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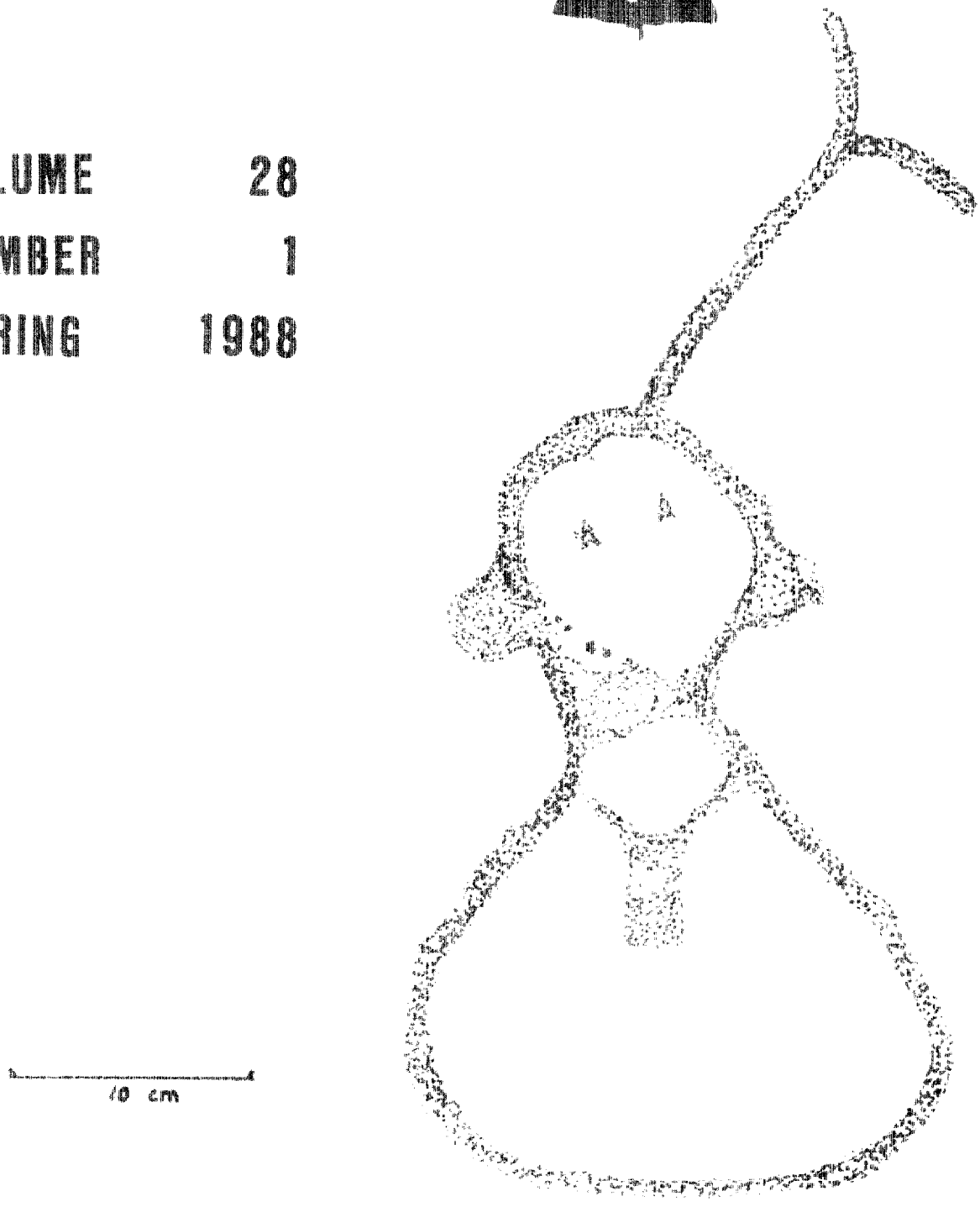

THE MAINE ARCHAEOLOGICAL SOCIETY, INCORPORATED

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Volume 28 Number 1

Spring 1988

COVER: The power to provide is implied by the bulging belly of this petroglyph from the Embden site. The image is similiar to Ojibwa representations of benign spirits called Meda. See Figure 19 in "Prehistoric Maine Petroglyphs" in this issue. (Drawing by Mark Hedden)

LETTER FROM THE PRESIDENT

Spring is officially here and I find myself excitedly awaiting my first river bank walk or poking along a nearby island shore to look for signs of our rich archaeological past. I put up with the mud and blackflies just for the chance to discover one more treasure.

Public interest in archaeology is high. The state universities' enrollment in archaeological studies has increased. Their field schools will be busy this summer unlocking more parts to the puzzle of our cultural heritage. It's a great opportunity for amateurs and professionals to work together and to learn from each other. We are fortunate that cooperation and communication are wonderfully apparent between these two groups.

MAS director, Mike Brigham, received recognition from the Maine Historic Preservation Commission for his commitment to archaeology in the Milo area. Arthur Spiess and Deborah Brush have their book ready on the Michaud site, and Alaric Faulkner's book on Fort Pentagoet is doing very well. The MAS Newsletter by Jim Petersen and Laurie LaBar Kidd is filled with articles pertaining to archaeology and the current research around the state. It has been a terrific success and a welcomed complement to the Bulletin. Much is happening and we have much to be proud of.

We are sorry to be losing our friend and director, Riley Sutherland. He and his wife, Barbara, are moving permanently to sunny California. We will miss them and wish them well.

I hope all of you have a happy and successful Spring and Summer.

Sincerely,

Bunny Doyle
President, MAS

Prehistoric Maine Petroglyphs (A Videoscript)

Mark H. Hedden

INTRODUCTION

The videoscript below outlines a project in search of funding. The idea grew out of a videotaped lecture I gave at the Vienna Union Hall in the summer of 1986. As such things go, the talk was dull enough, the videotape worse. The man with the camera, Peter Devine, and I decided to liven it up with long segments at the actual petroglyph sites. The results, while uneven, showed excellent promise. As time permits, we are putting together a pilot tape to show what can be done with adequate funding. The projected videotape will be oriented towards the general public and should be suitable as an educational tool for high school and older audiences.

I am standing on a rock ledge extending out into Machias Bay near the eastern extremity of Maine. At my feet are man-made designs dinted into the surface. These designs, called petroglyphs, represent one collection of many thousands of similar rock markings throughout the world. Some petroglyphs can be dated back 35,000 years or more. By that time, modern man, *Homo sapiens*, had developed a sophisticated spoken language system. This language system enabled people who were normally isolated and dispersed in small family groups hunting, fishing and gathering roots, nuts, grains and berries, to come together for occasional events such as seasonal hunting drives. In that period, *Homo sapiens* began to spread out from one or several homelands in North Africa, the Near East and/or Asia to occupy every continent on the earth. While the petroglyphs at my feet are probably less than 2,500 years old, they are representative of the last stages of that original hunting and gathering way of life, a way of life once followed by all our ancestors.

I will show how these designs mark the presence of certain ideas about the nature of the world, of the cosmos, well into the unrecorded past. We are dealing with a different conception of the world--conceptions which take all forms, such as the rock I am standing on, as transitory relics of past transformations, as houses of spirits who have the potential to swallow up and destroy the unwary and the unworthy. These spirits make themselves understood through signs, by birdcalls, syllables heard in inner recesses. These spirits speak through the medium of people who are sensitive to their voices and who, in turn, transmit their words to those of us who are less sensitive.

My training as a scientist in a literate society does not prepare me to deal with spirits. I can, however, tell you something about the history of these designs, what evidence we have to establish how old they are and who made them and why. And finally I will talk about how they imply a way of seeing which is different from ways of seeing we take for granted as adults in a modern civilization, a difference we need to be aware of if we are to understand the roots from which we have sprung.

Stylistic features of these designs indicate that they are the work of the Algonkian ancestors of present day Maine Indians. Historic Algonkian speakers from

Figure 1: Birch Point, Machiasport, looking NE at dawn. Main ledge of petroglyphs (62.1) and tidal pool beyond eroded till in foreground. Tidal channel, Outer ledge and Machias Bay in background.

Nova Scotia to Manitoba and from Labrador to Pennsylvania and Ohio employed the same basic inventory of motifs. Their neighbors such as the Iroquois, Athapascan and Eskimos did not, except to represent dead or captured Algonkians. Only the Prairie Sioux, who lived to the south and west of the Algonkian groups around the Great Lakes, are an exception. They were the only neighboring group speaking a different language who shared a substantial number of motifs in their drawings. Also, other shared traits tend to suggest that Algonkian and Siouan groups had been neighbors a good deal longer than Algonkians and Iroquois, Athapascan or Eskimo.

