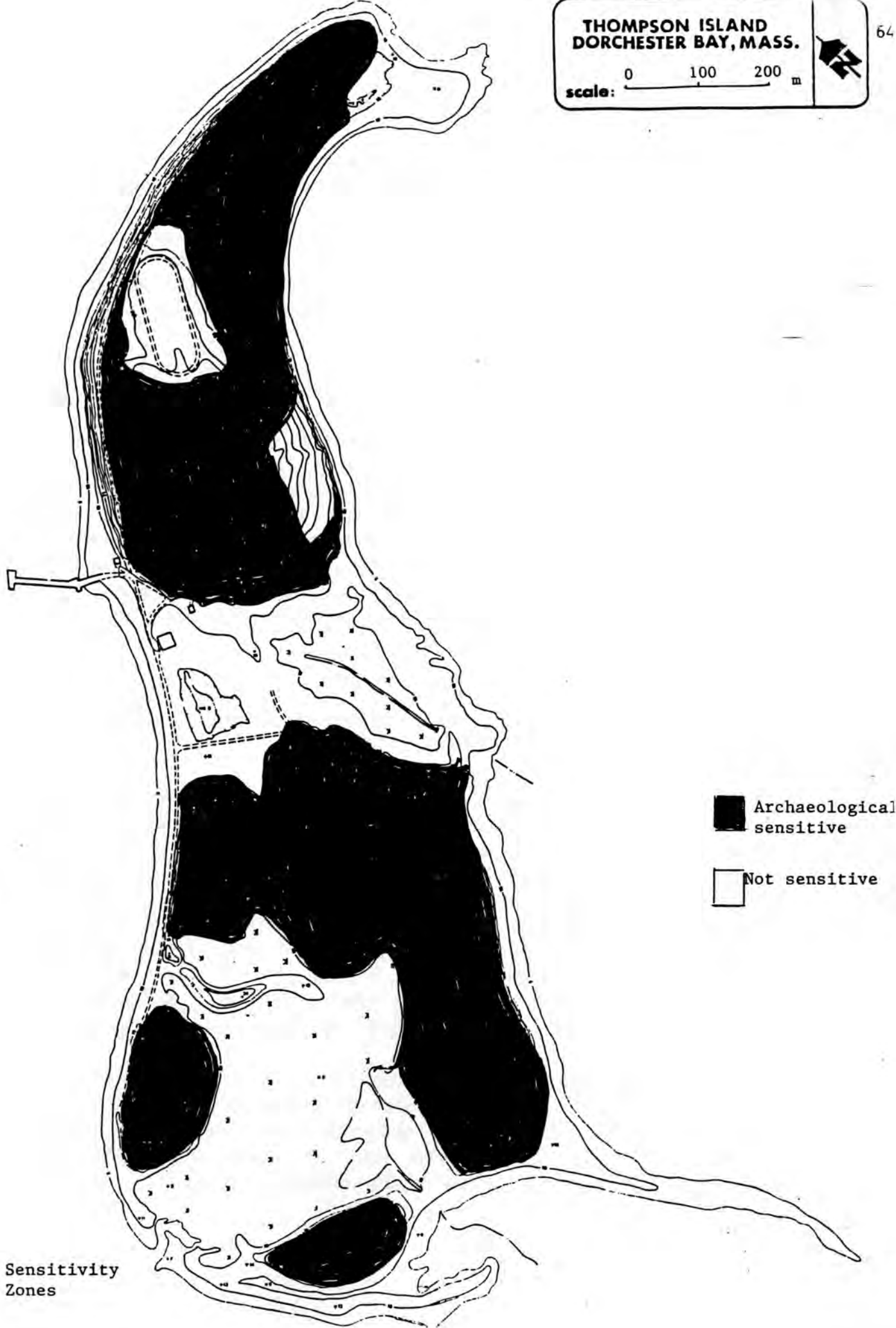
For all these reasons, as Map 5 indicates, the vast majority of Thompson Island must be considered archaeologically sensitive. Sites have been found almost everywhere we have looked for them. This means that additional sites could be found almost anywhere, with the exception of a few highly disturbed or marshy areas.

