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MAINE ARCHAEOLOGICAL SOCIETY, INCORPORATED

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CONTENTS

Volume 27 Number 2 Fall 1987

Cover design by Mark H. Hedden

Letter from the President

I hope that all of our members enjoyed a happy and productive summer. The weather was certainly accommodating for archaeologists, and little valuable time was lost because of rain.

I had the chance to visit two interesting projects. Blackman Stream was test excavated prior to future flooding by a dam project on the Penobscot. This site, along with the important site downriver at Eddington Bend, had been severely damaged in the past by development and unsystematic collecting. Modern development threatens them still, but now cultural resource management laws require the salvage of such archaeological sites prior to any construction activities.

The most interesting thing at Blackman Stream for me was the Late Paleoindian "Plano" point found under about 2 meters (6 feet) of alluvium. Current projects along the Penobscot have revealed a cultural continuum from Paleoindian times forward, and finds such as those at Blackman stream provide new and important information. The excavation was under the direct control of Doug Kellogg and Dave Sanger, and is one of several projects Sanger is running along the Penobscot between Bangor and Old Town.

There was also an important excavation in Milo at the Sharrow site. Plans by the Maine Department of Transportation to improve the Route 16 bridge across the

Piscataquis River required a series of test excavations which fit nicely with recent work conducted by the Piscataquis Archaeological Project. Jim Petersen was in charge of a volunteer crew that excavated what must be the largest trench ever sunk in Maine for archaeological purposes. This site, like the nearby Brigham site, has well-stratified archaeological features with radiocarbon dates going back to 10,000 years B.P. This particular trench was 1 meter wide, 6 meters long and 3 meters deep. Over twenty cultural horizons were apparent which produced datable quantities of charcoal. Of significance here was the appearance of ground slate tools at a level associated with strata dating over 6000 years B.P. Ground slate tools were thought to date to around 4500 B.P. a few years ago. If this find holds up to the subsequent scrutiny it will be subjected to, and there is no reason why it will not, it will push slate working back 2000 years. Given the size of the Sharrow site one wonders what else will be recovered.

I certainly enjoyed seeing these projects and was impressed by both the richness of the sites (remember that Maine was not supposed to have deeply stratified sites five years ago) and the skills of the excavators. Extreme care was employed to preserve and record as much information as possible; and important results will undoubtedly be forthcoming from the laboratory analysis yet to de done.

I have also enjoyed my last term as the President of the Maine Archaeological Society. I have received the utmost in cooperation from the Board of Directors, the officers,and the membership, for which I am grateful. I know I have gained far more than I have contributed. I know that incoming President Bernice Doyle and the new slate of officers will enjoy the same cooperative spirit which characterizes The MAS in particular and Maine archaeology in general.

I would encourage you to greater efforts to protect our unique cultural record here in Maine. We must be vigilant to the thoughtless destruction of archaeological sites by vandals, stopping it when we can. We must encourage in the strongest terms the protection of archaeological sites by private and corporate landowners. It costs them nothing and can be so important in saving otherwise unprotected sites form "potholers" or development. We must continue to improve our individual skills and work at levels that are appropriate to those skills. We must also keep in touch with each other. One of the major goals of The MAS is the dissemination of archaeological information to our membership and the general public. We have been successful in this effort with publication of the finest archaeological society periodical in New England and our recently-begun semi-annual newsletter.

We can be proud of our archaeological society and the accomplishments of its individual members. At the same time we must realize that the archaeological record, which is part of our common heritage, is very fragile and under great pressure from both natural and human sources. We, The MAS, stand as volunteers along with a few state and federal agencies charged with the important task of conserving our heritage for the benefit of future generations who, like us, will live in and love the State of Maine. They demand our best.

David S. Cook, President
The Maine Archaeological Society, Inc.

High on a Hill Above the Kennebec: The Shepherd Site

Arthur Spiess and Deborah Brush

It is extremely rare to find prehistoric archaeological sites in Maine away from present bodies of water, or former lake or river shores now abandoned by changes in water level or water course. The site reported herein is one of those rare sites, associated apparently with a small upland spring. Although there are no truly diagnostic artifacts from the Shepherd site, we are working on the hypothesis that it is Late Paleoindian in age and that it is probably single component.

NARRATIVE

In late July of 1983 Spiess spent several days at the archaeological excavation for Fort Western in Augusta, attempting to determine the nature of several possible prehistoric features associated with this 18th century Euroamerican fort. During this time Mrs. Barbara Shepherd, head docent at Fort Western Museum, stated that she had discovered what she thought was a stone tool in the garden behind her house in Hallowell (a few miles downriver). She proceeded to show Spiess indeed what appears to be a bifacially flaked hafted knife-like tool (Figure 1). Assuming that this was another river valley-bottom site, Spiess produced a map of Hallowell and asked Mrs. Shepherd to locate her garden. She did, near the top of a 300 foot hill overlooking the Kennebec River valley.

Since isolated artifact finds away from water are not rare in Maine, Spiess assumed that this knife was such a find until he had a chance to inspect the surface of the garden following the growing season on October 18, 1983. Spiess recovered 5 biface-thinning flakes of the same material as the knife, and realized that Mrs. Shepherd's garden was worth further investigation. She readily agreed. Consequently, Spiess spent a week in May, 1984 and again in April 1985 on the site with a small crew, mapping, surface collecting, and excavating an area of about 68 square meters. All dirt was screened through 1/4" mesh hardware cloth. Our efforts were not rewarded by the recovery of diagnostic artifacts, but did produce approximately 100 more flakes and core fragments and did uncover a hearth base preserved below the plowzone which was associated with a flake and calcined bone concentration.

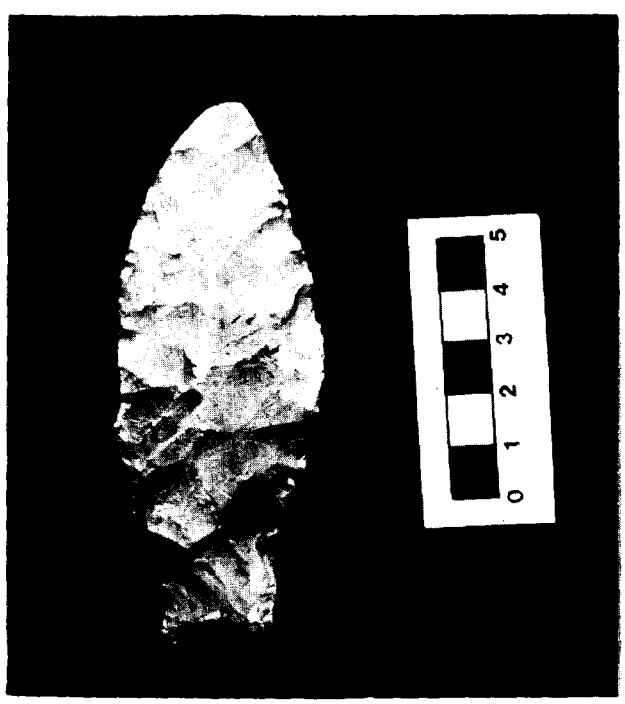

Figure 1. Bifacially flaked artifact recovered by Mrs. Shepherd from her garden.

SITE DESCRIPTION

Site 37.15, the Shepherd site, is located on a level terrace on the southern spur of a 300 foot hill overlooking Hallowell, Maine. Its elevation is approximately 96 m (315 feet) (Figure 2, from USGS Augusta 7 1/2 minute quadrangle map). (See Figure 3).One can see at least 15 miles to the southward and southeastward on a clear day from the site, because of agricultural clearance of the surrounding forest and the site's topographic position. Cultural debris and the remains of one feature are contained in the plowzone (0-26 cm), and just below the plowzone in a silty clay loam which caps a shallow series of bedded sands, clays and silts. The terrace-like topographic feature which attracted this settlement appears to be a small delta (about 2 acres in extent) which must be of terminal Pleistocene age, perhaps associated with the Presumpscot transgression, possibly built by a southward flowing stream. Because the habitation debris is confined to the surface of the delta, habitation clearly post-dated delta formation and drying of the land surface. Figure 4 is a site plan showing that we placed our excavations on the lip of the terrace-like feature, which coincided with the greatest concentration of surface-recovered debitage and with the findspot of the bifacial knife. It should be noted that the Shepherd's had been gardening this plot of land (Figure 5 and 6) for at least 10 years, and that while Mrs. Shepherd had noticed some of the flakes and had left them approximately where she had noticed them, the biface knife was the first recognizable artifact that she had found. Thus we assumed that there are not very many more diagnostic artifact fragments left undiscovered in the site.

GEOLOGICAL CONTEXT

Two plowzones are evident in the shovel testpits and cores taken on the site. The deeper one, which extends to a maximum of 26 cm, evidently records plowing of the site during the 18th and/or 19th centuries, during the height of Maine's agricultural development. In places a shallower plowzone of slightly darker tan was visible. We assume that this second plowzone, approximately 16 cm deep, is the result of tilling for the garden in recent years.

The plowzone at the site appeared to have bene developed on a stony, pebbly, clayey soil which superficially resembled glacial till. Subsequently we were surprised to find that the subsoil underlying the site was not glacial till (See Table 1, soil report). After the plowzone and subsoil had been excavated to 25 cm at N14 E22, Spiess proceeded to excavate a geological test trench along the south wall of the square. As stated above, the plowzones extend from 0 to 26 cm depth. The plowzones (Ap1 and Ap2) are a brown clay loam containing occasional pebbles and cobbles, historic trash mostly of 19th century date, and prehistoric debitage and calcined bone. Underlying the plowzone is a pebbly sand with frequent cobbles extending to about 62 cm depth (2Bw1). It is orange in color and contains no inclusive lenses of clay or clay-like material. Soil layer 2Bw2 is a massive (unbedded) gray-tan, silty, very fine sand with rare pebbles. This material was unvaryingly similar to at least a depth of 110 cm below the surface, with increasing iron-manganese deposits below 90 cm depth. This sequence is amplified in the formal soils description prepared by James Balogh (Table 1).

A second geological testpit was hand dug at South 8 East 4, with the surface approximately 2 meters lower than the surface at North 14 East 22. The soils were culturally sterile, but preserved a very similar soil sequence: clay over gravelly sand over silty very fine sand. The geological levels themselves appear to be slightly thinner, however. We hypothesize that we have detected the foreset beds of a very localized delta, which would drop slightly in altitude and become thinner with distance away from the top of the delta surface.

There is an outcrop of bedrock between the habitation site and Mrs. Shepherd's house. Before the house was built, a small area of bedrock had been exposed above the soil. Since the house was built, Mrs.

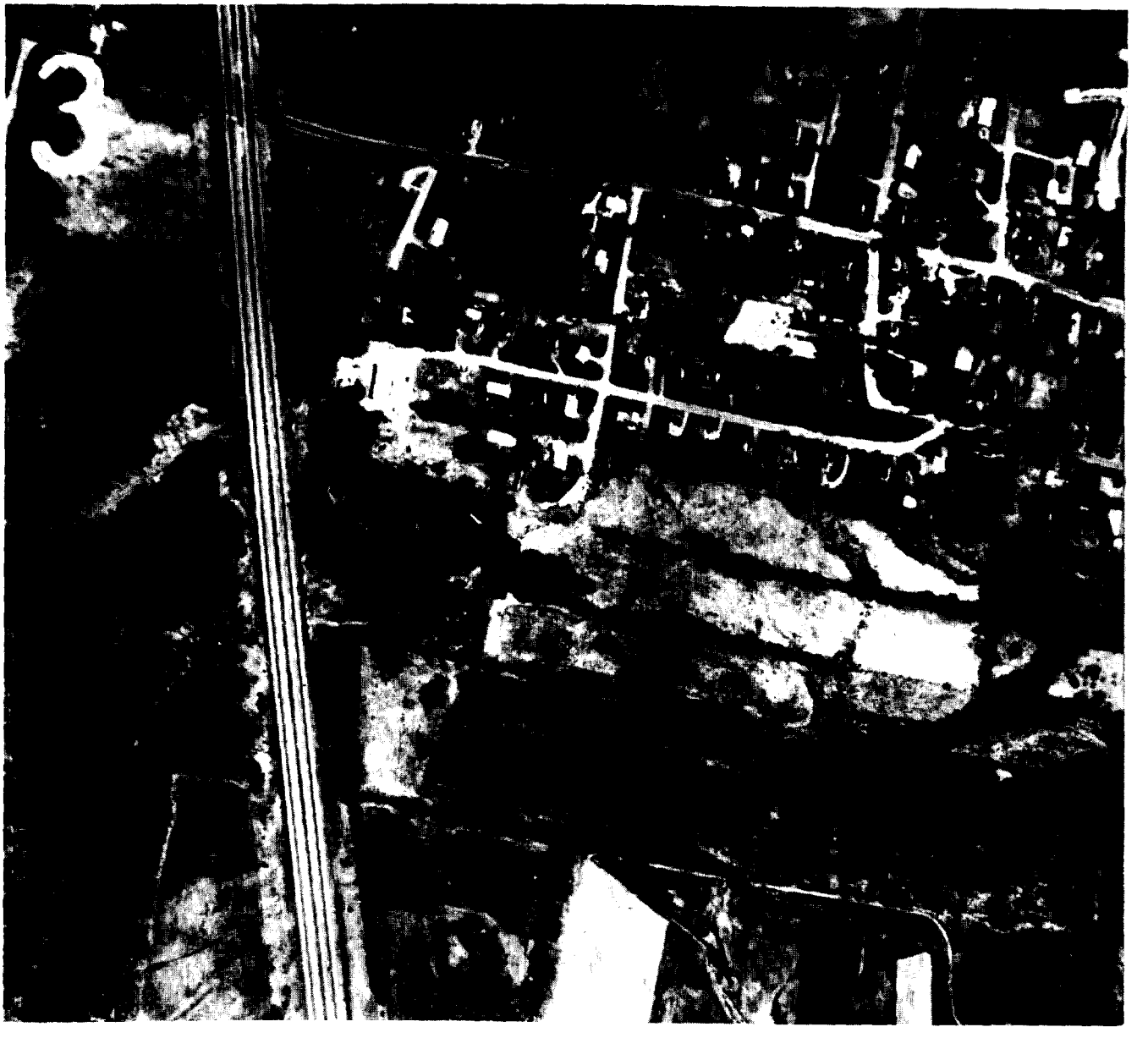

Figure 2. Location of the Shepherd site indicated by tip of arrow in center of this mid-1970's air photo of western Hallowell. Mrs. Shepherd's garden visible as small light rectangle at head of arrow. Interstate 95 visible toward left edge of photo.

Shepherd has exposed more of the bedrock by removing the overlying thin, pebbly clay soil. We hypothesize that this "ledge"or bedrock outcrop acted in concert with the morphology of the hill to the northward, and possibly remnant ice in the vicinity to impound standing water and channel a small outwash channel into that standing water during the terminal Pleistocene.