We have an idea how old these designs are from their situation and stylistic features. The designs on the rock surface closest to shore resemble late prehistoric and early historic drawings by Algonkian speakers from Nova Scotia to the Great Lakes and beyond. However, as we proceed further from shore out on this ledge, the body profiles become more rounded, different images appear, such as this long sticklike figure with a circle near its upper end (Figure 2). Where such images are found further west, they are generally recognized as representations of atlatls with weights. Atlatls are short sticks with a hook or insert hole at one end which fitted into the base of a light dart or spear. The stick with the weight gave added power to the cast of the dart so that, at close range, it could penetrate thick hides. Atlatls were used to cast darts in hunting game by North Eastern Indians until they were gradually supplanted by the bow and arrow. As you can see, the further we proceed to the eastward out towards the bay, the more and more weathered,broken and obscure the images become. (Figure 3)

When I first came here in 1977 to re-

Figure 2:Line intersecting oval (upper left in photo), Area C, Main Ledge. Possible atlatl with weight.

Figure 3:Eroded designs at east end of Main Ledge, Area E. First light of sunrise, 8/21/87.

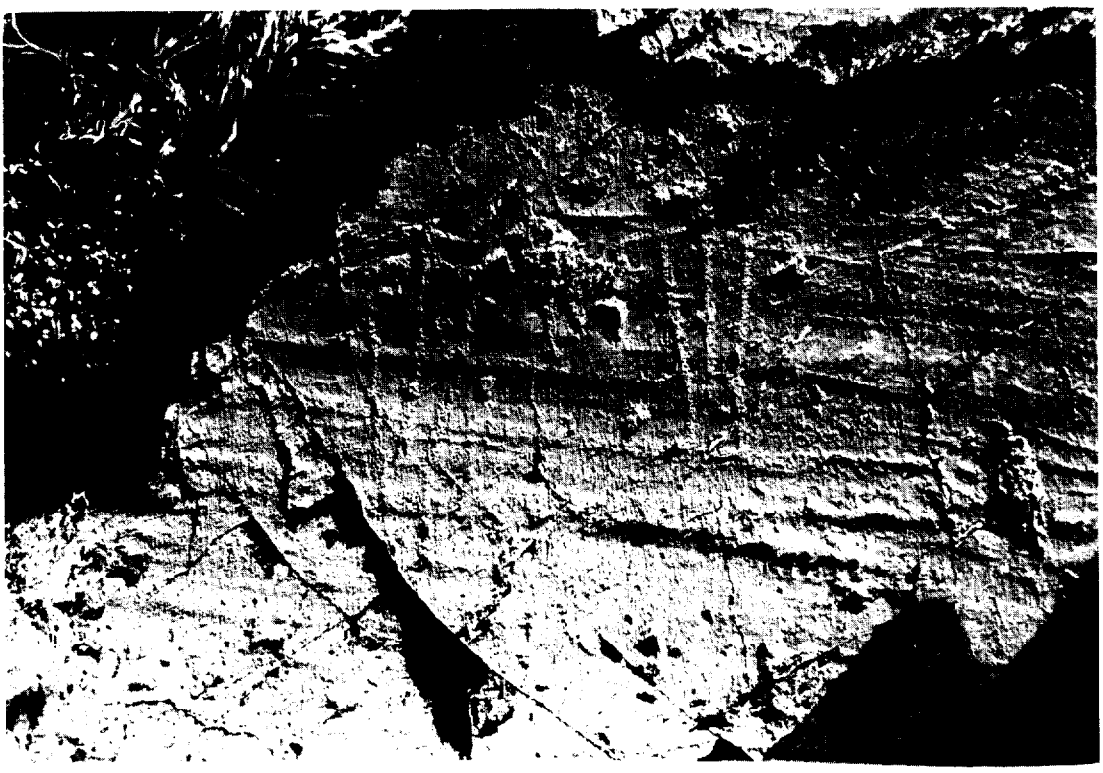

Figure 4:Earliest representational anthropomorphs, Outer Ledge. 75 cm below normal high tide. Sunrise, 8/21/87.

cord the site for the Maine State Museum, the initial report on the petroglyphs by Garrick Mallery, published in 1893, only mentioned the designs on the inner ledge. I decided to investigate the outer remnant of ledge, separated from shore now by a tidal channel. Here I found anthropomorphic or manlike figures that are quite different in style from the triangular bodied forms that appear near shore. Lowermost on the rock surface are two rectangular bodied forms that strongly resemble rock drawings of Archaic age from various sites along the Rockies and further west (Figure 4). Here is another panel on the same level with another rectagular bodied anthropomorph and three broad shouldered figures with squared off crotches. Note the heads that suggest bird heads and the long lines extending down from the crotch. Above these are constricted waist figures and signs that resemble a capital "H" These "H" signs appear in prehistoric petroglyphs as far apart as Safe Harbor, Pennsylvania and Peterborough, Ontario. So far as I have been able to determine, this ledge has the only example in which the "H" sign is incorporated into an anthropomorphic representation (Figure 5), a vital clue to its probable significance. Most of the designs on this outer ledge have been badly damaged by exfoliation from freezing and storm damage. As you can see, the designs appear only on surfaces that are marked by striation marks left by glacial movements-over the original bedrock. Most of the original rock exposures here have been broken up by frost and storm.

This progressive movement towards earlier stylistic features as we go further from the present eroded bank tends to support other evidence in the vicinity that this section of the coast has been sinking in relation to sea level for some time. Now let us step back and view the whole site. Note the large boulders that rest on top ofthe ledges. These are all that are left of an overburden of glacial till that once covered the bedrock. Look at the eroding bank. At one time not too long ago a similar glacial till extended out to and covered the outer ledge. How long ago? The petroglyphs help to pinpoint an approximate date. Here is the edge of the area with prehistoric petroglyphs. We have about 4 meters of freshly exposed bedrock with no designs before we reach the edge of eroding glacial till. Four meters over a period of 250 to 300 years since Maine Indian groups were last in control of this area. (Figure 6)

Actually, the rate of sinking of the land mass around Machias Bay seems to have been variable, at times faster and at times slower. University of Maine archaeologist David Sanger has excavated a series of late shell middens and early middens without shell in the nearby Passamaquoddy Bay area. His work indicates a relatively fast rate of land mass sinking to about 3000 years ago, followed by a much slower rate until the very recent past. United States Geological survey measurements made over the past century indicate a current rate of about two thirds of a meter per century. Many of the petroglyphs are already awash at high tide. At that rate, they will be subject to increasingly severe erosion and frost damage in the years to come.

A summary scenario consists of erosion and use of the site as follows: first, the entire point was covered by glacial till overburden which had been slowly eroding, the outer edges of bedrock becoming exposed no later than 3000 to 2500 years ago; around that period the slowdown in the rate of landmass sinking plus an increase in the range of tides created a favorable environment for shellfish,seaworms and other marine resources in the tidal flats of Machias Bay; archaeological finds along shoreline across the bay indicate heavy seasonal use of the area during the late prehistoric period; at some point shortly after the lower reaches of the bedrock became exposed, the earliest surviving petroglyphs were made in a style that corresponds to contemporary Late Archaic human forms in the west. The making of petroglyphs continued, moving gradually westward on newly exposed surfaces, until the influence of the Jesuits and other European contacts had ended the use of this site by Indians who followed the old traditions. Christian crosses appear at the most recent end of the petroglyph area.

Figure 5:"H" bodied anthropomorph, top of Outer Ledge. Sunrise, 8/21/87.

Figure 6:View north from top of Main Ledge above most recent petroglyphs, showing the eroded shore. Probably more than half of visible shoreline eroded since last petroglyphs were made.

While these rock drawings appear simple, they often combine several modes of expression and seeing. These vary from straight-forward: 1) visual perception of things as seen from without, such as game animals (Figures 7 and 8) to 2)linear expressions of things perceived by other than normal visual means, such as the interiors of men or animals (Figures 7, 8, and 9) to the 3)compounding of images to convey an idea or perception--such as expressing a wish or ability to fly by combining a man's body with the torso, wings and head of a bird, or to dive deep in the form of a fish or merman (Figure 9).

All these are done with great 4)economy of expression---reducing the image to the fewest lines necessary to convey the idea or perception. And the images are usually 5)constructed on a central axis or central locus corresponding to our own inner awareness of gravity. For example, there are no frames, no scenes in the petroglyphs you see here. Each image is independent or potentially independent. If connected, they are connected by lines like bead(s) on a string- or incidents of a story (Figures 10 and 11).

Who among the Algonkians made these petroglyphs?

These designs are most likely the work of shamans, that is, those members of the Algonkian bands who by inclination, training and/or heredity were supposed to have a special relationship with the world of spirits.

We know this again by comparing the Maine designs to other Algonkian designs in the Great Lakes regions---designs which were still being painted on wood and birchbark in the early 19th Century by Ojibway and Chippewa shamen. These were recorded by a New Englander named Henry Schoolcraft who went west to seek his fortune in 1819, became an Indian Agent and married into the Ojibwa tribe. He learned something of their significance directly from the shamans who made them.

According to Schoolcraft's account, human figures shown with either an hour-

Figure 7:West end of Main Ledge with game animal representations characteristic of last prehistoric period at Machiasport.

Figure 8:Male (left) and female moose confronted with small birdheaded anthropomorph between (upper center of photo). Area A, Main Ledge (Detail of Figure 7).