THOMPSON ISLAND  
DORCHESTER BAY, MASS.

scale: 0 100 200 m



64



Map 5 Sensitivity  
Zones

Are you suggesting that we avoid all activities in the zones you've indicated as "archaeologically sensitive"?

No. We recognize that protection of the natural and cultural environment is only one part of Thompson Island Outward Bound's mandate, and that many other needs and priorities exist, some of which may be in conflict. We only suggest that the likelihood of damage to archaeological sites be taken into consideration when making decisions about land use. For example, there is often a choice of several locations for any new facility; if one of those locations is on top of a known site, then one of the other possibilities should be chosen. In other cases, shifting the location of a new facility several meters in one direction or another might be enough to avoid damage to a site. If paths cross known sites, perhaps a layer of gravel or wood chips could be spread to slow the erosion resulting from foot traffic. In the event that serious impact to an important site is likely, I suggest that the State Archaeologist and City Archaeologist be called in to consult. They have a great deal of experience with helping to negotiate solutions to preservation problems in ways that protect the resource but also allow development.

What about the "not sensitive" areas; can we do whatever we want there?

The areas shown as "not sensitive" on Map 5 are generally those where significant disturbance has already occurred or where human settlement is unlikely. However, archaeological sites have sometimes been found in places where they were not expected, and the unusually high site density on Thompson Island makes this especially likely here. Whenever construction takes place, it would be wise for workers to keep an eye on the soil as it is turned over, and to stop if bones, shell layers, artifacts, or other unusual materials are encountered. Note also that areas not considered sensitive for archaeological sites may be very sensitive for other biological or geological reasons. Salt marshes are one obvious example.



**Would marking the known sites help us to protect and interpret them?**

Unfortunately, marking the sites would probably lead to damage from looters. The temptation to "dig for arrowheads" is almost irresistible to some people, despite the fact that they would soon discover that they have to dig up a very large area to find anything, and that such artifacts are surprisingly difficult to recognize because of their resemblance to the gravel in New England soils. Thompson Island is simply too big and hilly for all parts be kept under regular surveillance, and this makes most parts of it highly vulnerable to vandalism. The best protection for most of the known sites is ignorance of their location.

**How can we avoid accidental damage to these sites, if their exact locations are confidential?**

One suggestion would be to designate one staff member as the Environmental Steward, with responsibility for knowing the locations of all the various natural and cultural resources on the island. Then establish a new rule that anyone who wants to do an activity that involves digging or disturbance of the ground surface must check first with the Environmental Steward to make sure the planned activity will not damage archaeological sites or other resources. Note that "disturbance of the ground surface" includes not only obvious activities such as bulldozing and construction, but also activities such as planting trees or bushes, removing tree stumps, gardening, trail widening, auguring for geological purposes, etc. Again, the Environmental Steward's job is not to stop all such activities, but rather to evaluate their likely impact on the island's resources. I would be happy to help in any way, and the Steward is also welcome to call upon the expertise of the City Archaeologist and the State Archaeologist in making these evaluations. Currently, significant loss of institutional memory occurs every time there is staff turnover. Making Environmental Stewardship part of someone's job description would help remedy this problem because the responsibility would automatically shift to someone else if the current Environmental Steward left.

**What should we do if we find human bones?**

All human graves, marked and unmarked, are protected by law in Massachusetts and should not be disturbed. If bones that you think might be human are uncovered by erosion or by accident, follow the instructions in Appendix B.