The bedrock outcrop is notable today in that it always contains a shallow pool of water immediately to the east of the summit of the outcrop. Apparently this bedrock, a metamorphosed sedimentary material, contains an aquafer which produces a low-flow spring. This spring

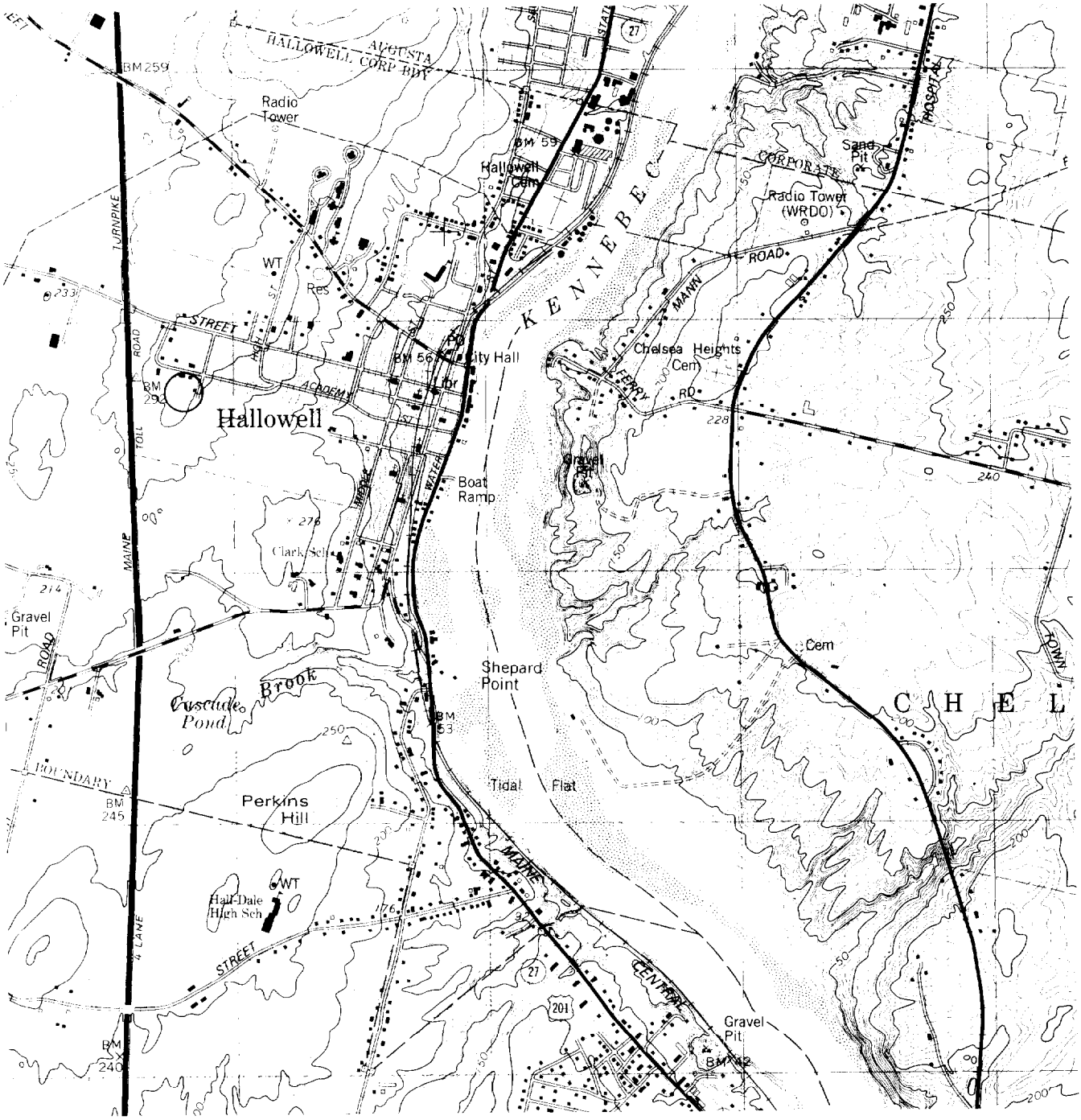

Figure 3. Vicinity of Shepherd site as shown on USGS topographic map.

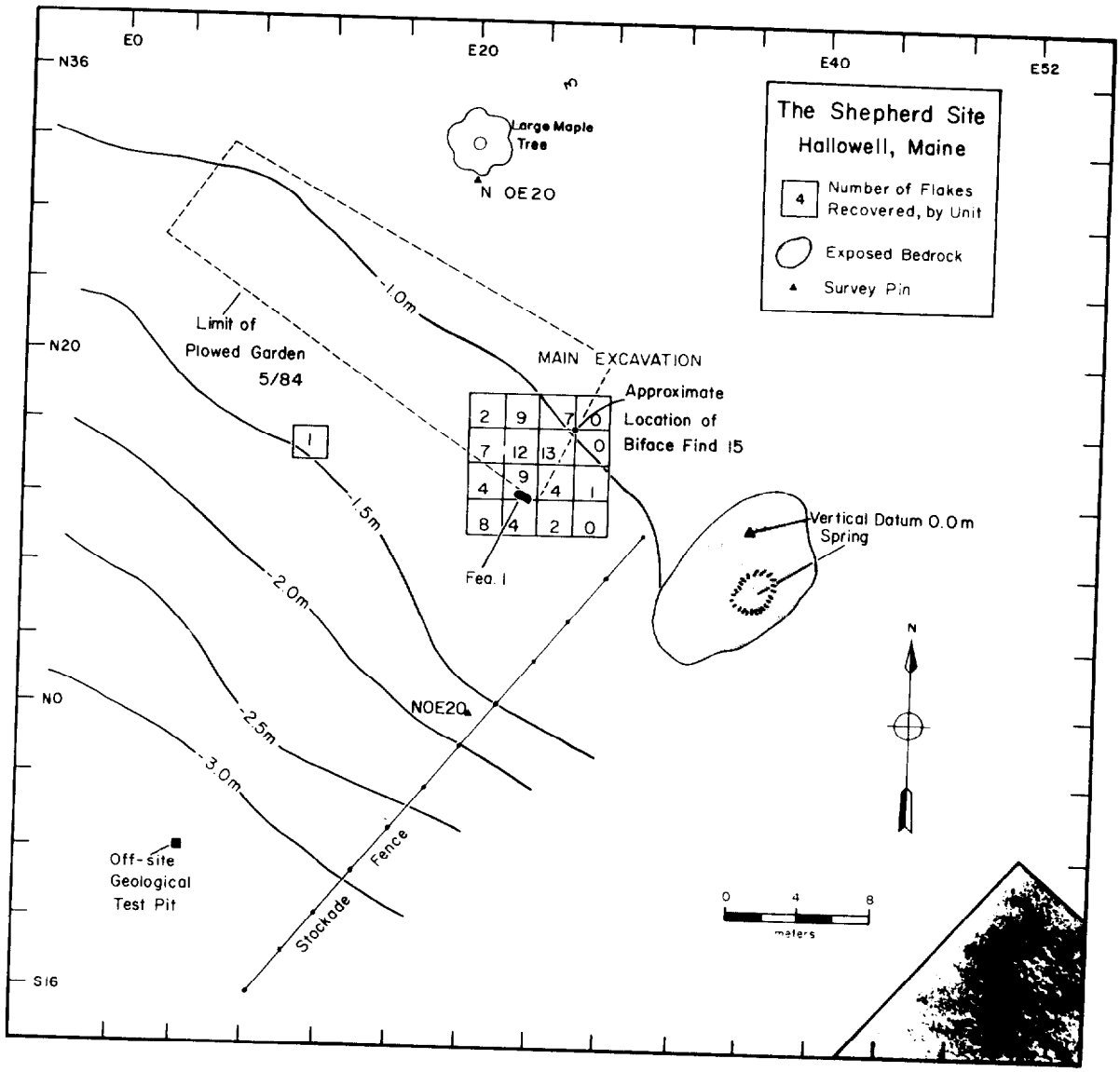

Figure 4. Map of Shepherd site. Number of flakes recovered in each 2.2 meter square shown # indicates the location and number of surface collected flakes outside the area excavated. Contour intervals are in 1/2 meter below vertical datum, a high spot on the bedrock outcrop behind the Shepherd house.

Figure 5. View looking southeast across Shepherd garden during initial testing in 1984. Shepherd house at left, stockade fence visible in middle distance. Note distant hills visible just over top of stockade fence.

may have been the water source used by the prehistoric inhabitants of the site, although we would expect the hydrologic regime in the area to have changed appreciably since the early Holocene.

FLAKE DISTRIBUTION AND FEATURE

Figure 4 shows the area of excavation, location of Feature 1, and the counts of all flakes recovered from the excavated area. As noted, Feature 1 is located very near the break in slope of the terrace edge, at the southern limits of our excavation. Because the plowed surface of the garden does not extend southward to the edge of the terrace, we successfully tried to find the apparent limits of the flake distribution with our excavation. It is indeed possible that there is more artifactual material along the break in slope to the grid south and southwest of the excavated area, but unlikely. Only one flake was recovered from a 2 x 2 meter square with southwest corner located at N14 E10, which was excavated to test this hypothesis.

It is certain that there was no flaked stone located around or in the immediate vicinity (ie. within 1-3 meters) of the bedrock outcrop and spring complex located between the flake concentration and Mrs. Shepherd's house. Thomas (1986) has summarized strong ethnoarchaeological evidence indicating that over 50% of the area of single component habitation sites often contain no material culture debris recognizable to an archaeologist. Thus, the

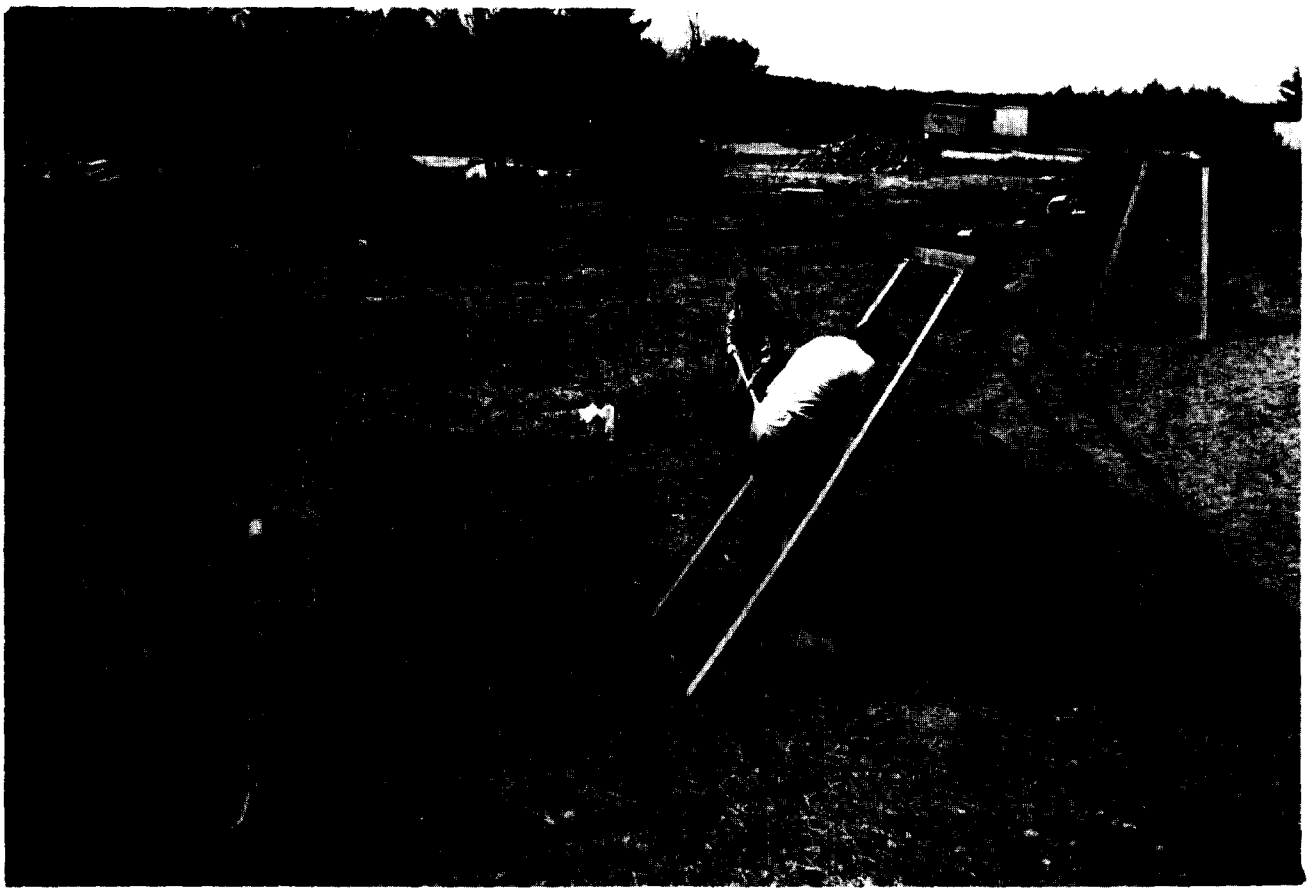

Figure 6. Excavation of the N10 series of squares in 1985, looking grid west. Henry Lamoreau on the screen, Mark Hedden behind Henry.

limits of the habitation area as used by the inhabitants, and the archaeological site as viewed through the distribution of preserved material culture remains, are not necessarily coincident. In view of the argument that the bedrock outcrop and spring is the only usable fresh water source within several hundred meters, we would necessarily include this natural feature within the absolute limit of scatter (site margins as used by the inhabitants) even it is not within the nuclear area of the site (Thomas' terms). The flake and calcined bone concentration which we have excavated would be the only "nuclear area" now visible to an archaeologist.

Feature 1 was first encountered as a noticeably orange tinge to the normally olive-drab subsoil in the southern quadrant of N12 E22, while shovel-scraping the base of the plowzone. Spiess subsequently trowelled the plowzone/ B horizon transition layer on the southwest and southeast quadrants of the square to reveal the outlines of the feature: an elliptical dull orange stain, clear and contrasting with a buff olive-tan clay surrounding. the ellipse had approximately 50 by 100 cm diameters with a long axis along grid east-west and its southward margin at N12.00 E23.00. there was a noticeable tail to the orange stain which tended grid southeastward, away from the main body of the ellipse. Further trowelling revealed that the feature's discoloration was only 1-2 cm. thick at its thickest. We surmise that the orange stain

Table 1. Soil profile description prepared for the Shepherd site by James Balogh, Resource Assessment Service, Orono, Maine. May 18, 1985. Soil testpit hand dug at N37 E15.

Landform. Hill crest, possibly local outwash delta intermixed with glacial till. 0-5% slope. Southeast aspect.

Water status. Soil water status at time of description was dry-moist. Well drained, greater than 92 cm to water table.

Comments. AT depths between 142 and 160 cm. sand with 15% gravel was observed using a soil auger. Coarse fragments are bedded in three layers in the 2Bw1 horizon.

Soil profile description.
Ap1. 0 to 16 cm, brown (10YR 4/3) loam; moderate, medium subangular blocky structure parting to weak, fine subangular blocky structure; friable; few, fine charcoal fragments; 5-10% large gravel; many, fine roots, common medium roots; gradual, smooth boundary.
Ap2. 16 to 26 cm, dark yellowish brown (10YR 4/4) loam; weak, medium subangular blocky structure; friable; few, fine distinct (10YR 5/6) mottles, few, fine charcoal fragments; 5-10% small gravel, less than 5% cobbles, common, fine roots; clear, smooth boundary.
2Bw1. 26 to 62 cm, yellowish brown (10YR 5/4) medium sand; loose; very friable; 10% cobbles, 5% stones (stones are predominantly at the bottom of horizon); few, fine roots, abrupt, smooth boundary.
2Bw2. 62 to 92 cm, brown (10YR 5/3) fine sand; weak, coarse subangular blocky structure parting to weak, medium subangular blocky structure; friable; common, fine distinct (10YR 4/4) mottles, few, fine organic matter coatings in root channels; less than 5 percent small gravel; few, fine roots; abrupt, smooth boundary.
2Bm. 92 to 142 cm, light olive brown (2.5Y 5/4) loamy sand; strong, medium subangular blocky structure parting to weak, fine subangular structure--structure is grading to platy; very firm, brittle; common , fine, faint (2.5Y 4/4) and common , fine, prominent (10YR 4/4) mottles; few, fine, faint iron coating on ped surfaces; less than 5% small gravel.
3C. 142 to 160+ cm, grayish brown to yellowish brown sand; 15% large gravel; observed by soil auger.

represents oxidation of the clay minerals immediately underlying a hearth. The southeastward tending tail of the oxidized clay may represent a downwind margin of the hearth or some other southeastward extension of the effect of the campfire.