Figure 9: Outlined anthropomorph with bird attributes and small lizard associates. Note bird droppings. Presence of birds gave rock special potency.

Figure 10: Meander complex on NE corner of Area A and top of ledge (Area B).

glass body outline or a triangular upper torso were spirits, people invested with spirit powers, or shaman. Simple outlined figures or stick figures represented people without power---often those who were sick or otherwise in need of help. The shape of the shaman's body fits with a basic idea of these people that the spirits only come to someone who is pure and empty like a vessel.

The shaman or spirit possessed figure represented like an hourglass---constricted at the waist but open at the top and bottom---can be related to another concept which forms part of Algonkian shaman ceremonies of the Great Lakes region. In these ceremonies the shaman summons the spirits of the upper world and the spirits of the lower world to meet on the plane of the earth. The shaman's body becomes the vessel through which these powerful spirits are heard. Do you remember the "H" sign and the anthropomorph whose body is formed by the "H"?

Also implicit in this image is the "Shaking Tent" that the shaman used when he was summoning the spirits, a small circular enclosure made of poles covered with bark or blankets open at the top and set into the earth on the bottom. Here the shaman, surrounded by an audience which may include the entire encampment as well as any casual visitors, conceals himself while he summons and talks to the spirits. All the audience will see by the dim light of the fire will be the shaking of the tent as the spirits approach and gutteral sounds and voices as the shaman addresses his visitors. Such ceremonial structures and performances were described by Jesuit priests as early as 1630 in the Canadian Maritimes and by American explorers in Labrador late into the 19th Century. To get in tune with the world of spirits, the shaman had to get out of ordinary reality, out of self-consciousness (whereby we temper our actions and thoughts), out of the ordinary limits of body awareness. To do this, the shaman isolates himself, fasts, takes sweat baths and exerts himself

Figure 11: Detail of Meander in Figure 10. Meander winds between two pits before passing through head of anthropomorph and body of small lizard. Note small quadruped (dog?) joined to feet of anthropomorph.

strenuously. He may use medicinal or hallucinogenic plants.

Once he has achieved a state of ecstasy, of being out of body, the shaman could, the Algonkians believed:

a) fly great distances and see where the game is, or where enemies are approaching;

b) become sensitized to illnesses afflicting somebody and be able to cast out bad spirits with the aid of his own familiars;

c) have influence through connections with the spirits of the upper and lower worlds on bad weather that may be affecting the fortunes of his people.

Flight,of course, can be understood as a metaphor, a way of describing the internal sensation of ecstasy, of being out of body. What the shaman sees are his own visions. Most shamans with reputations were also good hunters. They had experience to aid them in determining where the game might be found. They made it their business to talk to successful hunters. The visions gave authority to practical knowledge and allowed as well the full play of intangible hunches.

There were good and bad shamans just as there are good and bad doctors. Neither profession, however, likes to admit the weaknesses of its members.

The effort involved in achieving the ecstatic state of mind as well as the inherent psychic risk may explain why the shamans were the only members of Algonkian society who expected and received payment for their services.

Why did they make petroglyphs? The designs served, I think, as do the framed licenses and diplomas you will find in your doctor's office, to certify that the practitioner, in this case, the shaman, has served his apprenticeship and paid his dues. The shaman's apprenticeship was long and arduous and, in the Great Lakes area, involved passing through several grades and paying handsomely to older, established shamans for the learning they passed on and for the ceremonial initiations that publicly proclaimed the shaman's legitimacy. The images are the visible signs of a body of memorized esoteric lore. With the initiation went the right to replicate the images. For the uninitiated the images were dangerous. The Algonkians applied names to the rock on which these images appeared, names that indicated they should be avoided or treated with the greatest respect.

The petroglyphs at Machias Bay represent the work of a traditional Algonkian hunting/gathering society whose needs in times of crisis were probably taken care of by a single shaman with an assistant who used the "shaking tent". The Down East shamans, by the way, were not always men. There are a number of accounts of women who were shamans. The next site we will see is located on the Kennebec River (Figure 12). Here we will find a number of ideas that are not present at Machias Bay which point to more complex roles for the shaman and a closer relationship to maize and bean producing areas of the Mid-West.

PART II EMBDEN

This ledge is located on the west bank of the Kennebec River in the interior of Maine. Several features characteristic of the Machias Bay rock are also found here: 1) a SE exposure open to the morning sun (the old Abnaki raised their arms to the sun each morning to receive its vitality); location on the water's edge (the river with its uterine connotations was a passageway to the underworld); a place where birds roost (birds represent or serve as messengers to the spirits of the sky) and 4) a surface with a relatively soft rock of sedimentary origin. Benedict Arnold noted the petroglyphs when he passed by here in 1775 on his march to Quebec. Earlier in the 18th Century, Father Rasles, a Catholic missionary, accompanied the Norridgewock Indians here while they fished for eels migrating down river in the fall. They may have speared the eels while standing on ledges like this one, many of which were blasted out in the 19th and early 20th Century by timber companies who were then floating logs downriver. A photograph taken around 1900 before the blasting indicates that no petroglyph visible then

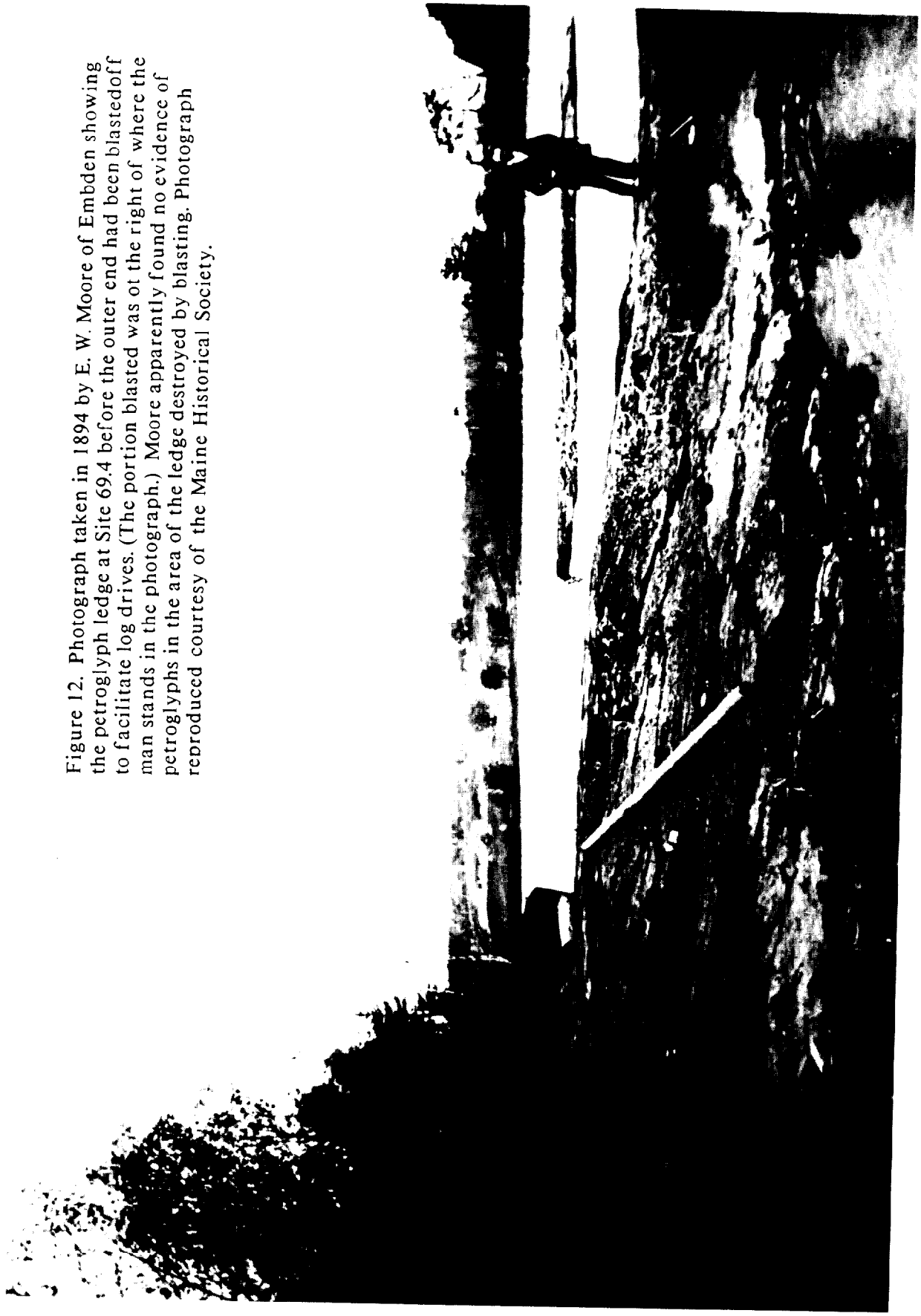

Figure 12. Photograph taken in 1894 by E. W. Moore of Embden showing the petroglyph ledge at Site 69.4 before the outer end had been blastedoff to facilitate log drives. (The portion blasted was ot the right of where the man stands in the photograph.) Moore apparently found no evidence of petroglyphs in the area of the ledge destroyed by blasting. Photograph reproduced courtesy of the Maine Historical Society.

on this ledge was affected by the dynamiting.