**What should we do if we find another shell feature eroding out along the beach?**

Members of the Thompson Island Archaeology Advisory Committee were never able to agree on what to do about this recurrent problem. On the one hand, none of us wants to allow irreplaceable information to wash away. On the other hand, none of us is able to commit ourselves to being available at any time for emergency salvage of such features. Furthermore, the very act of excavating a feature weakens the erosional scarp and can contribute to further erosion. Therefore, the best advice I can give at this time is to report such features to me or to the City Archaeologist, preferably in writing and with a map showing the location of the eroding feature. Any additional information you can give would be valuable (for example, "it looks like a layer of shells about half a foot thick, 2 feet wide, and located about a foot below the turf. I didn't see any bone or stone in it."). Do not remove any materials still in place in the erosional scarp, but it would be helpful if any shell, bone, or artifacts lying on the beach could be collected in a bag and labeled with the date and location. This would at least allow us to keep track of such occurrences, and to salvage the feature if necessary or feasible. Of course, if human bones are noted the situation should be considered an emergency and the instructions in Appendix B should be followed.

**We're well aware of the erosion problem on Thompson Island, and have already tried many different methods for dealing with it for. Do you have any new suggestions?**

Filter fabric has been used successfully for short-term stabilization of eroding banks adjacent to archaeological sites (Thorne nd) and plants can provide a longer-term solution in some cases (Sharp et al nd). In addition, a National Clearinghouse for Archaeological Site Stabilization has been established to provide information on new procedures for stabilizing sites, successful and unsuccessful examples

of erosion control, etc. The full address is: Dr. Robert M. Thorne, National Clearinghouse for Archaeological Site Stabilization, Center for Archaeological Research, University of Mississippi, University, MS 38677.

In addition, because Thompson Island is part of a National Register district, Thompson Island Outward Bound would be eligible to apply for funding from the Massachusetts Preservation Projects Fund. This state fund provides a 50% match to funds from other sources for projects to stabilize endangered cultural resources listed on the State and National Register of Historic Places. A project designed to stop erosion at one of the known sites could be appropriate for such funding. Contact the Massachusetts Historical Commission (617-727-8470) for further information.

### **What about ideas for controlling vandalism?**

Motion sensors are being used at archaeological sites in the Southwest and elsewhere to protect remote and important sites, especially burial grounds. They are hidden in the ground, and will send a signal to a central monitoring system if unusual motion is detected. According to the Internet, one source of such systems is Spartan Technology Co., 4901 Rockaway Blvd. NE, Rio Rancho, NM 87124. Tel. (505) 892-5300.

### **How can we use archaeology in our education programs?**

Many people, especially children, are fascinated by archaeology, and teachers who know about Thompson Island's rich archaeological resources will be tempted to dig there. It is important to resist this temptation, because while not illegal on private property, doing archaeology for pleasure or for purely educational purposes is highly unethical. There are several reasons for this: 1) Archaeological sites are a non-renewable resource, and very few have managed to survive in the Boston metropolitan area. Allowing students to dig for fun would be as irresponsible as encouraging them to collect eggs from the nests of an endangered species of bird. 2) Even professional archaeologists do not dig solely for educational purposes; field schools always have a larger research goal. 3) Nobody should undertake an archaeological project if they are not prepared to obtain the necessary permits, analyze their finds, write a thorough

report of the work, and arrange for proper care of the artifacts. This involves a lot more time and expertise than most teachers will be willing to devote to a class project. 4) Archaeology is fundamentally organized destruction; we must destroy our resource in order to learn from it. We are being dishonest if we don't teach our students that along with the fun of archaeology come very heavy responsibilities.

However, there are a number of educational activities that do not involve disturbing sites:

- 1) Creation of an artificial site, above ground: half the class creates the site, the other half must excavate and interpret it.
- 2) Many teachers have found Dincauze's article "A Capsule Prehistory of Southern New England" (Dincauze 1990) and the book *The First Peoples of the Northeast* (Braun and Braun 1994) to be highly readable introductions to the archaeology of New England.
- 3) Robinson (1988) has additional suggestions for teachers who want to incorporate information on archaeology and New England natives into their classes.