Definite fire-cracked rock was encountered sporadically through the plowzone in the area excavated, but not frequently enough to note that it was concentrated in any particular area. There was no association of fire-cracked rock with the subplowzone stain.

Vertical distribution of material at the site is consistent with parameters published for controlled tillage experiments on archaeological sites (Odell and Cowan 1987). The Shepherd site artifact and a large number of the larger flakes were collected on the surface, while Odell and Cowan note

Figure 7. Dorsal surface of large flakes recovered from the Shepherd site. Blade fragment in upper left.

tendency for large pieces to be preferentially collected during surface survey. Of 19 surface collected flakes, 12 were from within the area of later excavation. Approximately 80 flakes were removed from this area, so the surface sample represents roughly 15% of the total assemblage of the area. Odell and Cowan (1987: 460) report recovery figures of 3 to 9% of assemblage on the surface of a plowed field for each collecting episode. The light scatter of surface flakes to the northwest of the excavated area may represent movement of artifactual material in the direction of plowing, another effect reported by the authors.

ARTIFACT DESCRIPTION

The artifact Mrs. Shepherd recovered from her garden in 1983, and has retained in her collection, can best be described as a stemmed asymmetric biface, probably a nearly completed preform, made of a tan silicified mudstone (argillite). The stone has a very dull lustre, perhaps a result of the highly patinated surface. The specimen is 104 mm long, 40 mm wide, and 16 mm thick. The biface is plano-convex in cross-section, suggesting that it was shaped from a large flake. The ventral side (herein described as that surface which was last attached to the core) exhibits a number of large, somewhat random flake removals, apparently removed to "straighten out" the

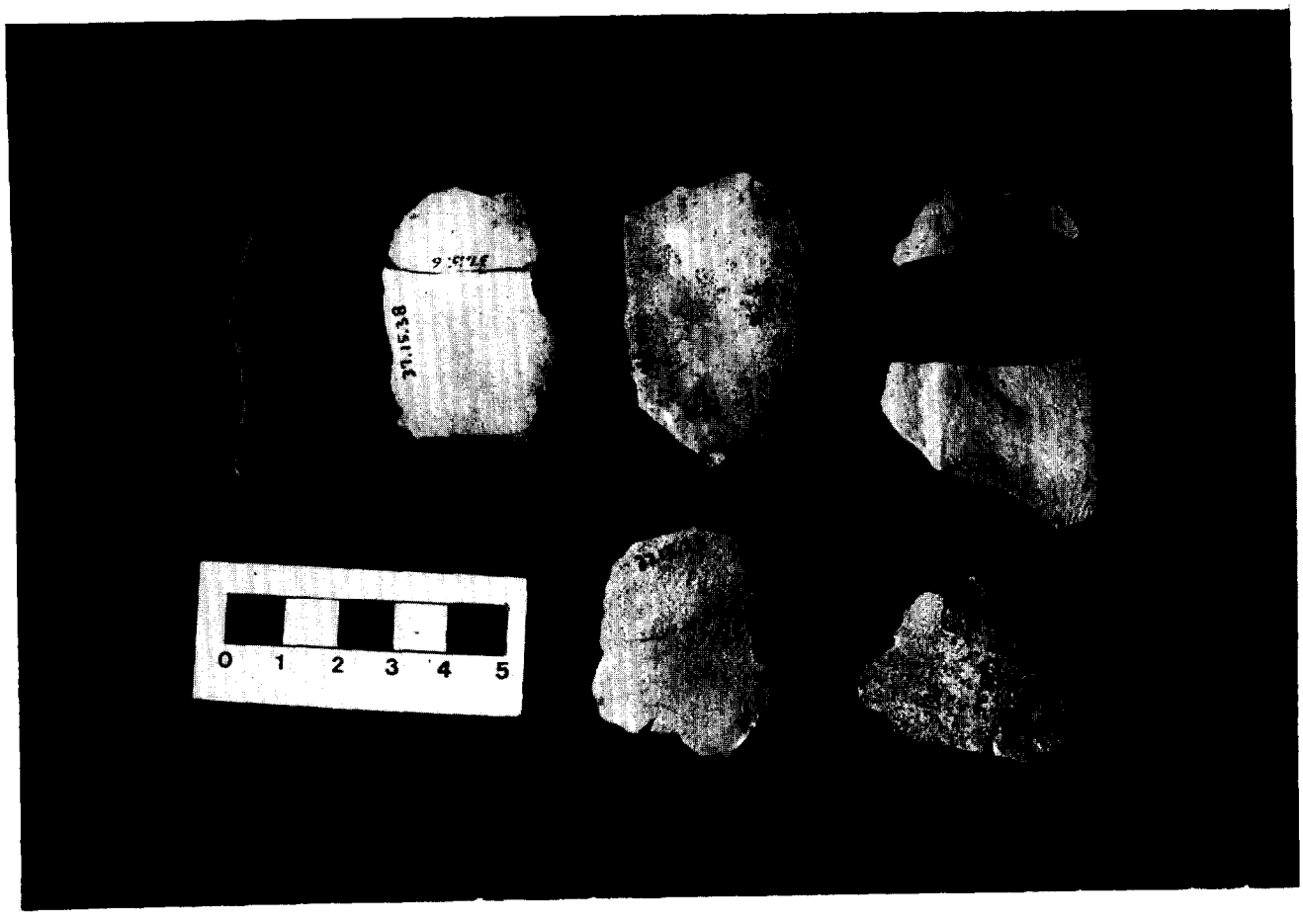

Figure 8. Ventral surface of the pieces shown in Figure 7.

flake. The dorsal surface exhibits a pattern of regular, collateral flake removals on the distal half. proximal dorsal surface in the area of the them is thick and somewhat irregular. These characteristics, coupled with heavily step-fractured lateral sides, suggest difficulty in creation of the stem. The left lateral side diverges in a straight line from the tip and reaches a convex maximum width at half the length of the biface, while the right lateral side is uniformly crescentric. The stem contracts from the main body of the biface, and is approximately 22 mm wide and 22 mm long. The edges of this biface appear at first glance to have been ground, but inspection under magnification suggests rather that decomposition of the grainy raw material may be responsible for the dulled appearance of the edges. Two areas however, may in fact exhibit some evidence of use or intentional grinding: the tip is skewed to the left of center and is heavily rounded at the tip and for 19 mm down the right lateral side, and the base appears to be ground beyond what the other edges show as natural edge deterioration. Thus, while it appears that this specimen was not a finely finished form, there is some evidence that the tip at least was utilized.

DEBITAGE

Approximately 100 flakes (some broken by tillage and later refitted) were recovered,

Figure 9. Dorsal surface of smaller flakes recovered from the Shepherd site.form the area during the 1983, 1984 and 1985 surface collections and excavations.

Although at first glance most pieces (70% roughly) appear to be the same tan, silicified, heavily patinated siltstone as the previously described biface, closer inspection reveals the presence of several similar materials or at least grades of the same material. With such a small sample, it should be possible to reconstruct the shell of whatever was created at the site. Damage to **many** pieces by plow contact (see Figures 7, 8 and 9) and possible scatter throughout the years the area has been cultivated, however, suggest reasons why this effort proved only minimally successful. A number of flakes exhibit edge modification suggestive of retouch. But again, as this material has a tendency to deteriorate along the edges, it is not possible to determine whether the edge damage was created by purposeful retouch, plow contact or simply by material decomposition. The presence, however, of more than one raw material, namely, several grades of possible argilliite, several flakes of an aphanitic, dark gray volcanic material (n=10), and a small number of quartz flakes (n=9), suggest that a number of flaking episodes occurred at the site.

The flakes which comprise this collection are of several types. Approximately 15% are large, early stage biface reduction flakes which have obvious, possibly ground, striking platforms. A number of smaller biface thinning flakes

are also present. At least 50% of the flakes, however, either are missing a diagnostic "type" striking platform or were apparently struck from a crude core. One specimen, however, is unique. It is an unutilized blade (Figures 7 and 8 upper left) which must have been removed from a prepared blade core. It is 51 mm long and 17 mm wide at the point of maximum width. It has a single dorsal ridge on the vertical axis of the flake which defined the removal. A striking platform is not present.

CALCINED BONE

A small sample of calcined bone (n=49, total weight=16.4 grams) was recovered from the plowzone and the site surface. The horizontal distribution of the bone was closely congruent with the horizontal distribution of flakes in a concentration around the remnant hearth (feature 1) area. Forty-six of these bone pieces can be identified only as mammal bone. Two are probably cervid (deer family) antler fragments. One piece is identifiable as an anterior shaft fragment of a metatarsal of a deer-family species, of white-tailed deer or caribou size. It is possible that all of the bone fragments can be accounted for by the kill of one deer or caribou.

CONCLUSION

The authors are not aware of any exact analogies for the stone tool described in this report in the northeast, nor for site selection by prehistoric peoples in this type of geographic location in Maine. The site is small indeed, and an occupation of short duration by a limited number of individuals is suggested by the presence of possibly only one hearth and the limited recovery of stone waste. It also seems unlikely that such an unprotected location would prove viable as reusable, long-term living space. The site was utilized as a living floor for some short period of time, however, as suggested by the presence of the hearth, the collection of calcined bone which probably indicates that food was consumed at the site, and form the moderate diversity of recovered lithic waste.

The technology employed in creating the recovered biface, particularly the possibly ground edges and fine, collateral flaking style exhibited on the dorsal side, are reminiscent of Paleoindian/Late Paleoindian technology. The form of this biface is also suggestive of Late Paleoindian types such as Hell Gap, although if so it is a clumsy cognate. The raw material utilized in the production of this tool is visually similar to the argillite recorded for Plano-like, parallel-flaked points from several locations in Maine (Doyle et al 1985). Indeed, argillite appears to be a dominant raw material employed in the parallel-flaked manifestation of Late Paleoindian in Maine, while the use of this material during other time periods in Maine prehistory is negligible. Another possible support of the site's Late Paleoindian affiliation is the presence of a blade fragment among the debitage. Although blades occur infrequently in early Ceramic assemblages in Maine (personal observation), their presence is often associated with Late Paleoindian assemblages (for instance, see Frison and Stanford 1982). In fact, blades are the supposed preforms for some plano-like points.

In sum, an asymmetric biface, together with a moderate quantity of variably sized debitage, a small amount of calcined bone, some of which was identifiable as cervid, and a hearth feature were recorded from Mrs. Shepherd's garden in Hallowell, Maine. Although no single component of this assemblage is, by itself, diagnostic as to time period of site occupation, a number of characteristics of this small collection suggest a Late Paleoindian temporal affiliation. The location, on sandy soil away form water, is reminiscent of other Paleoindian site locations in Maine (Spiess and Brush 1987), although not necessarily of Late Paleoindian (Spiess, Bourque and Gramly 1983). Discovery of this site has lead us not to be complacent in thinking that we currently have a representative sample of all site location types in our site inventory.

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Archaeological Data Recovery at Site 61.20, Jonesport, Maine

Steven L. Cox

INTRODUCTION

Site 61-20 is a black soil midden located at the tip of Henry Point in Jonesport, Maine. Brief inspection of the site by Dr. Arthur Spiess of the Maine Historic Preservation Commission in 1979 indicated the presence of intact deposits with prehistoric cultural materials and features, and the site was subsequently judged eligible for the National Register. Breakwater construction associated with a Corps of Engineers harbor improvement plan created a need for archeological mitigation, and in July of 1986 the author carried out archeological data recovery operations on the site. This study was prepared for the Army Corp of Engineers under Contract Number DACW33-85-D-0002-019. It is reprinted here with Army Corps permission.

STUDY AREA

General Environment

Jonesport is located on the eastern Maine coast approximately midway between Mt. Desert Island and Passamaquoddy Bay. This is a section of the coast with numerous small rivers, bays and island chains; major drainage routes to the interior are lacking. Like much of the eastern Maine coast, shores tend to be rocky, generally with cobble and boulder beaches rather than sandy beaches. The Maine coast is submerging, with a present submergence rate of approximately 9 mm. a year in Passamaquoddy Bay (Sanger 1985:14). As a result, much of the shoreline in the region exhibits eroding banks, and most known archeological sites exhibit some degree of erosional damage.

This would have been a relatively rich environment for prehistoric hunter-gatherers. The mixed northern hardwood forest of the region supported substantial populations of whitetail deer, moose, black bear, beaver and other furbearers. The fertile Gulf of Maine waters supported a wide variety of marine and anadromous fish species, with cod and flounder probably being the most important to man. Grey and harbor seals were available locally, as were large beds of shellfish, particularly softshell clam (*Mya arenaria*). On the other hand, the climate is marginal for agriculture, and there is no evidence for prehistoric horticulture from eastern Maine.

History of Research

The central Washington County coast is relatively poorly known archeologically. In the past decade and a half major archeological surveys have been carried out in Penobscot and Blue Hill Bays and on Mt. Desert Island to the west (Bourque 1975; Bourque and Cox 1981; Cox 1983; Sanger *et. al.* 1980) and in Passamaquoddy Bay to the ast (Sanger 1971, 1985, 1986), but less attention has been paid to sections of the coast between major drainage systems.

In the mid-1970's University of Maine crews under the direction of David Sanger carried out surveys of the Washington County coast, discovering site 61-20 in 1975 during the course of these surveys. The surveys also uncovered a series of promising sites on the Roque Island chain just east of Jonesport, and beginning in 1982 Sanger carried out test excavations in a number of these sites, the only extensive archeological testing program in the area until the Jonesport project.