Other than these petroglyphs the only nearby evidence of prehistoric activity on this side of the river is a small campsite with late 17th Century or early 18th Century artifacts that was found in the woods about 100 feet south of this ledge. On the opposite shore, however, beginning at the lower end of a series of terraces you can see directly across the river, are campsites with artifacts dating back from late prehistoric time into the archaic period some six thousand or more years. A limited test excavation by the MHPC in 1983 disclosed a succession of old gravel shorelines that extend further and further back from the present river's edge as we go back in time. The river, in other words, has been in the process of deepening its channel and narrowing its shores. A transit sighting taken from an abandoned shoreline that predates the beginning of the ceramic period in Maine around 2800 years ago establishes that the ledge I am standing on was probably underwater at that time.

The stylistic features of the petroglyphs indicate that by 1000 years ago this ledge was being used by the shamans. The Embden ledge, for example, lacks rectangular bodied anthropomorphs or atlatl-like forms. A few examples of constricted waist figures at Embden lack the horizontal line across the waist. The long wavy horned snakes at Machias are replaced by an angular zigzag horned creature.

Unlike the surfaces at Machias Bay, the exposure of the ledge here was probably more or less complete before the making of the petroglyphs began. To establish the sequence of designs we need to step back and try to imagine where on a completely unmarked surface the petroglyph maker would be likely to begin and then test that hypothesis against the actual designs found there. My guess is that the earliest designs were made in the central area on surfaces open to the early morning sun and convenient on which to work. What we find here (Figure 13) are extremely delicately dinted representations of moose--not unlike the moose on the inshore end of the ledge at Machias Bay. All of these are overlaid by later designs--such as this heavily dinted houselike structure. Shallow dinting is characteristic of many earlier petroglyphs. There was no need to make them stand out on an otherwise unadorned surface. Later motifs, where they are superimposed on earlier motifs, tend to be more deeply dinted, as is this structure.

Other very shallow designs in this central area that may be early include human figures (Figure 13), partly obscured by later designs, or anthropomorphs including a snakelike motif (Figure 14). Note that there is no overt male sexuality in these figures.

Below the central area, are a series of more heavily dinted designs that include disembodied phallic images (Figure 15) enclosed within a rounding that may symbolize the vaginal opening; a squatting figure that probably represents a woman in the act of childbirth or receptive to intercourse and a large "H" figure. Note the bulbous rootlike projections at the base of the "H" and the two figures flanking the upper arms of the "H" who are shown only with upper torsos, head and arms. All of these figures are well dinted, probably done by the same maker and likely represent a complex involving the cosmological sign for the heavens and deeps as well as fertility signs. (Figure 16)

On the edges of the utilized surface area are late examples of human figures, each with a very unmistakeable male attribute. The body profiles are sharply angular as we saw in the late shaman figures at Machias Bay.

Now, returning to the central area we have what appears to be a deeply dinted gable roofed house. Possibly this represents one of two chapels that Father Rasles, who ministered to the Norridgewocks between 1690 and 1724, had constructed at the main village at Old Point, a few miles down stream. Both of these were successively burned down by English raiding parties, the last of whom surprised and killed Father Rasles and various women, children and old men among his parishoners. Crosses, like those we found on the Machias ledge. All of these mark an end to the prehistoric use of this rock (Figure 17).

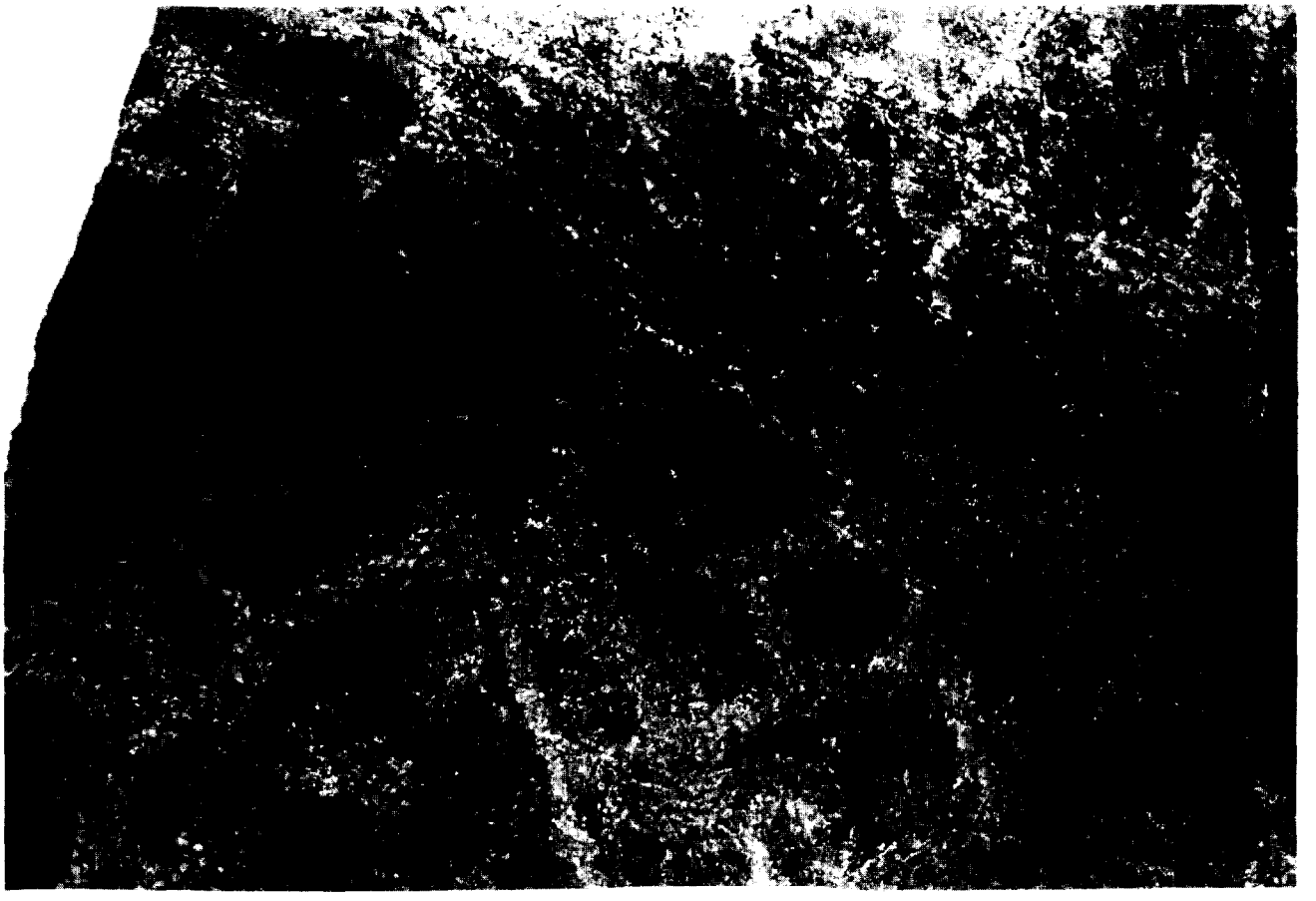

Figure 13: Central area of Embden ledge. Shallowly dinted moose (right) and anthropomorphs with bowed legs (upper left) overlaid by heavily dinted gable roof "house" and medium dinted anthropomorphs.

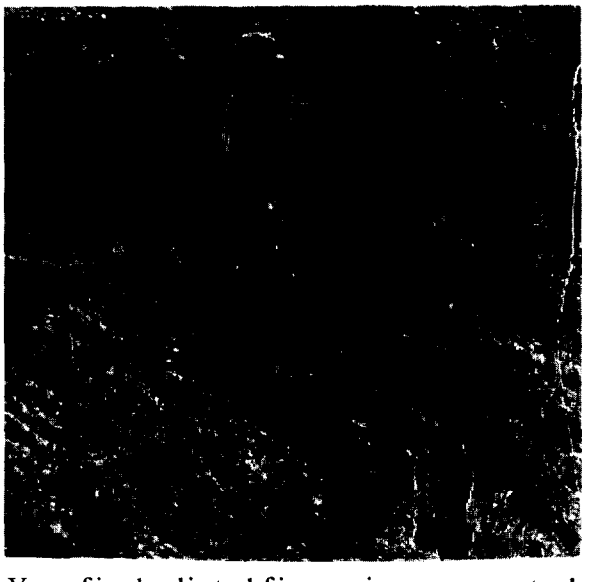

Figure 14: Very finely dinted figures in upper central area. Canoe(?) with single occupant and animal-head prow (center) and bird/man (lower left). Coarsely dinted open "H" anthropomorph (upper right) and snake (upper center) above. Note modern vandalism, including scratched tic/tac/toe above the canoe figure.

Figure 15: Heavily dinted disembodied phallic image in lower central area. Less patinated, medium dinted bird/man and walking man with raised left hand above.