### **Are there activities we could use to interpret native life on Thompson Island?**

In many ways, it is preferable to shift the focus away from archaeology, with its "buried treasure" associations, and onto the lives of the native peoples who lived here for so many thousands of years before people from other parts of the world arrived. Again, Robinson (1988) has numerous suggestions, and the list below includes only some of many other possibilities.

- 1) Storytelling: books of local tales are available
- 2) Traditional activities such as grinding corn in a wooden mortar, or using a bow and arrow or spearthrower
- 3) Dancing; there are tapes of traditional native music available, and dances can be easily learned at the many powwows held on virtually every summer weekend throughout New England
- 4) Make a list of all the edible plants on Thompson island and send students off to look for them
- 5) Traditional games: there are books on these as well



- 6) Make "natural" jewelry out of bird bones, fish vertebrae, drilled shells, etc.
- 7) Trumbull's *Natick Dictionary*, which provides English translations of many of the words in the language that would have been used by the natives who lived on Thompson Island, is available in many university libraries and some public libraries. Children might enjoy learning a few of these words.

### **What about the Colonial period and the Farm School period on Thompson Island?**

Again, there are many interesting possibilities for interpreting and learning about these periods, including:

- 1) Collect oral histories from people who lived at the Farm School when they were boys.
- 2) Teachers have told me that their students are fascinated by handwritten colonial documents, with their interesting spelling and word usage. Copies of such documents relevant to Thompson Island are probably available at the State Archives.
- 3) Have students go on a "treasure hunt" for specific locations or landforms that were important to the Farm School boys
- 4) Try playing marbles with clay marbles (I've seen reproduction clay marbles for sale at Plimoth Plantation and Old Sturbridge Village)
- 5) Try writing with quill pens
- 6) Sing songs of the period, or play them on early American instruments such as the mouth harp

In summary, Thompson Island has a rich and fascinating past that can contribute to the enrichment of the lives of people today and in years to come. The archaeological sites on Thompson Island are the material traces of that past, and they should be protected for the sake of all that they can teach us.

### **ACKNOWLEDGMENTS**

I would like to thank the administration and staff of Thompson Island Outward Bound for allowing us to do our survey in 1993, and for all their support and encouragement. Jake Yeagel was especially helpful as our contact person. I am also grateful to Frank White, who

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**Appendix A     ARCHAEOLOGY PERMIT PROCEDURE**  
(as revised 11/85)

Thompson Island contains some of the best preserved and important prehistoric and historic archaeological sites in the Boston area. To seek advice on the care and management of these cultural resources, Thompson Island has formed an Archaeological Advisory Committee consisting of a representative from the Island and interested archaeologists. Thompson Island has all the rights and responsibilities of property owners regarding the archaeological properties on their land. In seeking to have the highest professional standards of archaeological conduct on the island, Thompson Island and the Committee have agreed to the following procedures.

**I. Thompson Island responsibilities.**

Thompson Island will not allow archaeological field investigations on the island to be conducted until the principal investigator has been approved by the Committee as evidenced by a permit from the State Archaeologist. Not even members of the Advisory Committee are exempt from this requirement. Thompson Island will refer any requests to conduct archaeological field work to the Committee facilitator so that the Advisory Committee can give technical assistance in review of any proposal.

**II. Thompson Island Archaeological Advisory Committee responsibilities**

The Committee is responsible for advising Thompson Island whether to allow an archaeological investigation to occur. The facilitator will instruct any interested archaeologists to submit a permit application to the State Archaeologist in order to initiate the process of seeking the comments of the Advisory Committee. Members of the Advisory Committee will review all permit requests and forward any comments to the Committee facilitator within ten days of receipt of a permit request. The Facilitator will coordinate with the State Archaeologist, making sure that the research design, field plan, and project team meet the committee's standards.

### III. State Archaeologist's responsibilities

The State Archaeologist will accept permit applications for archaeological field investigation on Thompson Island on behalf of the Advisory Committee. Within ten days of receipt, the State Archaeologist will determine whether the application is complete. If so, the State Archaeologist shall send each member of the Advisory Committee a copy of the application with instructions for forwarding their comments to the Committee facilitator. The State Archaeologist will coordinate with the Boston City Archaeologist in reviewing the application as well as with the facilitator.