In 1979 the staff archeologist of the Maine

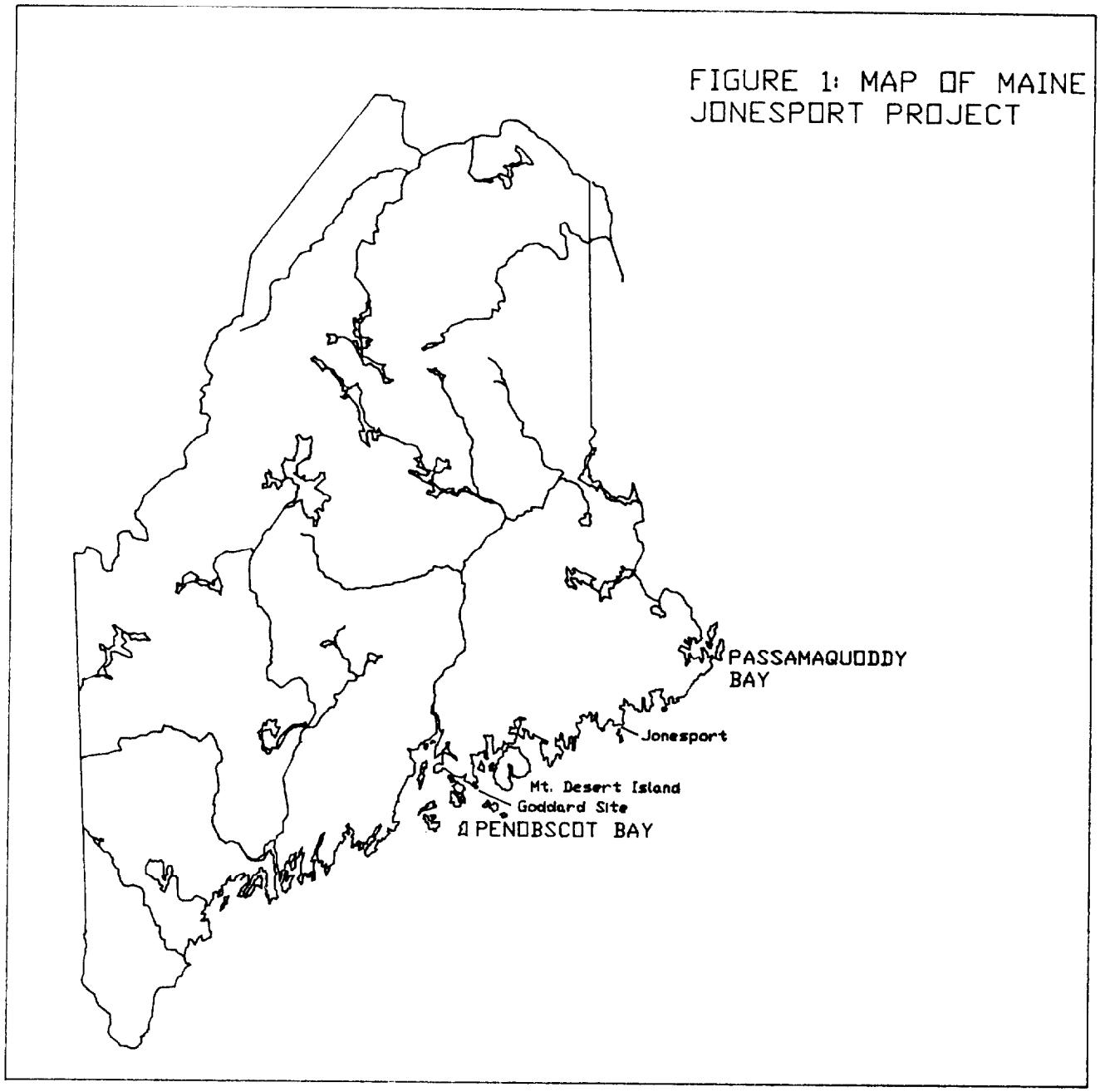

Figure 1. Location of Henry Point site at Jonesport, Maine.

Historic Preservation Commission, Arthur Spiess, visited Henry Point as part of an initial assessment of environmental impact of the breakwater project. Spiess,examined the eroding banks of the site and determined that it was a shell-free black soil midden containing prehistoric cultural material and features. He also made a preliminary map of the site showing a main 12x40 meter area of midden on the point and three small isolated midden remnants northeast of the point.

As a result of his investigation, Spiess recommended National Register eligibility for the site on the basis of the following factors:

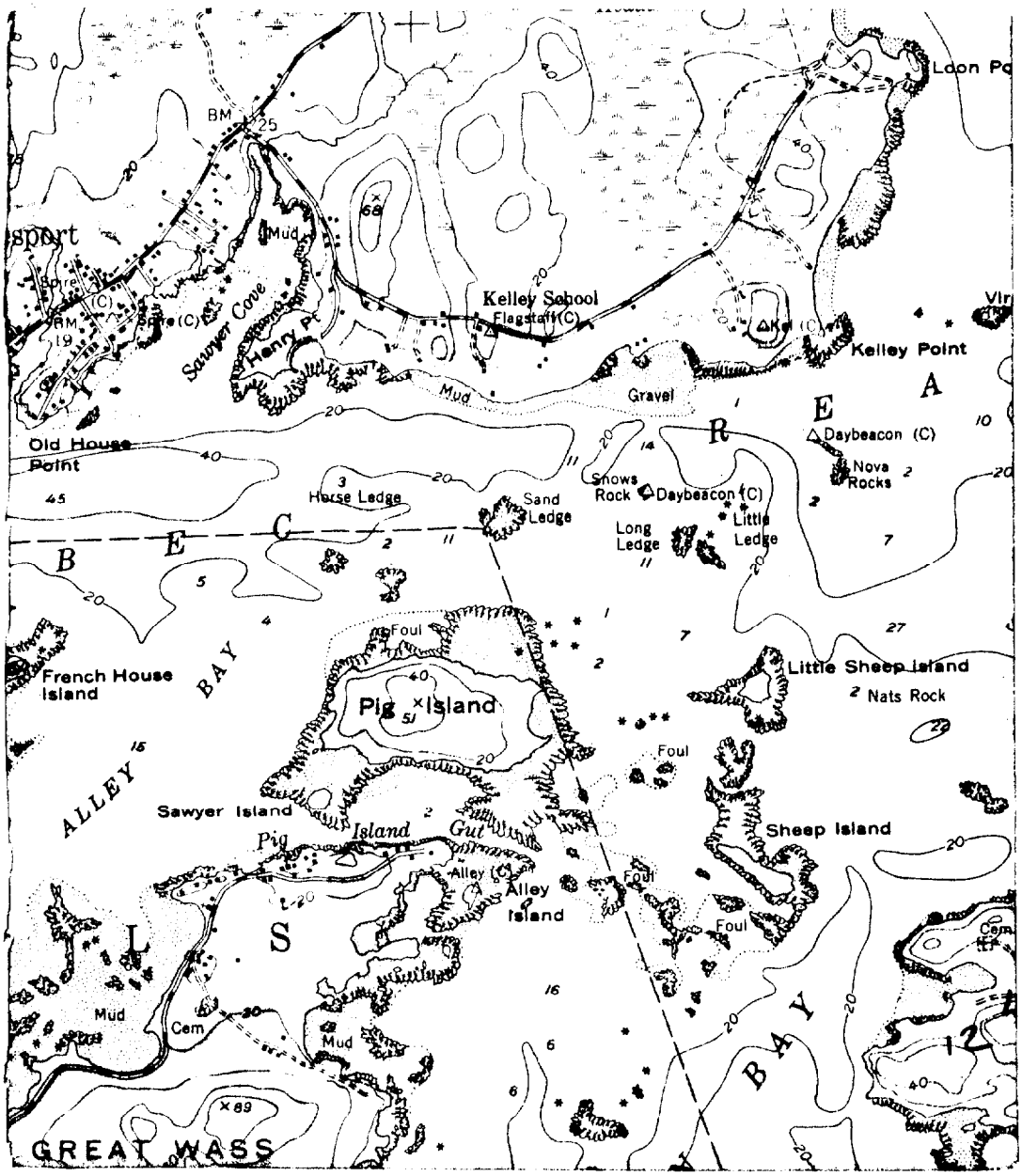

Figure 2. Map of Henry Point and its Environs, from USGS topographic map.

1) preservation of intact site deposits and features in a section of the coast undergoing heavy erosion and site loss;

2) the relatively impoverished archeological record for this section of the coast;

3) the lack of shell in the midden stands in contrast to the usual shell midden sites of the Maine coast, and suggested that the Henry Point site belonged in a small group of "black soil middens" on the Maine coast.

These sites are rare but tend to be very productive in cultural remains. The lack of shell in these sites is thought to relate to site seasonality, but is still poorly understood.

In the fall of 1979 the site was judged eligible for the National Register. The final professional investigation of the site prior to the 1986 field season occurred in 1985, when Diane Kopec was hired by MHPC to make a field check of the site. Kopec found the site to be in substantially the same condition as described by Spiess in 1979. As part of her investigation Kopec dug two shovel test pits, one on the point and the other inland from the point to the east of the access road. The test pit on the point encountered 30 cm. of black sandy midden containing three flakes. The test pit to the east of the access road did not produce cultural material.

Regional Culture History

The earliest intact archeological components on the Maine coast date to the Late Archaic period, although there are traces of an earlier Middle Archaic occupation in the form of scattered artifacts from later sites and a few underwater finds. The earliest well-defined component is best represented by Occupation I at the Turner Farm site in Penobscot Bay, where it dates to ca. 5000 B.P. Artifacts attributable to this period include small stemmed points, quartz scrapers, plummets, and probably pecked and ground adzes. The available evidence suggests that by this time period a fairly sophisticated adaptation to coastal life had been achieved, with heavy reliance on marine resources including fish, sea mammals and shellfish. Perhaps contemporary with this small stemmed point component is the Vergennes phase of Laurentian, common in the interior of Maine but very rare on the coast.

The most famous of Maine's prehistoric cultures, called variously Moorehead phase, Maritime Archaic or Red Paint culture, follows during the period 4500-3700 B.P. This culture is best known for its spectacular cemeteries with elaborate grave goods and red ocher, but is perhaps equally interesting for its sophisticated maritime adaptation, featuring open water swordfish hunting and fishing. The available evidence suggests that members of the culture lived on the coast for much of the year, with trips inland along the river systems for anadromous fishing during part of the year, perhaps the spring. Moorehead artifacts include small and large stemmed points, ground slate points and bayonets, pecked and ground adzes and gouges, plummets, and a variety of bone and swordfish sword tools. Exotic materials represented in burial goods include Ramah chert from northern Labrador and cherts and quartzites from the Great Lakes region, evidence of a rather broad-ranging exchange network that perhaps centered on the Gulf of St. Lawrence.

At sometime around 3600-3700 radiocarbon years ago the Moorehead phase abruptly disappears and is replaced by the Susquehanna Tradition in a shift that most Maine archeologists attribute to the entry of a new population. Susquehanna artifacts, including broad, well-flaked bifaces, drills, grooved axes and bifacial scrapers are both morphologically and technologically very different from their Moorehead counterparts, and while ritual burials continue, in Susquehanna they are cremations without red ocher. While the Susquehanna settlement pattern was not greatly different from that of Moorehead - indeed, most Moorehead sites contain a Susquehanna component - even in coastal sites the Susquehanna subsistence base was much more terrestrially oriented (primarily whitetail deer hunting), and lacks the deep water fishing and swordfish hunting component of the Moorehead phase. In Maine Susquehanna disappears as abruptly as it appears, sometime around 3400 B.P., and is followed by a terminal Archaic period of almost a millennium which is virtually unknown archeologically. It is only at the end of the terminal Archaic period, around 2500 B.P., that we begin to get a clearer picture from a series of sites on the eastern Maine and Maritimes coast.

Virtually all of our evidence for Late

Archaic coastal occupations in Maine comes from the Penobscot Bay region and further west. In Passamaquoddy Bay and the Jonesport area components earlier than about 2500 B.P. are absent, perhaps because of a greater submergence rate on the east coast and consequent destruction of earlier sites. The earliest components from the region lack ceramics and contain a variety of stemmed points and large scrapers. Shellfish do not appear to have been utilized to any great degree, and faunal remains are scarce, leaving unclear the degree of maritime adaptation during this period (Sanger 1986:147).

Pottery in the form of Vinette ware appears in central and western Maine at about this time, but it is not until the middle Ceramic period around 2000 years ago that ceramics become established in eastern Maine with a series of pseudo-scallop shell and dentate rocker stamp wares. There is no evidence that agriculture or a new population accompanied the introduction of pottery into Maine, and in eastern Maine we see a continuation of a basic hunting-gathering pattern throughout the ceramic period, coupled with a gradually increasing emphasis on marine resources.

Middle ceramic artifacts include small stemmed points, small-to-medium sized endscrapers, small ground adzes, and a variety of bone tools including harpoon heads, barbed and unbarbed points, beaver tooth knives, awls and needles. Marine resources including fish, shellfish and seals become increasingly important, although terrestrial species such as deer and beaver are common in middens. Virtually all of the coastal sites from this period are shell middens, and it is from this period that we see the first clear evidence for houses - small (ca. 4x3.5 m.) oval wigwam-like structures built into a depression and occupied during the cold weather months.

At around 1200 B.P. the late ceramic period begins with a shift to cord-wrapped stick impressed pottery and small side-notched points. The Great Spruce Island site (61-17) from the Roque Island group belongs within this transitional period, and contains a mixture of cord-wrapped stick and dentate ceramics as well as evidence for an unusual rocker application of a cord-wrapped stick (Sanger and Chase 1983). The Great Spruce Island site contained several of the wigwam-like habitation structures described above, and faunal remains suggested a cold weather occupation based on shellfish, bottom fishing (tom cod and sculpin), sealing, and terrestrial hunting (deer, moose and various small mammals). The quantity of fish remains from Great Spruce was greater than that from most Passamaquoddy Bay sites of the same time and season, resembling more Penobscot Bay assemblages, and the notched points from the site also resembled central coast types more than those of Passamaquoddy Bay, suggesting stronger cultural links to the west than the east.

It is also during the late Ceramic period that we begin to see clearly a new type of site, best exemplified by the Goddard site in Blue Hill Bay (Bourque and Cox 1981). The Goddard site is a large (2.3 acres) shell-free black soil coastal midden. Virtually all prehistoric components known from the Maine coast are present at the site, but by far the largest component is late ceramic. Analysis of material from the site suggests that it was a large late ceramic summer village, with seasonality accounting for the lack of shellfish remains. The site is an extremely productive one (over 20,000 artifacts in various collections), and a striking aspect of the late ceramic assemblage is the large number of exotic lithic materials it contains. Cherts from Labrador, Nova Scotia, New York and Vermont are relatively abundant in the collection. What we seem to be seeing at the Goddard site is the prototype for the large summer villages reported during the early contact period, villages which were the focus for a variety of social and economic activities including long-distance exchange.

At the moment Goddard stands along in terms of its size and productivity, and it is not yet clear whether it is unique or representative of a class of such sites. Shell-free middens are rare on the coast of Maine and few other than Goddard have

been adequately investigated. It was for this reason that the shell-free midden at Henry Point was of particular interest.

ARCHEOLOGICAL INVESTIGATION

Research Objectives

Research objectives of the Jonesport project were defined on the basis of those qualities of the site which led to its National Register nomination: its position on the archeologically poorly known central Washington County coast and its shell-free midden, suggestive of a relationship to the productive summer village sites known from the Penobscot Bay region. These objectives were defined in the project research design as follows:

1. Determine the nature of the site - is it a shell-free midden comparable to the Goddard site or simply the remnant of an eroded shell midden? Answers to this question might be present in the distribution of any shell in the site, in seasonality data from faunal and feature analysis, in a determination of the amount of site area lost to erosion, and in the general productivity of the site.

2. Determine the culture history of the site, including the presence or absence of multiple components, and dating of occupations through typological analysis and radiocarbon dating.

3. Determine the economic basis and seasonality of the site's occupation(s), primarily through obtaining and analyzing an adequate faunal sample. Spiess reported faunal remains in the midden, and seasonality data was regarded as particularly important given our working hypothesis that summer occupations produced shell-free middens.

4. Determine the nature of any structures or features encountered. Location and investigation of features had the highest priority in fieldwork strategy. Aside from the fact that features generally tend to have the highest concentrations of cultural material, they are particularly valuable in providing a generally synchronous assemblage in what are often multicomponent sites. Habitation structures, if encountered, can provide information about the full range of activities at the site, including seasonality and economy, social and spatial organization, and possibly settlement size.

5. Obtain a sufficiently large lithic sample to be able to analyze patterns of lithic procurement and use. As discussed above, we are seeing significant amounts of exotic lithic materials in late ceramic sites on the central Maine coast, including materials from the Maritimes and the St. Lawrence. At this point it is not clear whether these materials are moving into Maine through interior canoe routes or along coastal routes. We felt that the Henry Point site, because of its coastal location between major bay complexes, might provide evidence for coastal movement of raw materials.