Figure 16: Heavily dinted "H" sign with bulbous rootlike bases and upper parts of anthropomorphs on each side of stems. Phallus within ovoid outline at center left and canoe figures above.

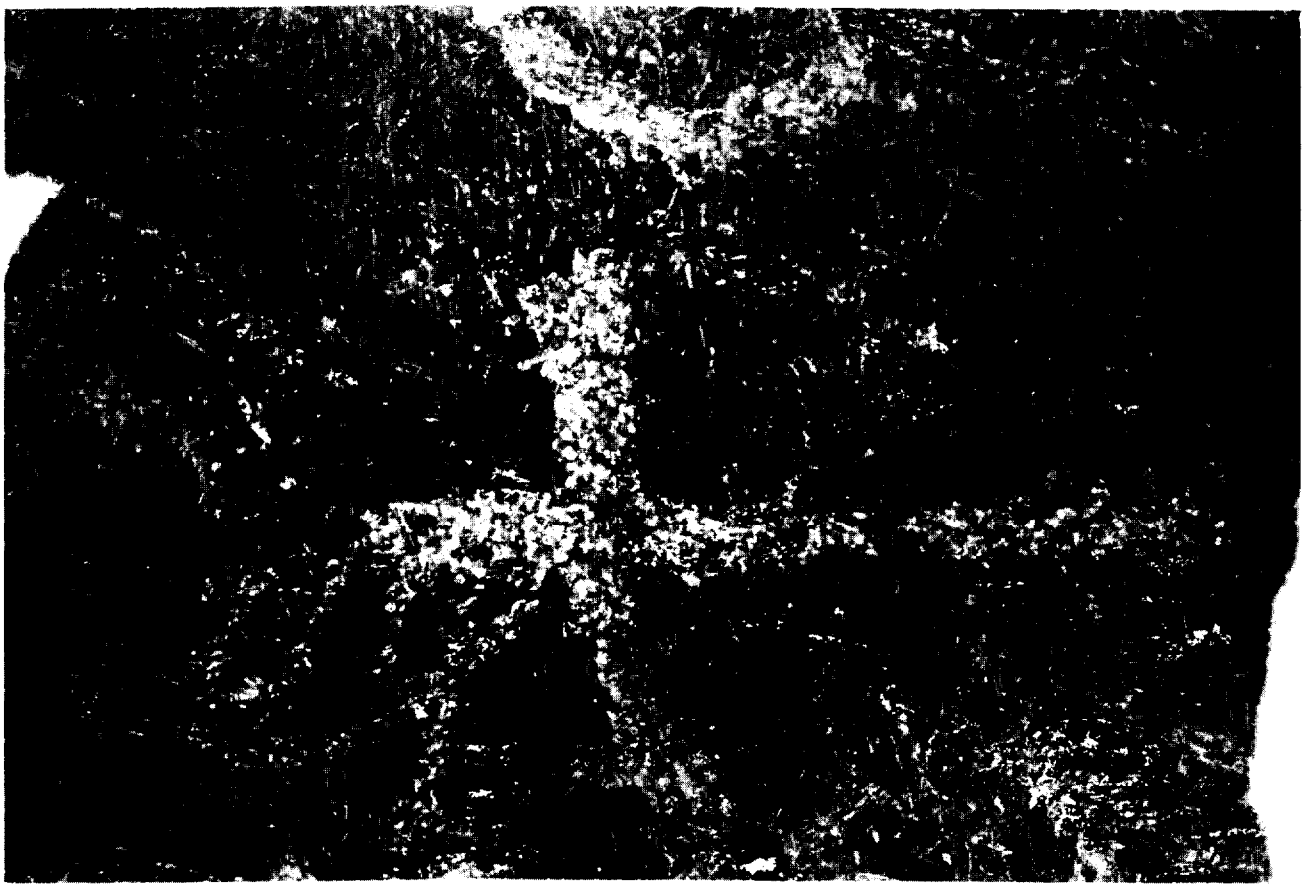

Figure 17: Thinly dinted canoe figure overlaid by broadly dinted Christian cross. East peripheral area.

Another feature I have not mentioned up to now are figures in canoes (Figures 17 and 18). Small linear projections with long poles or paddles extending below the line of the canoe mark the occupants. Several of these canoe figures also carry larger figures with triangular torsos and other shamanic attributes. These canoe figures appear to date somewhere between the earliest and latest designs on the ledge--more or less contemporary with the figures that express overt male sexuality.

The sexual imagery, the canoe representations, the triangular-bodied figures, including some with birdlike attributes that have been identified with "The Thunderers" among the Ojibway and this odd round body, round headed figure called a Meda spirit among the Ojibway (Figure 19) are all found in later prehistoric and early historic rock art and sacred birchbark scrolls of the Algonkian shaman around the Great Lakes. Early settlers found cleared fields for growing maize in Norridgewock territory. There has not been enough archaeology done in the Embden area to establish how long maize was cultivated. Nonetheless, the nature of the designs on the Embden rock make a strong case for arguing that the Norridgewock had been producing food for a period before European Contact.

For at least a thousand years before European conquest, the peoples of the Great Lakes and St. Lawrence River Valley had been growing maize and other crops. While this was only one of a number of seasonal activities which otherwise followed the old hunting/gathering cycle, the introduction of crop production had a gradual effect on population density, social organization and relationships with other groups. It meant, for example, that land that could be planted began to assume an importance and burden it never had to the hunter/gatherer. It meant that year-round villages soon had to be sustained on or near that land. Beginning around 800 A.D.

Figure 18: Canoe figure with triangular bodied occupants. Note winglike projections from occupant on right

the appearance of palisaded villages from New York State westward to the Missouri River indicates that defensive postures, alliances and even aggressive warfare against intruders or unwanted neighbors had become necessary. These events had a ripple effect on the neighboring bands of hunter/gatherers from the northern shores of the Great Lakes to the forests of Maine.

From our perch at the other end of the process, we tend to see the development of food production as a necessary beneficial step towards modern society. Members of a hunter/gatherer tradition, however, were aware of the loss of a certain kind of independence following involvement in farming. This is eloquently expressed by the prophet Smohalla in his (chief of the Wanapum on the Columbia River, Washington) response to the entreaties of a government agent that he encourage his people to take up farming:

"My young men shall never work...
Men who work cannot dream, and
wisdom comes to us in dreams...
You ask me to plow the ground.
Shall I take a knife
and tear my mother's bosom?
You ask me to dig for stone.
Shall I dig under her skin for her bones?
You ask me to cut grass and make hay and sell it and be rich like white men.
How dare I cut off my mother's hair?"

The sense of violation in Smohalla's words, a man who was in his 30's before white settlers with plows invaded his ancestral lands, derives from a perception of nature which is quite distinct from that of the farmer. The posture of the farmer towards his environment is active. He alters the natural state of things. The hunter/gatherer operates in a passive mode.

Figure 19: "Meda" figure in lower central area. Note "pitcher" ears, dot eyes and long bifurcating line from left side (viewer's right) of head. Bipointed oval bug-like figure to right appears to be a later addition.

He takes what he hunts and finds with a minimum of disturbance. The farmer develops a work ethic: the more input the better the chance of a good crop. The hunter/gatherer utilizes his learned skills and the wisdom of his group but ultimately he is a gambler and like a gambler he cannot worry about tomorrow. He leans on his luck and his luck depends on the good will of the game or spirits controlling game and other foods.

The change in orientation from hunter-gatherer to farmer/producer was not accomplished overnight. Men of the Northeastern tribes did not dig and plant. That was the work of women. The men cleared the fields and perhaps built fences but aside from the hunting and fishing, they were not active in food production per se, such as saving seed, preparing ground, planting, thinning, weeding and preservation of the crop, etc. On the other hand, they were clearly active on the ideological end of promoting regeneration and growth by ceremonies designed to enlist the aid of the unseen energies of the spirit world.

The use of sexual imagery seems to be part of this ideological effort. The preparation of the ground and planting of seed with a digging stick were seen as analoguous to the sexual act. The concern of the Algonkian shamans around the Great-Lakes with ritual death and revival resembles the pattern of Dionyesian rites of the ancient Near East and Europe.

This stands in sharp contrast to the absence of overt male sexual imagery at Machias Bay. Such imagery is also absent from rock art of Archaic age (more than 2500 years ago) anywhere in United States- that is, before food production becomes established in the Southwest,Southeast and Central United States.

I am not entirely sure why this should be so. One possible reason in that the American hunter-gatherer believed in spiritual regeneration. The killing of game, such as a deer, did not mean the death of that deer in a spiritual sense. The hunter's ceremonies were focused on influencing the deer's behavior, including the post-mortum disposal of the bones. In the ceremonies the deer is treated as a guest, referred to discreetly and invited to return another time. There is no reason to believe that the Archaic hunters were not fully aware of the rutting season and a relationship between sexual intercourse and the generation of offspring but these facts of life were not as important to their way of thinking as moving the spirits who controlled the game to be on their side. Because these spirits were often visualized as big or "grandfather" versions of game animals, it was important that they not be offended. For example, studies of hunting taboos among northern forest hunters stress the need for the hunter to be pure, to have no offending scent such as might come from blood or sexual activity so that the game they sought would not smell them and thus avoid the hunter. In this sense, sexual reference of any kind could be considered an offense.