The State Archaeologist will issue a permit only after Thompson Island, the Committee facilitator, the City Archaeologist, and the State Archaeologist agree that the proposed field investigation is in the interest of the Thompson Island archeological program. If Thompson Island, the facilitator, the City Archaeologist and the State Archaeologist fail to agree, the matter will be turned over to the Thompson Island Archaeological Advisory Committee. The Committee shall meet and agree whether to recommend to Thompson Island to allow the archaeological field investigation to proceed.

## APPENDIX B

## COMMONWEALTH OF MASSACHUSETTS

SECRETARY OF STATE: MASSACHUSETTS HISTORICAL COMMISSION

PERMIT APPLICATION: ARCHEOLOGICAL FIELD INVESTIGATION

A. General Information

Pursuant to Section 27C of Chapter 9 of the General Laws and according to the regulations outlined in 950 CMR 70.00, a permit to conduct a field investigation is hereby requested.

1. Name \_\_\_\_\_
2. Institution/Address \_\_\_\_\_
3. Project Location \_\_\_\_\_
4. Town \_\_\_\_\_
5. Attach a copy of a U.S.G.S. quadrangle with the project area clearly marked.
6. Property Owner(s) \_\_\_\_\_
7. The applicant affirms that the owner has been notified and has agreed that the applicant may perform the proposed field investigation.
8. The proposed field investigation is for a:  
(circle one)
  - a. Reconnaissance Survey
  - b. Intensive Survey
  - c. Site Examination
  - d. Data Recovery

B. Professional Qualifications

1. Attach a personnel chart and project schedule as described in 950 CMR 70.11(b).
2. Include copies of curricula vitarum of key personnel (unless already on file with the State Archeologist.)



C. Research Design

1. Attach a narrative description of the proposed Research Design according to the requirements of 950 CMR 70.11.
2. The Applicant agrees to perform the field investigation according to the standards outlined in 950 CMR 70.13
3. The Applicant agrees to submit a Summary Report, prepared according to the standards outlined in 950 CMR 70.14, by \_\_\_\_\_  
date
4. The specimens recovered during performance of the proposed field investigation will be curated at \_\_\_\_\_  
(M.G.L. c. 9, s. 27C) curatorial facility

SIGNATUREAPPLICANTDATE

# KnowHow #4

INFORMATION AND ASSISTANCE FROM THE MASSACHUSETTS HISTORICAL COMMISSION

## *What to Do When Human Burials are Accidentally Uncovered*

### **1. *Why are bones sometimes found?***

In Massachusetts, many unmarked graves exist without gravestones, fences, tombstones, or other surface indications of their presence. These are chiefly the graves of prehistoric and historic Indians, which may never have been marked at all; and graves which had been identified at one time in the past, but the markings are no longer visible. As a result, bones are often found during ordinary ground disturbance activities such as the construction of new homes, utilities, or roads; in the agricultural or industrial use of a site; or the excavation of sand or gravel borrow. Bones are also sometimes found eroding out of areas exposed by natural erosion, floodwater scouring, or sand dune formation.

A new law has been enacted which establishes procedures to follow when human bones are accidentally discovered.

### **2. *Who is involved?***

- Private citizens
- State and Local Police
- Medical Examiners
- State Archaeologist
- Commission on Indian Affairs

### **3. *What should you do if you discover bones?***

Do not touch or disturb the bones. Notify the state or local police and the regional medical examiner about the discovery and location.

### **4. *What does the Medical Examiner do?***

The Medical Examiner investigates the discovery to determine whether the bones are human, and whether they are recent or more than 100 years old. If the bones are less than 100 years old, a criminal investigation may be warranted. If the bones are more than 100 years old, the Medical Examiner then notifies the State Archaeologist, who immediately conducts an archaeological investigation of the site. Throughout these investigations, the police authorities must insure that the site is protected from further damage.