Site Description

Henry Point is a southwest-trending point at the mouth of Sawyer Cove in Jonesport. Site 61-20 covers most of, and is presently largely confined to, the narrow tip of the point, an area of approximately 450 square meters. For convenience' sake, when we hereafter refer to the point we mean this narrow tip containing the site. Midden remnants reported by Spiess to extend north of the main portion of the site appear to have been nearly completely destroyed by erosion. The site is presently part of a town campground and is largely covered with grassy vegetation, with a few scattered spruce trees at the inland (eastern) end. However, there is ample evidence in the form of burned roots and tree throws for a former forest cover. A gravel road extends out to the tip of the point, running through the middle of the site.

The site has low relief, sloping gently from about 1.9 meters above mean high tide at the tip of the point to about 0.9 meters at the base of the point. A cobble beach surrounds much of the site, except at the southeast margin of the site where there is

Figure 3. Site 61.20, view to the east from the tip of Henry Point.

a sand beach. The banks of the site above the cobble beach are being actively eroded and are heavily slumped. The southeast margin of the site, opposite the sand beach, is lower and more gently sloping, and appears to have undergone a more complicated process of both erosion and deposition.

The stratigraphy in most of the site consists of 10-20 cm. of dark brown to black sandy midden overlain by 5-10 cm. of sod and underlain by an unsorted or minimally sorted sand-cobble deposit which is probably of glacial outwash origin. The soil under the midden is moderately well developed, with a thin (2-5 cm.) E horizon at the top of the outwash deposit in most areas. The stratigraphy of the southeastern margin of the site is somewhat different, reflecting beach formation processes, and will be described in more detail in the fieldwork description section below.

Fieldwork Description

Archeological fieldwork on site 61-20 was carried out during the period June 30 - July 23, 1986, a total of 18 working days. The field crew consisted of the project director (Cox), a crew chief (Diane Kopec) and three crew members (C.D. Cox, Anita Crotts, Laurie LaBar). All personnel had had extensive prior experience in Maine archeology.

Fieldwork began with laying out a grid on the site, with grid north at 330 degrees magnetic and datum located near the tip of the point. Our strategy was to excavate a series of one meter test squares spaced over the site in order to determine the spatial extent and variability of the site and to locate concentrations of cultural material or features for further excavation. Based on the results of these tests, we then planned to open up 2-4 area excavations.

Our initial tests included a 35 meter long transect of test squares at 5 meter intervals running east from datum along the north side of the point, and a single square one meter south of datum near the tip of the point. In the east-west transect one square at 20 meters east of datum was skipped because of disturbance in that area. We initially did not test south of the road because of the lack of space between the southern margin of the road and the bank. We also did not test in the road because of the probability of midden disturbance from road construction (later confirmed) and because of our reluctance to disturb the road surface, which is commonly used by vehicles.

The initial tests produced small amounts of prehistoric cultural materials from all squares but one (1N5E), but no concentrations of material and only one diagnostic artifact, a notched point base from 0N25E. Lacking evidence for any concentrations of material, we decided to open up three areas of the site, one at the tip of the point (Area A), which would be the area most impacted by breakwater construction, and two areas at the base of the point, one north of the road (Area B) and one to the south (Area C). Our decision to excavate in the narrow strip of land south of the road was prompted by reports from local people that most or all of the prehistoric cultural material picked up over the years had come from the sandy beach southeast of the site. In addition we dug a number of shovel test pits around the inland margins of the site to determine site boundaries. We excavated a total of 46 one meter squares, representing slightly over 10% of the total site area.

All excavation other than the shovel tests was by trowel in one meter excavation units, and all backdirt was screened through 1/4" screen. Squares were designated by their NW corner grid reference. No significant stratigraphy was noted within the midden, and excavation proceeded by 5 cm. arbitrary levels within the midden. All squares were taken down to a point at which we could be reasonably sure we were below cultural deposits, generally about 5 cm. below the base of the midden or below any sub-midden features. Although we were reasonably confident of our identification of the subsoil as a late Pleistocene outwash deposit, we did excavate several of the initial test squares approximately 20 cm. down into that deposit, confirming the lack

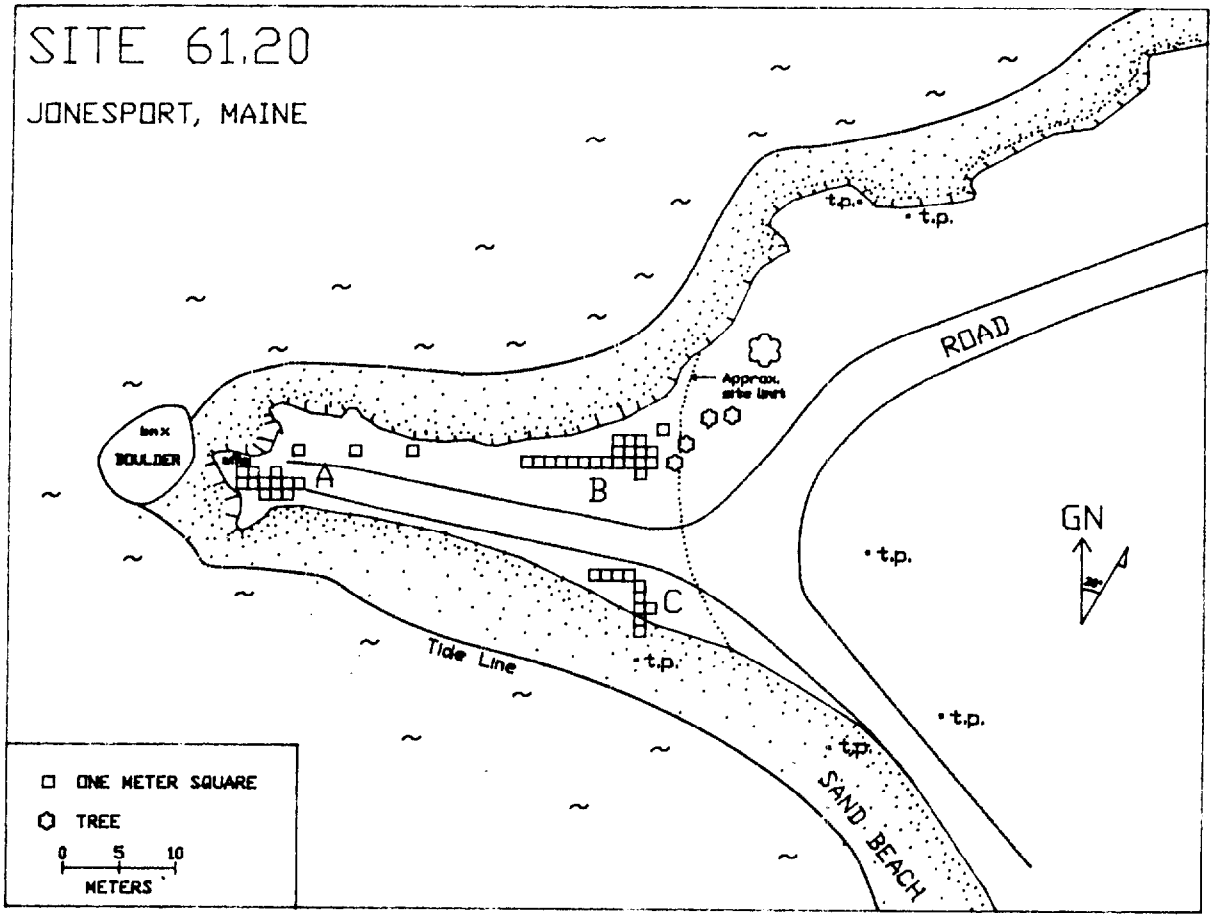

Figure 4. Site 61.20 showing area excavated.

of cultural remains.

All artifacts and features were mapped, and all other materials (mainly flakes) were collected by 5 cm level and square quadrant. Soil samples were saved from major stratigraphic layers and from features, and any charcoal encountered in features was saved. Stratigraphic profiles were drawn for at least one wall of each square, and the site was mapped using a plane table and alidade.

ARCHEOLOGICAL RESULTS

Excavation Areas

Area A. Twelve one meter squares were excavated in Area A at the tip of the point. Cultural material generally occurred in low densities, with the exception of a single flaking station (Feature 2) containing several biface preform fragments and several hundred chert and rhyolite flakes. The area produced a total of 10 artifacts and 763 flakes. The only temporally diagnostic artifact from this area is a ceramic sherd found within the flaking concentration. It is grit tempered and decorated with a cord-wrapped stick, indicating a late ceramic (ca. 1200-700 B.P.) affiliation.

Soil stratigraphy in Area A is similar to that found in most other areas of the site:

Sod - 5-10 cm. dark brown (10YR3/3) sandy loam with dense rootlets.

Midden - 8-15 cm. black (10YR2/1) sandy loam with light gravel, pebbles and cobbles. Virtually all prehistoric cultural material occurs in this layer.

Subsoil - discontinuous 0-5 cm. light grey (10YR7/1) E horizon over dark brown (10YR2/2) to dark yellowish brown (10YR4/4) B horizons, poorly sorted sand to cobbles.

Squares 1S1E and 1S3E had been affected by road construction. In the northeastern quadrant of 1S1E the midden has been entirely replaced by road fill, and the NW quadrant of 1S1E and the northern half of 1S3E had a thin layer of recent fill between the base of the sod and the top of the midden.

All squares from this and the other areas of the site showed some degree of disturbance, possibly from plowing, with historic material mixed down into the midden. Usually the historic material did not extend below the upper 5 cm. of midden. There was no evidence from anywhere within the site for natural or cultural stratigraphy within the midden deposit.

Two features were encountered during the Area A excavations. Feature 1 was an oval pit slightly less than a meter wide in squares 1S3E, 2S2E, and 2S3E. It extended to about 35 cm. below the surface (about 20 cm. below the base of the midden) and had a dark brown peaty fill with very little gravel. Six rhyolite flakes were recovered from the feature, but we suspect that it may be a natural feature, possibly a rotted-out tree stump.

Feature 2 was the only feature encountered during the excavations which was definitely cultural in origin and which contained artifacts. The feature consisted of a concentration of chert and rhyolite flakes and biface preform fragments in and above an oval flat-bottomed pit extending to 23 cm. below the surface. The pit lay mainly in squares 2N3E and 2N4E, measured approximately 1.2 x 0.6 meters, and was filled with a black, charcoal-rich sandy loam, darker in shade than the overlying midden. Between the base of the midden and the pit, at 16-18 cm. below the surface, there was a very thin (ca. 2 mm.) layer of light gray to light brown coarse sand. The flake concentration began near the base of the midden at ca. 14 cm. below the surface and extended down through the coarse sand layer to the base of the pit. Charcoal was abundant in the feature and several samples were collected, but we have doubts about their reliability due to the quantities of non-cultural charcoal in the midden, including a large partially burnt tree root just to the north of the feature.

The nature and function of the pit feature is unclear, beyond its obvious association with biface reduction. The coarse sand layer and flat bottom of the pit are reminiscent of house deposits, but it is obviously far too small to have been a habitation structure. Our best guess, and it is only that, is that that this feature may be the remains of a small temporary shelter for a single individual working on tool (biface) manufacture.

Cultural material from the feature included three biface preform fragments, two fragments from late stage preforms or completed bifaces, and the CWS ceramic sherd mentioned above which dates the feature to the late ceramic period. The feature also produced a total of 541 flakes, virtually all of them biface reduction flakes of local rhyolite and chert. These flakes account for approximately one third of the total number of flakes recovered in the excavations.

Aside from the material in Feature 2, Area A produced only four artifacts and 222 flakes. Artifacts included a complete ovate biface preform found in the midden about half a meter NW of Feature 2 and possibly associated with that feature, a small grey chert biface fragment possibly used as a graver, one utilized flake, and one deer antler tine. The antler tine was found at the sod/midden junction and is uncalcined. In the absence of other evidence for preservation of prehistoric bone in the site, we are inclined to believe that the antler dates to the historic period. As in Feature 2, the great majority of flakes are biface reduction flakes of local materials.

Area B. Area B includes all squares dug north of the access road on the point. These include 6 squares dug in the initial east-west test transect, a one meter wide

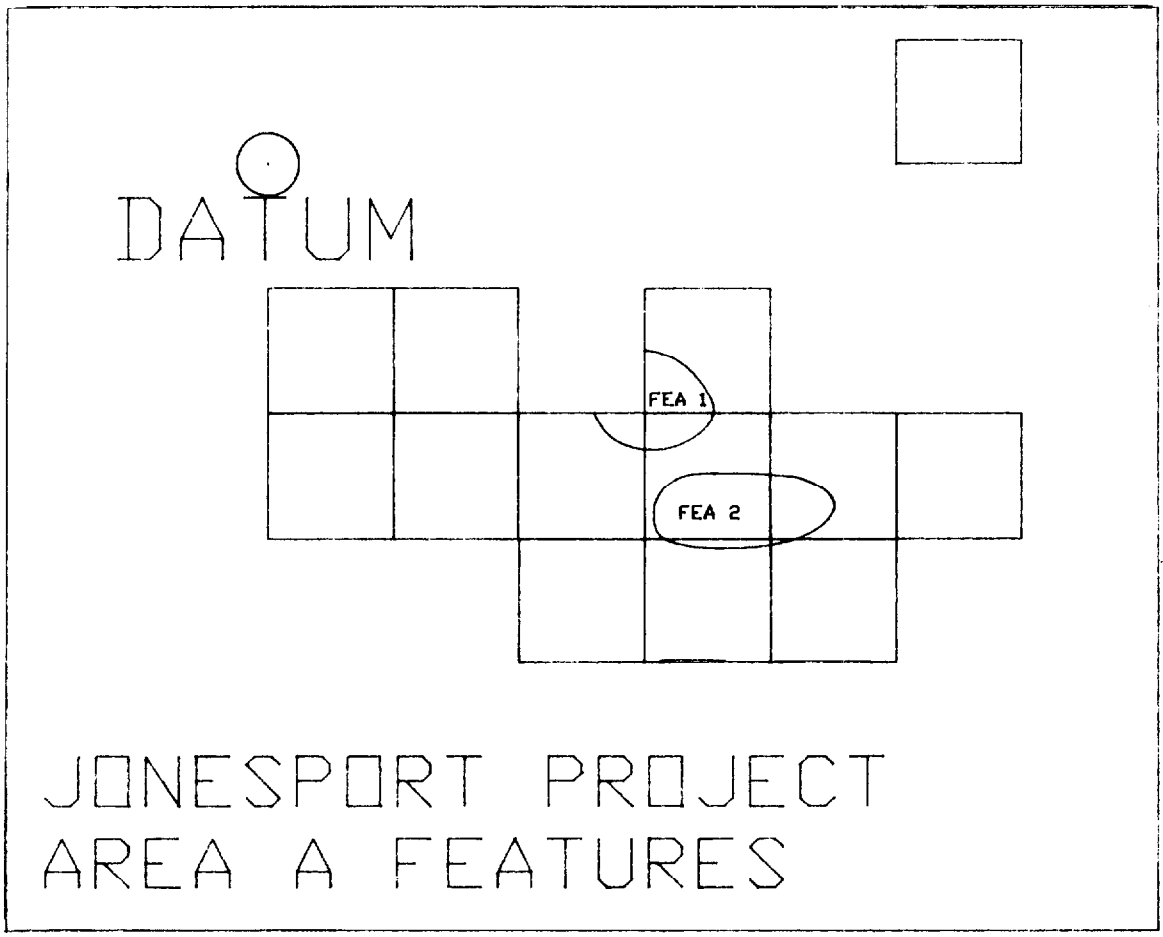

Figure 5. Area A features at the Henry Point site.

trench excavated along the transect from 0N25E to 0N36E (9 squares not including the initial transect), and an expanded excavation at the eastern end of the trench (9 squares), for a total of 24 one meter squares in this area, concentrated mostly at the base of the point.