The major effect of food production and, more particularly, preservation and storage of surplus food was to concentrate people. Denser populations in year-round villages set the stage for more complex and highly organized societies. The shamen played a major role in this development.

The Ojibwa of the western Great Lakes, for example had two other classes of shaman performances besides that of the older solitary shaman of the "Shaking Tent". These other classes were called the Mide and the Wabeno and involved many initiates and other participants. The Wabeno who had very bawdy performances designed to enhance fertility were apparently soon forced underground by missionaries and government agents. The Mide still perform the Midewin and what is interesting for this discussion are certain details in the way the performance is organized. The two most active officers in the performance which may go on for several days and nights are referred to as the *helmsman* and *steersman.* They are the ones who signal every change in the action and guide the performance from start to finish. The organizing principle of the Midewin performance, then, is of a canoe trip in which all the participants are embarked under the guidance of the *helmsman* and *steersman.*

I cannot argue that the canoe representations at Embden represent Midewin performances. I cannot state that the disembodied genitalia and ithyphallic shamen derive from the Wabeno society performances. At the time the Embden petroglyphs were being made, it is hardly likely that either society existed in the forms in which Schoolcraft observed them. However, I think it is highly likely that the ideas which these images express were in the air and were being picked up and passed on from group to group and from shaman to shaman. At another major petroglyph site near Peterborough, Ontario, canoes represented with many occupants appear with an image of the sun attached. The sun and open sky are as sacred to the Midewin performance as night and the depths of the earth were to the Wabeno. The canoe image seems to have been used to express magical voyages or performances involving more than one shaman. The single shaman figure with bird attributes may continue the older tradition present at Machias Bay of the single shaman who concealed himself in the "shaking tent" while taking flight.

Yet what do these designs mean to us? These designs are not works of art in our sense of the word. They are not made with an aesthetic purpose in mind. They are signs referring to concepts of reality which are alien to our literate adult consciousness yet they are familiar to us by way of a past through which we have all come, a past we have learned to dismiss.

Through the eyes of a child we may better appreciate the world of man before the invention of writing. The direct and economical expression inherent in the drawings of children are shared by the nonliterate of all societies.

Literacy changes our way of perceiving from the inside out to the outside in, from the subjective to the objective. The drawings of preschool age children can help us understand this change. The scribbles of preschoolers represent explorations using the pencil or crayon to express discoveries made tactilely, on hands and knees as it were. Hence the lines need to be seen as kinetic, not visual, representations. For example, for a house, a 3 or 4 year old will draw his or her perception of the inside perimeters of the rooms, and will name each room. Contrast this house to the houses children do from 2nd or 3rd grade on in school. You know the house with the flowers in front, the windows, door and chimney with the smoke rising and the child standing next to it. Who is the child? The child is you, the one who made the drawing. You the artist stand outside the picture looking in.

Literacy changes our perception of time and space. What was once measured in terms of distance from the hearth, or measured in terms of seasons, lifetimes and living memory is now measured in regular units determined by the rotation of earth around the sun. With literacy we perceive time as events recorded like points on a string, proceeding inexorably from some unknown beginning point towards some unknown end. For the nonliterate, the further from the common hearth, from the now in both time and space the closer to that wildness at the beginning point of all cycles that the Greeks called *chaos*, the cosmic egg. With literacy we have come to perceive time and space as a continuum that extends to the borders of the reported world with a sense of similar unreported worlds beyond. To explore these worlds we make our spaceships.

Where once, as among hunter/gatherers, authority was vested in subjective perceptions tempered by experience, the sources of authority now are documents, written texts, or experts who have read all those documents. Literacy makes sight the primary sense and reduces the roles of all other senses such as hearing, smell, touch and the sense of gravity/balance/weight. But that sight is very narrowly focused. To borrow an image from Edmund Carpenter, our way of seeing is like a beam of light in a very dark room. We tend to exclude any action outside the word illuminated by the beam of light. We tend to exclude our inner worlds of light and darkness.

A century ago Jane Harrison, a classical scholar, took up the study of Greek religion. She found that the ideas held by the traditional Greeks of the 5th

Century B.C., the contemporaries of Aristotle and Plato, were not much different than those held by American Indians of the early 19th Century A.D.

Of all the changes that took place during the 35,000 years *Homo sapiens* has come to dominate earth, the invention of writing has had the most marked effect on the way we think. Perhaps, through a better understanding of how learning to read and write affects us, we may more readily perceive the limitations of our accepted way of seeing and be more tolerant of others who hear different voices.

In the late 19th Century a linguist named J.D.Prince recorded this song from the Passamaquoddy Indians of northern Maine. This may be the only Maine shaman's song that survives to us.

I sit and beat the drum.
By the sound of my drum
I call the animals from the mountains.
I sit and beat the drum
and storm and thunder answer.
Even the great whirlwind pauses
to hear the sound of my drum.
I sit and beat the drum
and the spirit of night air comes
and listens to the sound of my drum.
Even the great Wuchowsin stops his wings
to listen to the sound of my drum.
I sit and beat the drum
and the spirit under water rises,
and the wood spirit ceases chopping.
I sit and beat the drum
and the great Appodumken will come
out of the deep to hear
the sound of my drum.
Thunder, lightning, gales, storms, forest spirits, whirlwind,
water spirit and spirit of night air
are gathered and listening
to the sound of my drum.

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An Archaic Period Incised Artifact from Medford, Piscataquis County, Maine

by James B. Petersen and John Langerak

INTRODUCTION

Decorated nonceramic artifacts are uncommon in the archaeological record of hunter-gatherer populations. Although a rich inventory of decorated material culture may well have been utilized by northeastern aboriginal populations over a long time (e.g., Eckstorm 1932; Gibson 1980; Whitehead 1980), very little evidence of this inventory is available in the incomplete and poorly preserved archaeological record of the Northeast. Singular examples of decorated nonceramic artifacts are thus of great potential interest, particularly when they can be attributed to one portion or another of the long span of regional prehistory.

A decorated lithic artifact described here represents one such recent discovery from the town of Medford, Piscataquis County, Maine. Discovered in disturbed sediment adjacent to an unsystematic excavation at the Schoodic Point site, this lithic artifact exhibits incisions, presumed to be decoration, on two opposite surfaces. Its elongate form, slightly faceted cross-section and characteristic use wear allow suggestion of a primary function as an "abrader", most likely used in the manufacture and maintenance of other tools. Abraders occur in diverse forms over a long period of regional prehistory (e.g., Fowler 1963:18-20), but some forms, particularly including elongate cylindrical to less regular elongate specimens known as "stone rods", have a more restricted period of attribution (e.g., Bolian 1980:125; Byers 1959:244; Sanger, et al. 1977:465). These elongate specimens have been dated between ca. 7000 B.C. and 2000 B.C. at a few sites in the broad region and thus can be strictly related to the Archaic period. Elongate abraders are not typically decorated, however, and the specimen from the Schoodic Point site is thus unique.

Additional details about this unique specimen, its discovery and apparent correlations are presented below.

BACKGROUND

John Langerak discovered the incised abrader at the Schoodic Point site (ME 107-9 in the Maine Site Survey Files) in the early 1980's during a visit to the site, which has been long known to local collectors. As reported by Langerak and others, at least two separate loci are present at the Schoodic Point site: one in proximity to the flood plain and another about 15 - 20 m above the Piscataquis River. The Piscataquis River makes a notable bend around the point and the upper terrace looks down on a constriction in the river which produces substantial rapids under some seasonal water levels.

Langerak discovered the incised abrader in disturbed sediments adjacent to a previous unsystematic excavation at the site. On the basis of his recollection, the abrader must have originated in some sort of subsurface cultural deposit, possibly a burial or other cultural feature. The specimen appeared human-made, but due to a heavy coating of some organic deposit, probably carbon, no evidence of decoration, use wear or manufacture was initially observable. After soaking it in water, light brushing by Langerak revealed the decoration and other subtleties preserved on this unusual artifact.

The initiation of the Piscataquis Archaeological Project by the University of Maine at Farmington Archaeology Research Center brought Petersen and others to the

area in and around the town of Milo in 1984. Several deep, stratified archaeological sequences have been since identified there, but the research potential of the area is still unfolding due to the depth of the deposits and the density of the cultural remains. Concurrent research has been dependent on the study of private artifact collections and field survey throughout the extent of the Piscataquis River drainage (e.g., Petersen 1986; Petersen et al. 1986; Petersen and Putnam 1987). The incised abrader was studied by Petersen in 1984 and again in 1987 as part of this long term research project.

SPECIMEN DESCRIPTION

The incised abrader from the Schoodic Point site can be more precisely described as an elongate rectangular, tabular, very fine-grained grayish brown siltstone specimen (Figure 1). It seems likely that the aboriginal artisan chose a piece of raw material that roughly approximated its final form. The first stages of modification apparently included extensive pecking and some flaking, the latter only observable on the narrow, proximal end. The pecking is more obvious, with small pits, 0.70 - 1.20 mm in size, preserved on portions of the lateral margins. One or both of these processes undoubtedly contributed to the primary shaping of the specimen.