### **5. *What does the State Archaeologist do?***

The State Archaeologist investigates the site to determine the age, cultural association and identity of the burial. If the State Archaeologist determines that the burial is that of a Native American, the Commission on Indian Affairs is notified. The State Archaeologist consults with the landowner to determine whether the burial can remain undisturbed. In the case of development projects, the owner and State Archaeologist discuss whether there are prudent and feasible steps the owner can take to protect the burial. If it is impossible to avoid future harm to the burial, the State Archaeologist removes the remains.

### **6. *What does the Commission on Indian Affairs do?***

The archaeological investigation of Indian burials is monitored by the Commission on Indian Affairs to insure that the remains are treated respectfully.

Please remember: Once bones or artifacts are removed from the site, valuable information concerning the identity and age of the human remains is lost. Therefore, it is important not to disturb the site in any way until the State Archaeologist can conduct an investigation and record the discovery.

## **BIBLIOGRAPHY**

Massachusetts General Laws, Chapter 38, section 6B; Chapter 9, sections 26A & 27C; Chapter 7, section 38A; Chapter 114, section 17; as amended by Chapter 659 of the Acts of 1983 and Chapter 386 of the Acts of 1989.

### ***For Further Information:***

Please contact the State Archaeologist at the Massachusetts Historical Commission.

**MASSACHUSETTS HISTORICAL COMMISSION**

80 Boylston Street, Boston, MA 02116-0420 • (617) 727-8470  
220 Morrissey Blvd 02125

### Appendix C      RADIOCARBON DATES

With extraordinary generosity, Lawrence Kaplan of the Department of Biology, University of Massachusetts, Boston, arranged to have a series of radiocarbon dates run on Thompson Island samples at the University of Arizona's NSF Arizona AMS Facility, as part of National Science Foundation grant # DBS 9221554 to Dr. Kaplan. The laboratory reports that all dates were  $^{13}\text{C}$  corrected and that the radiocarbon ages are given  $\pm 1$  sigma while the calibrated calendar ages represent a range of  $\pm 2$  sigma. Dates were calibrated with the University of Washington radiocarbon calibration program.

<u>Sample #</u>	<u>site #</u>	<u>provenience</u>	<u>material</u>
AA-16856	19-SU-75	EU 21, lev. 5	charred wood
AA-16857	19-SU-72	EU 8, lev. 3	charred wood
AA-16858	19-SU-37	EU 16, lev. 5	charred wood
AA-16859	19-SU-70	T9 STP 5 lev. 4	charred hickory nuts
AA-16860	19-SU-75	EU 25, lev. 18	charred wood
AA-16861	19-SU-75	EU 25, lev. 8	charred wood
AA-16862	19-SU-75	EU 19, lev. 6	charred wood
AA-16863	19-SU-74	EU 4, lev. 7	charred wood

<u>Sample #</u>	<u><math>\delta^{13}\text{C}</math></u>	<u><math>^{14}\text{C}</math> age BP</u>	<u><math>\pm</math></u>	<u>calendar age range</u>
AA-16856	-25.7	1,135	55	AD 780-1016
AA-16857	-25.7	3,240	65	1674-1395 BC
AA-16858	-25.4	340	50	AD 1445-1660
AA-16859	-26.0	1,160	50	AD 774-998
AA-16860	-24.0	35	45	AD 1698-1955
AA-16861	-25.9	490	55	AD 1326-1484
AA-16862	-25.2	3,730	55	2285-1949 BC
AA-16863	-25.2	695	50	AD 1251-1397