Cultural material was sparse throughout the area, and included only 8 prehistoric artifacts and 381 flakes. Only two of the artifacts were temporally diagnostic, a late ceramic notched point found in the initial tests in square 0N25E and a stemmed point probably dating to the middle ceramic period in square 1N34E. Stratigraphy was virtually identical to that of Area A (Figure 6), and there was again late historic material mixed down into the top of the midden.

Only two rather dubious features were found in Area B. Feature 3 was a shallow midden pit extending about 5 cm. below the base of the midden in squares 0N29E and 0N30E. The pit was oval, about 0.7 x 0.4 meters, and produced only one flake. Feature 4 was a small round pit 0.6 meters in diameter in square 0N34E. The pit extended to 41 cm. below the surface and was filled with a very dark black, charcoal-rich sandy loam. Some of the charcoal consisted of charred tree root, and there was no cultural material in the feature. Both of these features could be natural - many similar depressions in the midden in all areas could be more confidently identified as resulting from natural causes - tree throws, decayed tree stumps, rodent burrows, etc.

In addition to the notched and stemmed points, artifacts from Area B include a rhyolite biface preform fragment, two

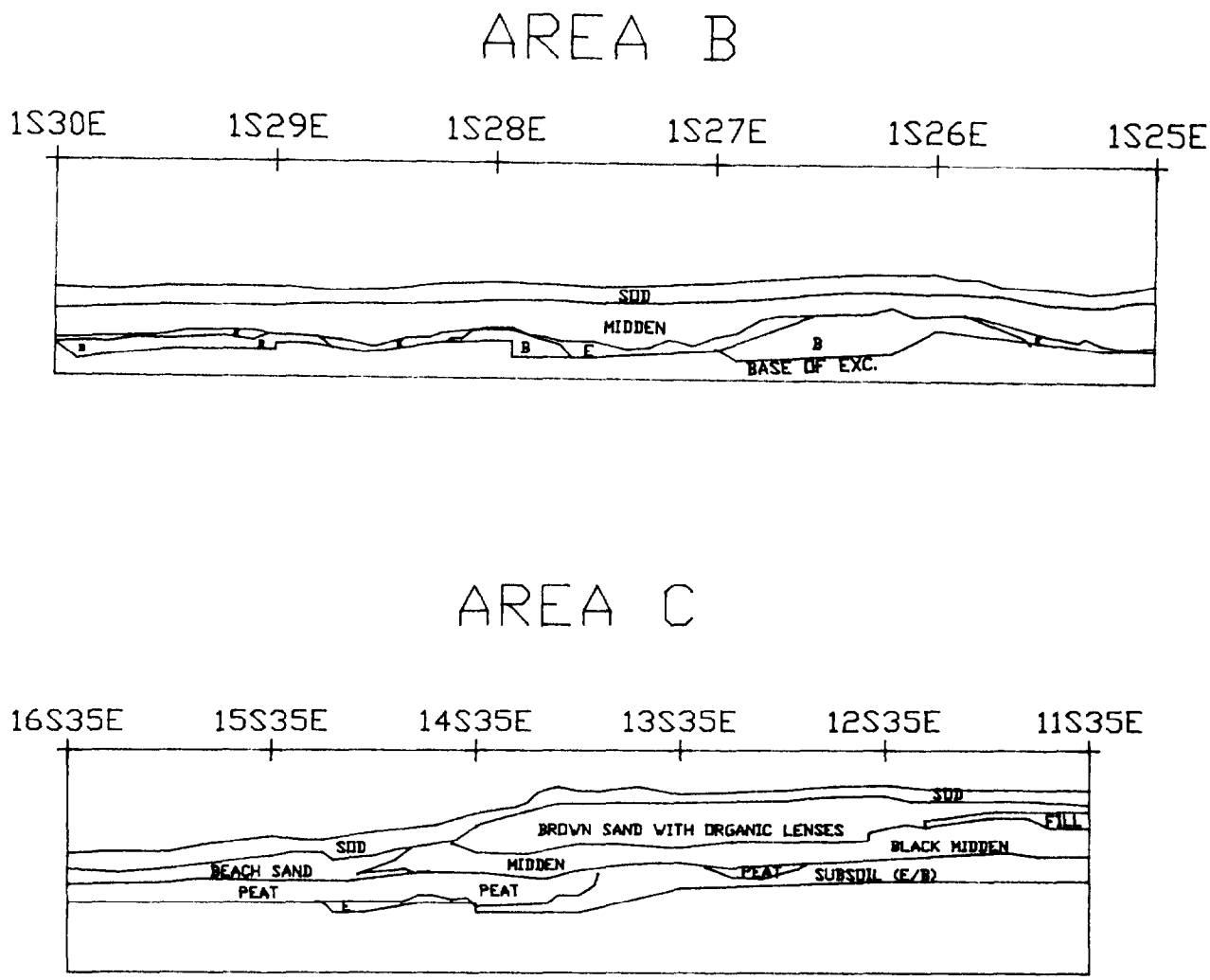

Figure 6. Site 61.20, profiles from area B and C.

utilized flakes, a quartz piece esquillee, a rhyolite core, and a small worked chert nodule. As in Area A, the bulk of the debitage consists of biface reduction flakes.

Area C. We had originally planned not to dig in the narrow strip of land south of the access road because of the lack of space for area excavations and the probability of disturbance in this area from both the road and beach erosion. However, after commencing work at the site we learned from local people that almost all of the prehistoric cultural material that had been recovered from the site area had been found on the sand beach southeast of the point. Our own searches of the beach produced a number of flakes. As a result, we decided to test the southeast corner of the site, designated Area C.

Initial tests proved promising, and we eventually excavated 9 one meter squares in the area, consisting of a 4x1 meter east-west trench along the road (10S31-34E) and a 5-meter long north-south trench extending onto the beach (11-15S35E, 13S36E). This area of the site is quite low (about a meter above mean high tide), and there is

no clear topographic break at the top of the beach. Indeed, the bottom of our southernmost square filled with water at a particularly high tide during our work. The stratigraphy in this area of the site is quite different from that of the other areas, reflecting both depositional and erosional episodes associated with the development of the adjacent beach (Table 1).

There are a number of lines of evidence which suggest that the midden deposit in Area C has been disturbed. The deposit is lighter in color and relatively loosely consolidated compared to that of other areas, and particularly in the southern squares, there are splotches of light brown beach sand within the midden. Gravel content increases toward the beach.

Table 1. Soils description for Area C.

Sod - 5-8 cm. dark brown (10YR3/3) sandy loam with dense rootlets. In the southernmost squares the deposit is increasingly sandy and less consolidated, and the grass is supplemented by beach vegetation.

Sand Overburden - 15-20 cm. light brownish-gray (2.5Y6/2) sand and minor gravel with multiple (3-4) dark brown (10YR3/1) peat lenses. This deposit is clearly the result of wind and water deposition during storms, punctuated by stable periods of vegetation growth (the peat lenses). Late historic (20th century) material is abundant throughout this layer, as well a small amounts of prehistoric material, and it appears to be a relatively recent deposit. In squares 10S34E and 11S35E this deposit is replaced by sand and gravel road fill.

Midden - 10-15cm. dark gray (7.5YR4/0) sandy loam with gravel. This layer contains the bulk of the prehistoric material. Gravel content increases toward the beach and the deposit is relatively loosely consolidated. Possibly redeposited (see discussion below). The midden deposit ends in the southern half of square 14S35E and is replaced to the south by culturally sterile sandy beach deposit.

Peat - 5-15 cm. moist black (7.5YR2/0) fibrous peat, little mineral content. This layer appeared only spottily in the northernmost squares of Area C, showing up as a continuous layer at about 13.4S and continuing to the southern edge of the excavation. Cultural material was found only at the top of this layer.

Subsoil - discontinuous E and B horizons identical to other site areas.

Most importantly, over half of the artifacts and flakes from the area show some degree of water wear, in some cases very heavy. These factors lead us to interpret this layer in at least the southern squares as either redeposited from an eroded seaward position or extensively wave-churned in place.

No prehistoric cultural features were found in this area. The density of cultural material is higher than in the other excavated areas (with the exception of the Feature 2 concentration in Area A), with 15 prehistoric artifacts and 490 flakes recovered. Artifacts include a late ceramic notched point, a triangular biface, six other biface or biface preform fragments, four endscrapers, two utilized flakes, and a whetstone. Only the notched point is culturally diagnostic, although all of the endscrapers would also most comfortably fit in late ceramic. As in the other areas, the debitage consists mainly of biface reduction flakes, although several uniface resharpening flakes were noted (not recognized from other areas).

Other Tests In addition to the excavations outlined above, we shovel-tested a number

of additional areas to determine the limits of the site. Two shovel test pits in the low area east of the access road produced no cultural material and no evidence for a midden deposit. The soil is quite moist in this area and we did encounter the peat layer found in the lower squares of Area C in both tests.

We looked for Spiess' reported midden remnants along the bank north of the site and found two very small pockets of black midden soil in the bank about 20 meters north of Area B. One of these pockets contained a few clam shell fragments. Shovel testing approximately 50 cm. inland from these pockets produced no evidence of midden, and subsequent scraping away at the bank indicated that neither midden deposit extended more than 10-20 cm. inland. We conclude that no significant midden remnants remain north of the point.

Finally, we dug two holes in the sand beach, one south of Area C and one about 30 meters east, on the off chance that midden was preserved beneath the sand. We encountered the peat layer present in Area C but no evidence of cultural deposits.

CULTURAL MATERIAL

Artifacts

A total of 32 prehistoric artifacts was recovered from the site. Measurements below are in millimeters and grams. Description of these items is presented below in Table 2.

Figure 7. Site 61.20 artifacts.

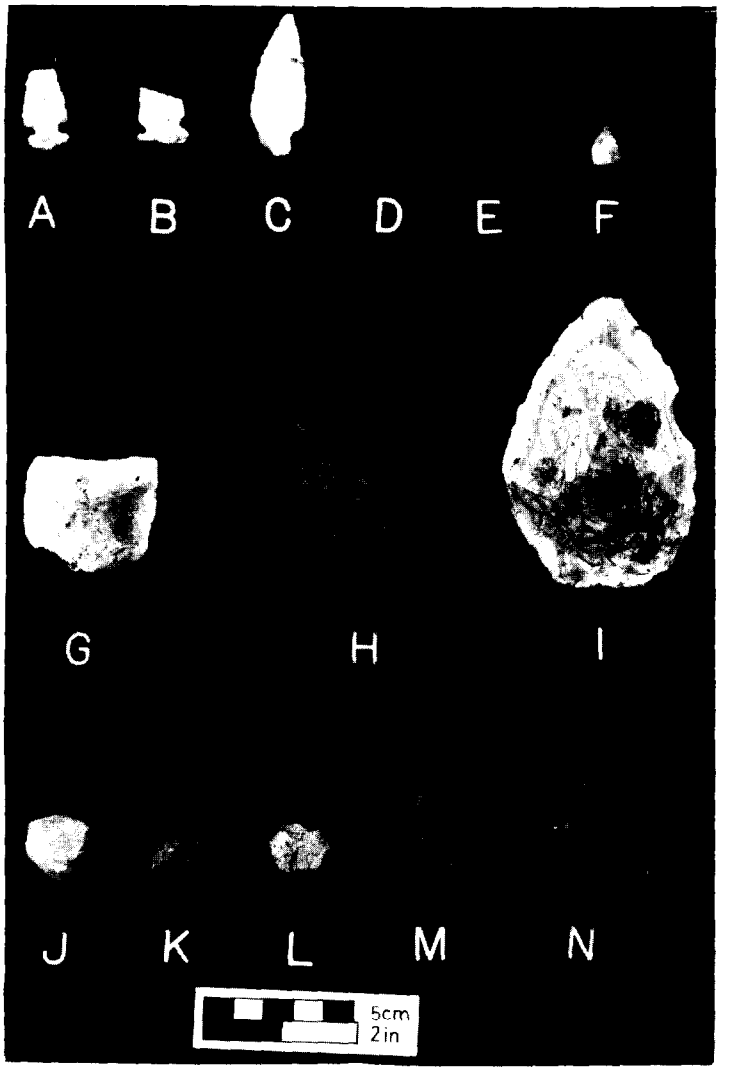

Table 2. A descriptive list of cultural material from 61.20.

1. Notched Points (2).

61.20.10 (Fig. 7B) - small notched point base of patinated gray rhyolite. Basal edge slightly broken. Late Ceramic. 0N25E.

61.20.25 (Fig. 7A) - notched point with broken tip of mottled grey/tan rhyolite. Convex base and notches oriented 90 degrees to long axis typical of central coast late Ceramic specimens. 13S35E.

Catalog No.	Length	Width	Thickness	Notch Width	Notch Depth	Weight
61.20.10	-	17.3	4.6	4.1	2.5	2.0
61.20.25	-	15.5	4.6	4.0	3.4	2.0

2. Stemmed Point (1)

61.20.16 (Fig. 7C) - complete small stemmed point of patinated tan rhyolite. Stem is slightly expanded, broken on one basal corner. Probably middle Ceramic, although early Ceramic and terminal

Archaic are possible. 1N34E.

Catalog No.	Length	Width	Thickness	Stem Length	Stem Width	Weight
61.20.16	48.2	18.4	7.2	8.0	10.9	6.0

3. Triangular Biface (1)

61.20.29 (Fig. 7D) - complete biface of dark gray banded rhyolite. Slightly asymmetric and rather thick and crudely flaked - possibly a reworked point tip or notched point preform. Undiagnostic but probably Ceramic period. Moderately waterworn. 14S35E.

Catalog No.	Length	Width	Thickness	Weight
61.20.29	37.1	17.9	7.3	5.0

4. Biface Preforms (7)

61.20.4 (Fig. 7I) - complete early stage ovate preform of patinated, slightly porphyritic rhyolite. Thick, with large rectangular flake removals. Measures 96.9 x 65.4 x 28.5 mm. and weighs 136 grams. 2S1E. Not in, but possibly associated with Feature 2 (see 61.20.33)

61.20.5 (Fig 7H) - preform basal fragment of fine-grained gray-green rhyolite. Straight base and excurvate lateral edges. 12.0 mm. thick. 2S3E, Fea. 2.

61.20.7 - proximal fragment of large gray rhyolite flake with minor bifacial retouch laterally. Probably initial stage biface preform. 2S3E, Fea. 2.

61.20.33 - biface preform edge fragment, very similar to 61.20.4 in material and workmanship. 2S4E, Fea. 2.

61.20.15 - heavily patinated rhyolite preform base, partially flaked. Slightly convex base, measures 43.0 wide and 8.7 thick. 0N34E.

61.20.18 (Fig. 7G) - preform base of patinated rhyolite. Retains striking platform at proximal end. Measures 44.6 wide and 8.9 thick. Its relative thinness and broad, shallow flake scars are reminiscent of Susquehanna technology, although it is not specifically diagnostic. Waterworn. 10S33E.

61.20.21 - initial stage preform fragment on large black andesite flake. Waterworn. 11S35E.

5. Miscellaneous Biface Fragments (7)

61.20.1 (Fig. 7F) - fragment of a gray chert biface. Chert is semi-glossy and very fine grained, probably not a Maine chert. One corner of the break has been reworked and bears evidence of use in the form of edge rounding and crush - possible use as a graver. 1S0E.

61.20.6 - biface midsection of patinated rhyolite, 27.7 wide and 4.7 thick. Late stage preform or finished point. 2S3E, Fea. 2.

61.20.8 - biface tip of blue porphyritic rhyolite. Late stage preform or finished point. 2S3E, Fea. 2.