The specimen was further modified over nearly all of its surfaces by some form of abrasion. Numerous parallel striations, 0.30 - 0.85 mm in width, preserve evidence of this modification before application of decoration and creation of use wear. Striations on the lateral margins parallel the longitudinal axis of the specimen, whereas those that occur on the broader obverse and reverse surfaces have a right oblique (lower left to upper right) orientation.

The overall form tapers only slightly from a maximum width of 24.0 mm near the broad rectangular distal end, itself 22.50 mm in width, to a more narrow rectangular end, 16.30 mm in width. The total length is 198.0 mm and the weight is 136.4 grams. The thickness ranges from 9.65 mm on the distal end to 15.50 mm on the proximal end. A plano-convex cross-section is evident near the distal end, while the proximal end is more properly heptagonal (seven-sided) and faceted within 50 mm of the end.

Incisions are present on both surfaces, but are more notable on the obverse surface (Figure 2). This apparent decoration on the obverse surface extends from the distal end for about 114.0 mm towards the proximal end and consists of three more-or-less discrete zones of incised elements. Holding the specimen with its longitudinal axis horizontally, the first zone from the left (distal) end includes several sets of incised elements. The dominant set includes four roughly parallel continuous incisions which are oriented first from the upper left to lower right, then towards the upper right, the lower left again and finally, towards the upper right where they are bounded by a vertical incision perpendicular to the longitudinal axis. Only the lowermost final right oblique incision extends into the second zone. These elements form what may be a mountain-like motif, possibly suggestive of the landscape in the northern and western portions of the Piscataquis River drainage. In addition, another set of nine incised elements emanates from near one intersection of the uppermost left and right oblique elements and radiates towards the upper lateral margin. This second set of incisions produces what may be a rising sun motif.

The second zone of incised elements, bounded on the left and right by vertical incisions, repeats the mountain-like motif with four incisions near the lower lateral margin. However, it only includes two right oblique and one left oblique portion of each continuous incision in contrast to the matched oblique portions of the continuous incisions in the first zone. One of the incisions, the uppermost, originates in the first zone. Above this lower area, eight nearly horizontal incisions (and a short incomplete incision) fill the balance of the second zone. Of particular note, more shallow and irregular portions of four of these horizontal incisions originate and crosscut the decoration in the first zone.

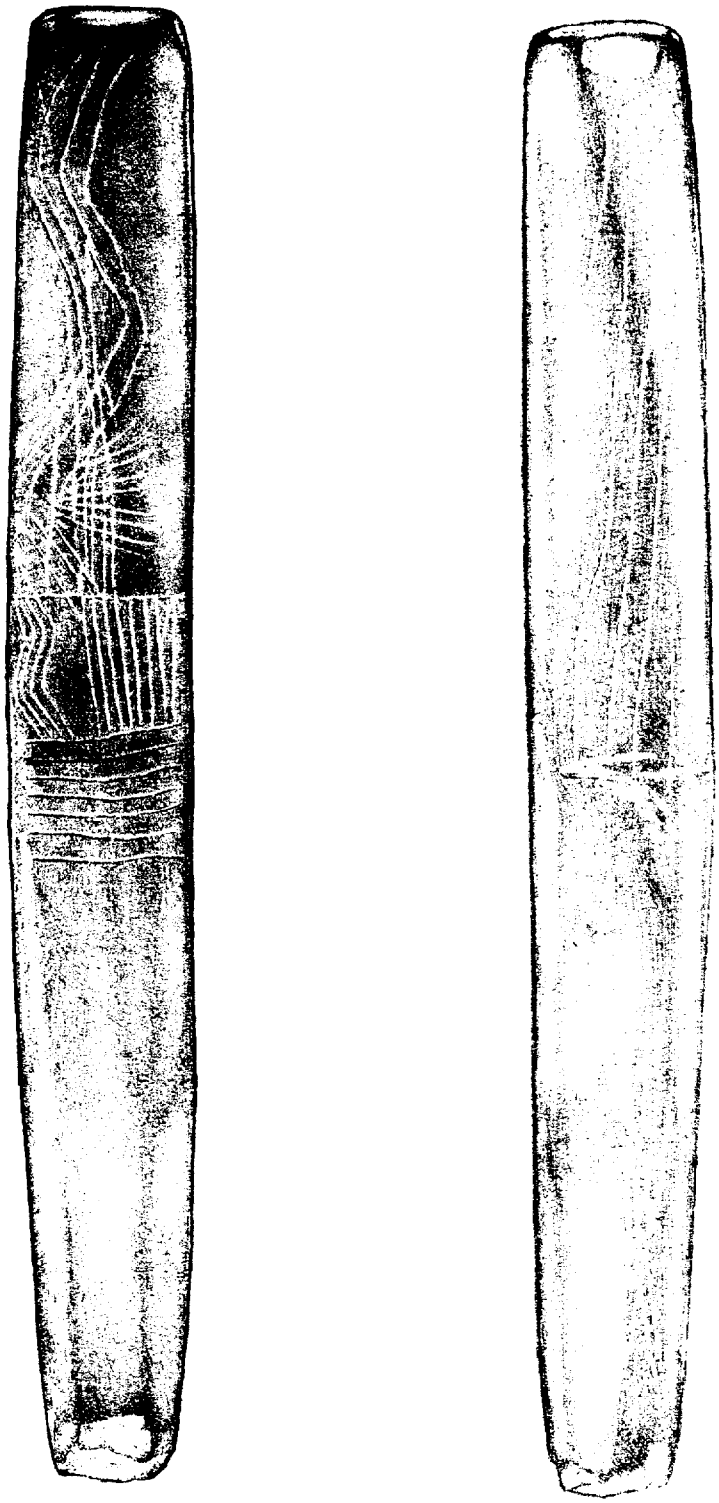

Figure 1. Elongate abrader with incised decoration from the Schoodic Point site. Obverse and reverse surfaces are depicted on the left and the right, respectively. Illustration done by John Langerak.

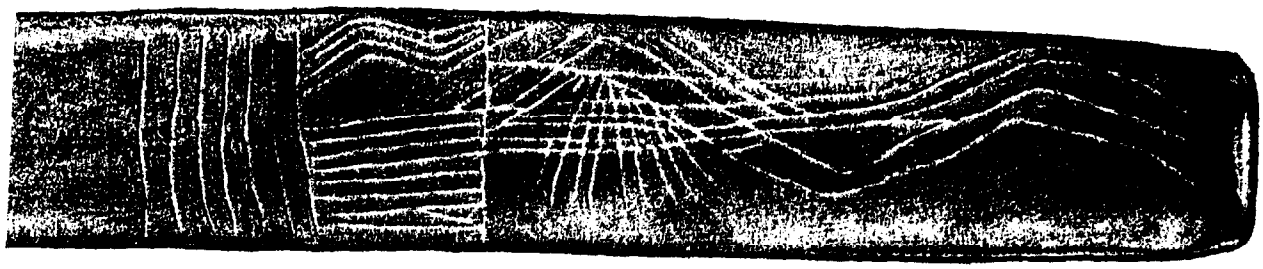

Figure 2. Detail of the incised decoration on the obverse surface of the elongate abrader from the Schoodic Point site.

In addition, a fifth similarly shallow horizontal incision crosscuts the first zone, with little or no extension into the second zone. These latter elements are the only incisions that systematically crosscut others.

The third zone consists of seven roughly vertical incisions, including one which bounds the second zone. These incisions nearly extend across the full width of the specimen. All of the incisions in this and the other zones are about 0.40-0.50 mm in width and were produced with a sharp tool with a v-shaped cutting edge.

On the reverse surface, five discontinuous incised elements roughly parallel the longitudinal axis. These are irregularly placed, however, and crosscut one another towards the proximal end.

An obviously modern scar is also present on the reverse surface. A nick, or glancing incision crosscuts the parallel elements and reveals the original color of the specimen. This nick likely represents shovel damage done to the specimen during its modern disturbance.

Use wear is apparently confined to the lateral margins. This wear is particularly evident within about 80 mm of the proximal end where heavy polishing and obliteration of manufacture marks (pits and striations) indicate apparent usage as an abrader.

Iron staining is present over most of the specimen as evidenced by a dark reddish brown color. This staining seems most likely attributable to red ocher that may have been present with it in its original context.

CORRELATIONS

Dating Elongate Abraders

The correlation and dating of decorated nonceramic artifacts is a difficult matter where their associations are uncertain and they do not represent some temporally diagnostic form. However, the recognizable form of the incised elongate abrader from the Schoodic Point site allows estimation of its antiquity.