## Appendix D LIST OF SPECIES NAMES

### Shellfish (scientific names after Abbott and Morris 1995)

mussel	<i>Mytilus edulis</i>
moon shell	<i>Lunatia heros</i>
oyster	<i>Crassostrea virginica</i>
quahog	<i>Mercenaria mercenaria</i>
razor clam	<i>Ensis directus</i>
ribbed mussel	<i>Geukensia demissa</i>
scallop	<i>Argopecten irradians</i>
slipper shell	<i>Crepidula fornicata</i>
soft-shell clam	<i>Mya arenaria</i>
surf clam	<i>Spisula solidissima</i>

### Fish (scientific names after Leim and Scott 1966)

cod	<i>Gadus morhua</i>
goosefish	<i>Lophius americanus</i>
sturgeon	<i>Acipenser oxyrhynchus</i>

### Birds (scientific names after Veit and Petersen 1993)

cormorant	<i>Phalacrocorax auritus</i>
duck	<i>Anas</i> sp.
goose	<i>Branta</i> sp.
turkey	<i>Meleagris gallopavo</i>

### Mammals (scientific names after Godin 1977)

beaver	<i>Castor canadensis</i>
deer	<i>Odocoileus virginianus</i>
dog	<i>Canis familiaris</i>
rabbit	<i>Sylvilagus</i> sp.
raccoon	<i>Procyon lotor</i>
seal	<i>Phoca vitulina</i>
vole	<i>Microtus</i> sp.

### Plants

corn	<i>Zea mays</i>
hickory nuts	<i>Carya</i> sp.





## Appendix E      FIELDWORK AND COLLECTIONS

Dates of previous formal archaeological fieldwork on Thompson Island:

<u>Year</u>	<u>Principal Investigator</u>	<u>Institution</u>	<u>Report or publication</u>
1970/71	Dincauze	Harvard	Dincauze 1973, 1974; Braun 1772,1974
1982	Barber	Harvard	Barber 1983; Shaw 1986
1983	Shaw	Harvard	Shaw 1984
1983	Beaudry	Boston U.	Cook 1993
1986	Shaw	TIAAC	Shaw 1987; Luedtke and Kerber 1987
1993	Luedtke	UMass Boston	Luedtke 1996

The following institutions have collections excavated or surface collected from Thompson Island:

Harvard University: Artifacts and materials collected by Dincauze and Braun are curated here, along with a few materials from the 1982 and 1983 field schools.

Boston University: Artifacts and materials collected in the course of Beaudry's survey are curated here.

University of Massachusetts, Boston: Artifacts and materials excavated during the 1993 field season are curated here, along with artifacts from the 1986 TIAAC surface collection and most of the materials from the two Harvard field schools.

In addition, there are artifacts from Thompson Island in private hands:

Henry Leschernier was an amateur archaeologist who collected on Thompson Island. In addition, some or all of the Farm School collection is said to have been given to him after the 1973 fire. His address in 1971 was 37 Edgeworth Rd, Quincy, but by 1993 his name was no longer in the Quincy phone book.

In 1988 Steve Pendery, who was then City Archaeologist for Boston, photographed a collection of ground and pecked stone tools said to be from Thompson Island. As far as can be judged from the slides, this collection includes 8 reasonably complete pestles and 2 pestle fragments, 8 net weights, 6 hammerstones, 3 adze or gouge fragments, 2 full-grooved axes or mauls, 1 celt bit, and 1 stone mortar. Pendery believes that the owner of these artifacts was named Ron Doucette and that he was affiliated with the Ceramics Department at Massachusetts College of Art. Copies of the slides are on file at UMass Boston.

In the 1980s a Trustee(?) named Dacey showed Luedtke a pestle fragment that he said he found on Thompson Island along a path that was "not near the coast", but about which he would not be more specific. Both ends had been broken off, but the remaining fragment was 32 cm long, 7 cm in diameter at the round end, and 7 x 6 cm at the oval end. It was made of green argillite, and had been carefully pecked all over.

Several employees from Thompson Island have also mentioned finding artifacts at various time over the years, but there is probably no way of tracking them all down now. In the future, all employees should be strongly encouraged to turn in stray finds to one of the institutions listed above where Thompson Island artifacts are already curated.