61.20.24 - biface edge fragment, gray banded rhyolite. Waterworn. 13S35E.

61.20.27 - biface midsection, mottled gray-green rhyolite. 5.1 mm. thick. Heavily waterworn. 13S36E.

61.20.28 (Fig. 7E) - biface tip, gray banded rhyolite. Slightly waterworn. 13S36E.

61.20.31 - biface tip, patinated gray rhyolite. 14S35E.

6. Endscrapers (4)

61.20.22 (Fig. 7J) - complete scraper of gray quartzite. No lateral retouch. 12S35E.

61.20.23 (Fig 7K) - distal end of heavily waterworn green porphyritic rhyolite scraper. Lateral unifacial retouch on left edge only.

13S35E.

61.20.30 (Fig. 7L) - heavily waterworn scraper of green porphyritic rhyolite. Proximal end possibly broken. No lateral retouch. 14S35E.

61.20.32 (Fig. 7 M) - Moderately waterworn scraper of pink and gray rhyolite. Relatively thick, with steep unifacial retouch on right lateral and proximal edges. Left lateral edge is unflaked and may be snapped. 15S35E.

Catalog No.	Length	Width	Thickness	Weight	Distal Edge Angle
61.20.22	22.1	21.4	4.7	3.0	70
61.20.23	-	20.2	7.0	-	70
61.20.30	17.3	20.9	4.6	3.0	65
61.20.32	32.2	(20.7)	9.9	10.0	70

7. Utilized Flakes (5)

Utilized flakes are flakes which show use wear but no deliberate retouch or shape modification.

61.20.2 - mottled gray chert, possibly Onondaga. Weight 3g. 1S3E.

61.20.14 - patinated rhyolite. 14g. 0N29E.

61.20.17 - gray rhyolite. 3g. 1N35E.

61.20.19 - gray-green rhyolite. 2g. 10S33E.

61.20.20 - gray-green porphyritic rhyolite. 5g. 10S34E.

8. Miscellaneous Lithic Artifacts (4)

61.20.11 - flake core (?) of patinated porphyritic rhyolite. Medium-sized cobble (386g) of low grade rhyolite with rather random-looking flake removals - could be natural.

61.20.12 - small (11g) blue-gray chert nodule, roughly worked (bashed). Chert is probably not from Maine. 0N29E.

61.20.13 - quartz piece esquillee fragment, 1g. Bifacially retouched with typical columnar shatter along one side. Core? 0N29E.

61.20.26 - whetstone of brown metasiltstone. Measures 194.0 x 115.1 x 49.8 mm. Large cobble with several flake removals at one end to create a notch. Both faces have a series of narrow grooves parallel or at a slight angle to the long axis, and one face has a smoothed facet ca. 64 x 18 mm. 13S36E.

9. Ceramic Sherd (1)

61.20.9 (Fig. 7N) - small grit tempered sherd with widely spaced cord-wrapped stick impressions. 4.2 mm. thick. Coarse sand temper. The combination of grit temper and CWSI decoration suggests a date in the range 1200 to 700 B.P. 2S3E, Fea. 2.

Flakes. We recovered 1634 flakes weighing a total of 1830 grams from the excavations. Flake distributions and weights are summarized in Table 1. Slightly over 90% of the flakes are biface reduction flakes, with primary core reduction flakes making up most of the rest of the total. A few uniface retouch flakes were found in Area C.

TABLE 1: SITE 61-20 FLAKE DISTRIBUTION

Area A	Number	Weight	Weight/No.
1S0E	8	8	1.0
1S1E	6	2	0.33
1S3E	29	23	0.79
2S0E	30	96	3.2
2S1E	26	24	0.92
2S2E	35	27	0.77
2S3E	349	219	0.63
2S4E	192	124	0.65
2S5E	4	28	7.0
3S2E	11	10	0.91
3S3E	46	43	0.93
3S4E	27	35	1.30
TOTALS	763	639	0.84

Area B	Number	Weight	Weight/No.
1N5E	0	0	0.0
1N10E	3	1	0.33
1N15E	4	4	1.0
0N25E	2	6	3.0
0N26E	2	5	2.5
0N27E	1	3	3.0
0N28E	17	12	0.71
0N29E	14	24	1.71
0N30E	6	5	0.83
0N31E	22	41	1.86
0N32E	27	21	0.78
2N33E	20	8	0.40
1N33E	21	11	0.52
0N33E	29	82	2.83
2N34E	27	14	0.52
1N34E	36	19	0.53
0N34E	34	52	1.53
2N35E	5	3	0.60
1N35E	36	27	0.75
0N35E	10	6	0.60
1S35E	12	9	0.75
1N36E	15	22	1.47
0N36E	15	12	0.80
3N37E	23	32	1.39
TOTALS	381	419	1.10

Area C	Number	Weight	Weight/No.
10S31E	6	3	0.50
10S32E	12	97	19.40
10S33E	26	22	0.85
10S34E	11	5	0.45
11S35E	18	21	1.17
12S35E	43	131	3.05
13S35E	94	169	1.80
13S36E	85	89	1.05
14S35E	149	174	1.17
15S35E	46	61	1.33
TOTALS	490	772	1.58

Over 98% of the flakes were from materials believed to be local to the site (defined as occurring within 50 kilometers of the site). These materials included gray fine-grained rhyolite probably from outcrops on Flint Island off Jonesport, patinated non-porphyritic rhyolite probably from the same source, banded gray rhyolite, pink rhyolite, green and gray porphyritic rhyolite originally from the Kineo-Traveller Series in north-central Maine but available locally as beach cobbles, and quartz. Not all of these materials can be identified to source, but we prefer to take the conservative position that if a material cannot be identified as being non-local and if geologically it could have come from a nearby source, we assign it a local provenience.

Only 24 flakes, 1.4% of the total, are of definite or probable non-local origin. These flakes are listed in Table 4, below.

Faunal Remains. Lacking shell to buffer the normally acid Maine soil, site 61-20 was not kind to prehistoric faunal remains. Only a few fragments of calcined bone can be attributed to the prehistoric occupation. Uncalcined remains, including an antler tine at the base of the sod in 2S0E and a woodchuck mandible at the top of the midden in 1N5E, are almost certainly

TABLE 2: NON-LOCAL MATERIALS IN SITE 61-20 FLAKE COLLECTION

Material	Number	Comments
Munsungan chert	6	north-central Maine source
Pink chert	5	Bay of Fundy or Passamaquoddy Bay
Red chert	6	Bay of Fundy or Passamaquoddy Bay
Blue-gray chalcedony	2	Bay of Fundy
Onondaga chert	1	western New York
Brown chert	1	unknown source, possibly New York
Gray quartzite	2	Canadian Shield or Vermont
Black rhyolite	1	Castine Formation in Penobscot Bay

historic. Probable prehistoric faunal remains (none with specific cultural association) are listed below. I am grateful to Dr. Arthur Spiess of the Maine Historic Preservation Commission for his assistance in trying to identify the unidentifiable.

2S3E, 2nd midden level - 1 calcined fragment, unidentified mammal.

0N29E, 2nd midden level - 3 calcined fragments, medium or large mammal longbone

0N29E, 3rd midden level - 1 calcined fragment, medium/large mammal longbone

Shell was also very scarce in the midden. Scattered small fragments of shell found in the sod and at the top of the midden in all areas probably arrived via natural agents, mainly seagulls. The only shell that we can attribute with some confidence to the prehistoric occupations of the site were two small pockets of clam-shell (*Mya arenaria*) fragments at 30 cm. below the surface in the midden of square 1N35E.

Historic Material.

Moderately large amounts of historic material were found in the sod and upper midden of all areas. With one exception, all of this material was either chronologically undiagnostic or dated to the 20th or late 19th century. The exception consisted of several fragments of a kaolin pipe stem of 4/64" or 5/64" bore diameter found in the second midden level of square 0N35E.

CONCLUSIONS

Prehistoric Occupations.

Middle and late Ceramic occupations of Henry Point have been identified from the material recovered in the excavations. Only four culturally diagnostic artifacts were recovered - two notched points, a stemmed point and a ceramic sherd. Of these, three - the notched points and ceramic sherd - are late Ceramic. The ceramic sherd also dates by association four biface fragments found in the same feature and possibly a complete biface preform found a short distance away. Additionally, all four of the endscrapers recovered in Area C exhibit the small size and general lack of lateral retouch characteristic of late Ceramic scrapers. Thus, we believe that the major component of the surviving site portion is late Ceramic, and that the majority of the material recovered belongs to that component.

The grit temper of the ceramic sherd suggests a date reasonably early in the late ceramic period, since grit temper seems to have been replaced by shell temper sometime around 700 B.P. (Petersen and Newcomb 1986). The notched points are quite similar to those of the Goddard site collection, which is also dominated by grit tempered CWS pottery and which has late Ceramic radiocarbon dates falling between 700 and 800 B.P. (Bourque and Cox 1981).

Is this site then similar to the Goddard site? Like Goddard, it certainly is a shell-free midden. However, beyond the lack of shell and the dating of the main component, it is difficult to imagine two more dissimilar sites, particularly in terms of productivity. Several lines of evidence suggest that in fact site 61.20 is an outlying remnant of a once much larger site, which may or may not have had an

associated shell midden, and that therefore comparisons between this site and relatively intact large village sites like Goddard are not valid.

The cultural assemblage recovered from the site reflects a very narrow range of activities. The great majority of both artifacts and flakes from the site are the byproducts of core reduction and biface manufacture utilizing locally available raw materials. Scarce or missing are the tools reflecting a broad range of domestic activities which one would expect in a habitation site. The site produced only one ceramic sherd and no endscrapers were found in Areas A and B, unusual in a late Ceramic site where endscrapers are normally one of the most common artifacts. Equally significant is the lack of features. House remains (either post molds or house pits depending on season) and a variety of storage and garbage pits are normally common on Ceramic period habitation sites. Their lack together with the narrow range of artifact types strongly indicates that the surviving portion of the Henry Point site was a specialized activity area (primarily biface manufacture) rather than a habitation site.

This conclusion leads to another question - is 61.20 a specialized site type or is it merely an outlying area of a larger habitation site? I suspect the latter. As noted earlier, virtually all of the prehistoric material picked up by local people from the site area came from the sandy beach southeast of the site. Our own excavations of Area C adjacent to the beach produced both a denser concentration of cultural material and a wider range of artifact types than in the other areas of the site. Thus, it seems likely that the main portion of the Henry Point site lay to the southeast of the surviving site, and lacking the bedrock outcrops and boulders which have to some degree protected the point, that portion of the site has been entirely lost to erosion.

A final question to be considered concerns lithic raw materials. During the late Ceramic period there was a great deal of long-range movement of lithic materials, presumably through a variety of exchange mechanisms involving perishable goods as well as lithics. One of the goals of the Jonesport project was to gather evidence on possible coastal movement of materials, primarily between the Gulf of St. Lawrence and Maritimes region and the central Maine coast.

Unfortunately, as it turned out 61.20 is not a particularly appropriate site for examination of this question due to its low productivity and specialized nature. Not surprisingly given the emphasis on biface manufacture at the site, the assemblage is dominated by local materials. Three of 32 lithic artifacts and approximately 1% of the flakes are of materials exotic to Maine. Identifiable sources include the Maritimes and New York. While we can thus say that Henry Point participated in the materials exchange network, the sample is too small to allow specific conclusions about routes of movement of these materials.

Recommendations.

We believe that site 61-20 has now received adequate archeological testing. Slightly over 10% of the total site area has been excavated and the central questions concerning the site have been addressed. The low productivity of the site and its specialized nature suggest that further work will not add significantly to our understanding of the prehistoric occupations of the region. We therefore recommend no further archeological mitigation.

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Canoe Figures at Embden and Machiasport: Comments on the Cover Design

Mark H. Hedden

Representations of canoes with two or more occupants are a major theme at the Embden petroglyph site. While occupants are commonly depicted by simple oblique or perpendicular lines, several of the thirty glyphs recorded show passengers with the broad-shouldered triangular torso associated with late prehistoric Algonkian shaman figures. Parallels with the Peterborough petroglyph site in Ontario, Canada and with ethnographic sources on Algonkian groups around the Great Lakes indicates that the canoe glyphs may represent ceremonial or spirit voyages undertaken by or under the leadership of shamans acting in concert. At the Machiasport petroglyph site (62.1) figures that suggest occupied canoes are rare-- only three such images are likely. The only one with more than two occupants (seven are indicated) appears less patinated than surrounding designs. This last figure seems to represent a late addition to the surface, possibly done by an 18th Century refugee from the interior.

At the Embden site the number of occupants indicated by simple upright lines ranges from 2 to 5. Oblique lines continuing below the inverted arc that marks the body of the canoe may represent poles or paddles. Where these oblique lines are long, poles for pushing upstream are the likely explanation. Shorter lines may represent paddles (Figure 1). Where more elaborate anthropomorphs occupy the canoe, the body form is usually broad-shouldered with the tapered torso found on figures with shamanic attributes (Figure 2).

On the cover, one unique canoe figure has 3 occupants, 2 linear flanking a central tapered torso figure without a visible head. However, lines curved down from the shoulders connect to the ends of a larger arc above which, in turn, appears to be topped by a short projection resembling a birdhead(Figure 3). The whole "Thunderbird". Another canoe figure with figure suggests a winged anthropomorph or two linear occupants, located to the east of the designs on the cover drawing, is depicted at a 90 degree angle as though plunging into the water. This gravity defying position could signify persons killed (drowned?) or a spiritual passage of some sort. There are at least two other examples of canoe representations similarly tilted. In at least one of the more generalized canoes with linear occupants, the central figure (of three) has raised arms. Another canoe with 3 occupants near the upper center of the surface has a central polelike extension which ends in a knob with short rays- (Figure 4). One end of the "canoe" seems to curve up and out, possibly representing an animal head. The opposite end is obscure. And finally, a little above and to the west of the last, a very finely dinted canoelike shape has a steep prow that seems to end in an animal head or open jaws. One occupant is obscured by later overworking.

Where canoe figures appear in the central cluster of petroglyphs on the Embden rock, they overlie (postdate) single anthropomorphs with the "H" or "cosmological" configuration and the heavily dinted sexual imagery along the lower periphery of the central cluster (Cf. Hedden 1984;1985). The canoe figures underlie (predate) angular anthropomorphs depicted in profile or walking postures and Christian crosses. Several examples appear in peripheral locations outside the main cluster of designs, which, by itself, would suggest an intermediate date. While no fixed or absolute dates can be attributed to the periods the Embden rock was used for petroglyph making, the burden of evidence from stylistic comparisons with the Machias Bay sites and elsewhere (e.g. the absence of rectanguloid anthropomorphs, complex abstract patterns, atlatls with weights, etc.)

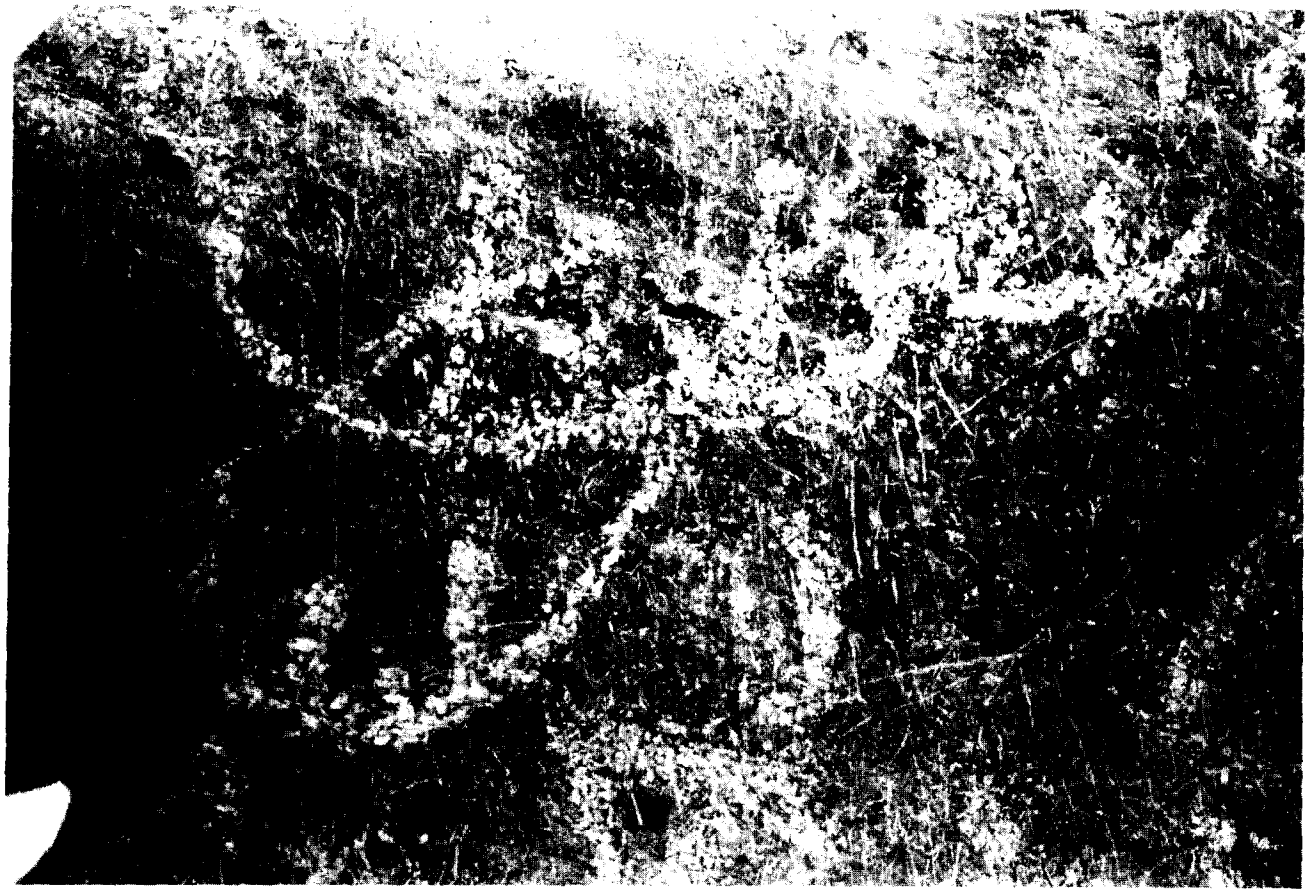

Figure 1: A cluster of canoe figures east of the Central area on the Embden ledge. Note high prows with projections. (All photographs by Mark Hedden)

tend to place the Embden site in the latter part of the Late Prehistoric period. I would suspect that most, if not all, of the canoe representations belong to the latter part of this estimated 1000 year time span. The very finely dinted canoe-like profile with animal head "prow" would seem, on technical grounds alone (superimposed design, patination and a technique which would make sense for an otherwise unmarked surface) to be among the earliest.

At Site 62.1 on Machias Bay, a series of three well-defined broadly dinted horizontal meanders appear along the lower edge of the main ledge below the current high tide level. All of these are patinated to the color of the surrounding rock and show considerable erosion. The middle meander has deeper and sharper loops than the meanders on either side. A probable canoe with seven or more occupants appears about 20 cm above the west end. The shortness of the lines below the canoe body suggest paddles are represented. A projection near the center of the canoe (5th from left and 4th from right) extends above the heads of the occupants and angles obliquely to the left. The length of the entire figure is about 15 cm. The subject and relatively fresh appearance of the design make it something of an analomy at site 62.1.

COMPARISONS WITH OTHER SITES

Some fourteen canoe or boatlike representations were recorded by the Vastokas (1973:121-128) at the Peterborough site in Ontario, Canada and they reproduce

Figure 2: Canoe figure with triangular torso. Central area.

a number of others from six other sites in the Great Lakes area. The largest and most spectacular image at Peterborough, measuring over a meter in length, features a vessel carrying seven passengers with a prominent sweep oar or paddle, a central pole or mast with a radiant circle at the top and an obscure extension at the bow that might represent the head or open jaws of an animal(Figure 5). At least four other simpler canoe figures have the pole like extension in the center without the solar device and another four have angled prow outlines that suggest an animal head(Figure 6). The occupants in the Peterborough "canoes" are represented as short perpendicular lines. In four instances some or all of these have knoblike heads. There are, however, no examples of passengers with broad-shouldered tapered torsos at Peterborough. The Vastokas (Ibid:Fig.52b) do illustrate one example of a pictograph from Thunder Bay showing 8 broad-shouldered figures in a single canoe. The Vastokas were unable to find other examples in the literature from North America which matched the details in the Peterborough petroglyphs.

The absence of the triangular torso canoe passengers at the Peterborough site suggests that their presence on the Embden rock places at least some of the Embden canoe figures in a later time period. The well defined radiant or solar circle at Peterborough tends to support a similar interpretation for the less clearly defined

Figure 3: Detail of winged canoe figure with triangular torso. Below Central area (Part of bird head visible).

image at Embden. The same may go for an obscure delicately dinted canoelike figure with a high prow marked by a head with open jaws.

INTERPRETATION

After describing the world distribution of canoe and boat representations with solar devices, the Vastokas (1973:126) note that the "boat is often a vehicle of the gods, of spirits, or of shamans in their journeys to other worlds" which may involve a simple horizontal passage similar to that ordinary mortals might make in a canoe. When conjoined with another shamanistic motif, the Cosmic Tree or Cosmic Axis, however, "the boat also comes to signify the vertical ascent of the shaman to the sky." Such spiritual voyages are implied, or perhaps merely the formalistic relicts of earlier ceremonies rooted in the concept are implied, by the terms of address still used in Ojibway Mide ceremonies to the two shamans who stand at either end of the group of assistants and are referred to as the *bowman* (Ojibwa: *naganid*) and the *steersman* (Ojibwa: *wedaged*) (Landes,1968:114). These terms would suggest that the canoe representations at Embden refer to spirit voyages involving one or more shamans and initiates.

Unfortunately, we have no clear ethnographic evidence of group ceremonies similar to the Ojibway Mide performances in Maine. Frank Speck(1920:247) discusses at some length the limited evidence he was able to gather from ethnographic sources for any organized society of Maine sha-

Figure 4: Canoe figure carrying high center pole with projections from knob at top and possible animal head prow. Central area.

mans. He found scattered references to shaman gatherings "for contests of power..", shaman bands acting as leaders in battle and "a final isolated account..(of) a dance of the medicine-men...in the spring of the year" and concludes that if organized societies did exist "only vestiges of it are now to be found." Given the effects of 200 years of prosetylizing, acculturation and dislocation, particularly of the Abnaki around Norridgewock whose shamans were the probable authors of the Embden petroglyphs, we perhaps should not expect anything very definite.

The single canoe with multiple occupants at Machiasport remains something of an analomy. Perhaps it is the work of a refugee from the interior. According to some accounts, a shaman's prediction of the attack on Norridgewock was ridiculed by Father Rasles. "Of those who escaped the massacre at Norridgewock many went back to their old shamanistic practices:- 'Many of them dont Pray, and sum are Wisards among them,' wrote Captain John Gyles to Governor Dummer. The shaman who gave the warning, believing in his own foresight, withdrew with all his kin three days before the attack and took refuge in Machias or Passamaquoddy. His family intermarried with the Neptunes and so may be partly responsible for the strong hold that shamanism maintained upon the Neptune family (Eckstorm 1946:187)."

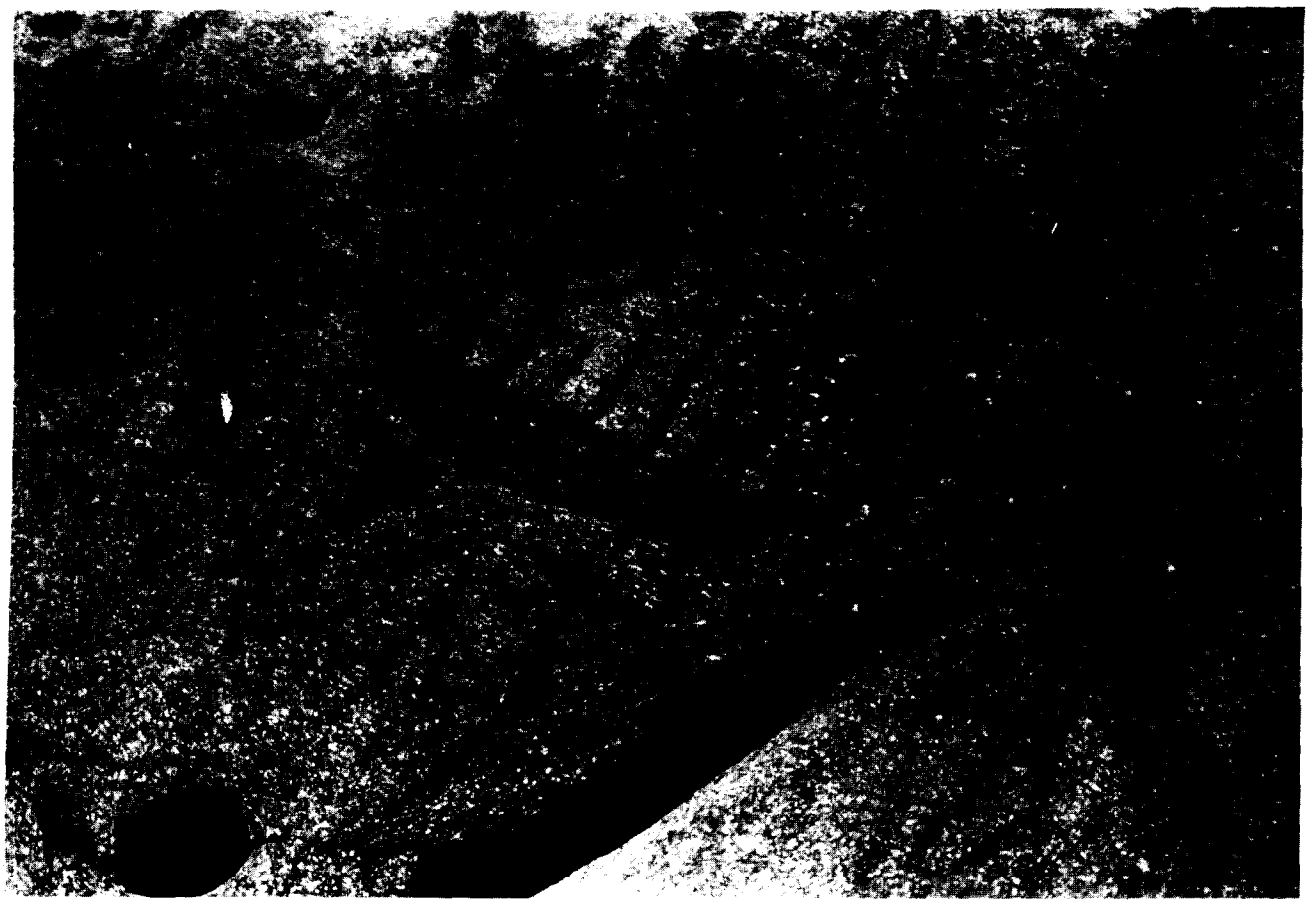

Figure 5: Canoe with solar disc from Peterborough site, Ontario, Canada.

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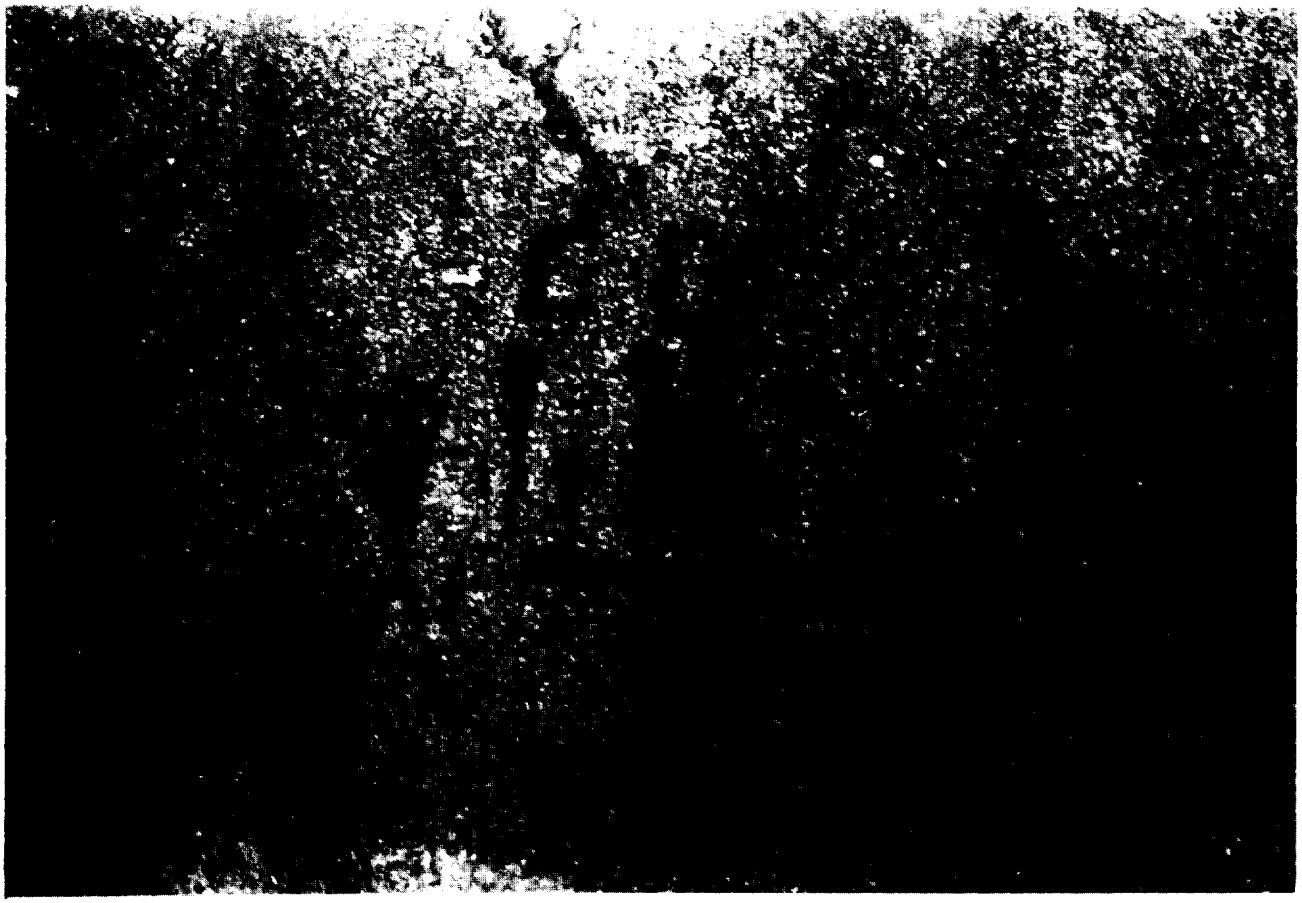

Figure 6: Canoe with animal head prow from Peterborough. Note superimposed walking figure with triangular torso.

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