As noted above, generally similar elongate abraders are attributable to much of the Archaic period, ca 7000 B.C. - 2000 B.C., on the basis of their contexts and associations as well as a few radiocarbon dates from the broad Northeast. Using this rather general category to include various forms, the oldest presumably reliable context for elongate abraders is known from the Weir's Beach site on Lake Winnepesauke where "stone rods" were associated with white quartz uniface tools and dates between 7,205 B.C.±395 and 5365±195 B.C. (Bolian 1980:124-125, Plate 17). In a more local context, a functionally similar, but less finely finished abrader has been dated to 4000 B.C.±230 at the East Branch site only about 20 km further up the Pleasant River portion of the Piscataquis River drainage from Schoodic Point (Spiess et al. 1984). Other comparable elongate abraders are known from several sites at the confluence of the Sebec and Piscataquis Rivers, only 10-12 km from Schoodic Point. At the Sharrow site, such artifacts have been found in contexts as old as 3420 B.C.±120, 3870 B.C.±110 and 4370 B.C.±110 (Petersen and Putnam 1987). None of these finds precisely match the form of the Schoodic Point specimen, however, and it is possible that it originated in a younger cultural deposit.

Elsewhere in local contexts, comparable artifacts are known from possible Middle Archaic and Late Archaic period contexts at the Hirundo and Young sites (Borstel 1982; Sanger et al. 1977), where they were more specifically related to the Late Archaic period, ca. 2300 B.C. and older. Close to the Penobscot River, comparable artifacts are also known from Late Archaic and /or Middle Archaic contexts at the Hathaway and Sunkhaze sites (Robinson 1987; Snow 1969), but in neither case have they been dated. A probable Middle Archaic period attribution is suggested for the Sunkhaze sites on the basis of regional data (Robinson 1987: Figures 2 & 3). The best nonlocal support for such an early attribution is provided by associations at the Morrill Point site near the mouth of the Merrimack River in Massachusetts where "stone rods" were

dated to 4375±235 B.C. and 5295±460 B.C. in presumed burials (Robinson 1987: Figure 2).

A large number of other presumed Archaic period attributions for elongate abraders can be cited for areas across the broad Northeast (e.g., Bailey 1939:13-14; Fowler 1963:18-20; Funk 1976:Plates 2 & 16; Robbins 1980:235-237; Wintemberg 1943). Few, if any of these contexts have been dated and some uncertainty remains about the specificity of this these assessments. "Stone rods" and closely related forms are certainly present early in the Archaic period, before ca. 5000 B.C.- 4000 B.C. in Maine and Massachusetts and as old as 7000 B.C. in New Hampshire. Elongate abraders may have persisted as late as 2000 B.C. across the region, but there is little or no evidence to support their usage in later prehistory, although other forms of abraders surely persisted as long as traditional aboriginal technology did.

Dating Decorated Artifacts

Evidence of systematic decoration in any form is relatively rare over the long span of northeastern prehistory before the advent of ceramic manufacture. As noted above, this scarcity is likely due, in large part, to conditions of regional preservation where perishable substances of any kind are rarely preserved. It is likely that lithic artifacts were less frequently decorated than others made from perishable materials due to the difficulties of working lithic materials in contrast to perishable materials. Hence, few decorated artifacts survive except in rare circumstances.

Probable Late Paleoindian period steatite fragments from the Reagen site in northwestern Vermont exhibit systematic incised decoration and as such, are almost certainly the oldest known decorated artifacts in the broad Northeast, ca. 8000 B.C. to 7000 B.C. (Funk 1978:Figure 5; Ritchie 1953). Few other clearly decorated artifacts are known until the middle and later portions of the Late Archaic period, after ca. 3000 B.C. - 2500 B.C., when artifacts associated with human burials preserve evidence of decoration, specifically including incision (e.g., Byers 1979; Fowler 1974; Ritchie 1965:Plate 39; Sanger 1973: 37-50, Plates 7, 9-12; Snow 1980:Figures 5.4 & 5.6; Tuck 1976:55-59, Figure 22; Willoughby 1935:Figures 28, 29, 36 & 48). Of particular importance, an apparent emphasis on slate working during the middle portion of the Late Archaic period during the Moorehead phase can be correlated with an increase in preserved artifact decoration since slate is nonperishable and yet can be easily worked.

Still later nonceramic evidence of incised decoration is attributable to the full span of the Ceramic (Woodland) period and the Contact period from 1000 B.C. to A.D. 1750 (e.g., Fowler 1966; Hammon 1984:76-87; Hedden 1984; Ritchie 1965:Plates 62, 63 & 80; Snow 1980:Figures 7.3, 7.17, 7.18 & 8.18; Willoughby 1935:Figures 49, 50 & 55). One exceptional specimen of apparent Ceramic (Woodland) period attribution is known from the Brigham site at the confluence of the Sebec and Piscataquis rivers. It is a flat tabular piece of slate which exhibits a mountain-like motif on one surface and a possible anthropomorph (human-like) figure on the opposite surface. Unfortunately, it was recovered from the surface of the eroded riverbank and thus can not be precisely dated (Hedden 1984; Petersen et al. 1986:Figure 4). In general, for these later periods incision and other forms of decoration are quite common due to their preservation on aboriginal ceramics. In addition, mostly all known rock art (i.e. petroglyphs) in Maine and nearby areas is attributable to these later periods of aboriginal occupation (e.g., Hedden 1984, 1985, 1987: Willoughby 1935: Figures 94 & 95; but see Hedden 1986).

In sum, incised decoration is likely as old as the Late Paleoindian period, ca. 8000 B.C. - 7000 B.C., among northeastern hunter-gatherer populations. However, incised decoration and other forms of decoration are very poorly represented in the archaeological record until the Late Archaic period, after ca. 3000 B.C. - 2500 B.C. The Schoodic Point incised elongate abrader may be one of the very rare earlier examples, or it too may be of Late Archaic period attribution.

Anthropological Observations

The Schoodic Point incised elongate abrader almost certainly served as a utilitarian artifact on the basis of obvious use wear. It may have served one or more additional functions in its cultural context, with the decoration possibly serving as an abstract or naturalistic representation of some sort. Drawing upon the speculative realm of general ethnographic analogy, this artifact may have served some magico-religious function, that is, it may have served as a tangible connection to the nonmaterial realm. Such symbolic infusion of artifacts is known among various ethnographic populations. For example, among some Australian aborigines "churinga" boards and stones are ocher painted or incised and then painted with geometric and naturalistic designs as representations of totemic ancestors and ancestral designs (e.g., Munn 1986:32-57). In more local settings, the Naskapi of Labrador reportedly applied decoration to their tools to record their dreams (Speck 1977:235-239) and the Micmac kept both modified and unmodified lithic objects as a connection to the good luck of the magico-religious realm (Tuck 1976:71). The Baffin Island Eskimo believed that their relationships with the spiritual realm were maintained, in part, by the curation of amulets and charms (Kemp 1984:473). Likewise, the Bering Sea Eskimo used a set of standard decorative forms to symbolize group concepts, including those of the magico-religious realm (Fitzhugh and Kaplan 1984:198-202). Generally similar suggestions have been made for archaeological occurrences of similar objects in varied contexts as old as 6000 B.C. - 5000 B.C. (e.g., Hull and White 1980:120-122, Figure 46; Kirkland and Newcomb 1967:108-110, Plates 67 & 68; Thomas 1983). Of course , the function of all such archaeological specimens remains conjectural, especially given the symbolic variation documented in these and other ethnographic contexts. It is also possible that some or all such decorated artifacts were embellished for more purely aesthetic or individualistic reasons, although this seems unlikely in the present case (see Thomas 1983: 347-352).

In conclusion, we can not specify any precise nonutilitarian function for the Schoodic Point incised elongate abrader. Nonetheless, this artifact is highly significant because it provides relatively ancient evidence of decoration of some sort, which almost certainly predates 2000 B.C. and may be as old as 7000 B.C. Moreover, it testifies to the richness and intrigue characteristic of the local archaeological record.

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ARCHAEOLOGICAL INVESTIGATION OF THE WATSON SITE, FRENCHMAN BAY

Steven Cox and Diane Kopec

INTRODUCTION

The Gavin Watson Site (59.8) is a multicomponent site located on Flanders Bay, part of the Frenchman Bay complex. The University of Maine, Orono, first tested the Watson site in 1973 during a site survey of the Frenchman Bay area. S. Mayer of the New York University system subsequently tested it in 1975. A total of seven test pits from the two testing operations recovered projectile points and other bifaces, scrapers, flakes, bone points, pottery and faunal remains. Beginning in 1978, Jeffrey Smith of Seal Harbor led his Sumner Memorial High School classes for several years in the excavation of the site. Smith focused his attention on the front of the site where his classes excavated a total of 23 ten foot squares in two adjacent trenches along the front of the site (Figure 1).

Smith's collection was examined during the Abbe Museum's 1985 Frenchman Bay survey. His collection, since donated to the Abbe Museum, contains approximately 1,000 objects including notched, stemmed and non-stemmed bifaces, scrapers, celts, hammerstones, plummets, bone tools, pottery, one copper point and faunal remains. In addition, a wide variety of lithic raw materials, including jaspers, agates and Ramah chert is represented in the collection. The artifacts suggested that occupation of the site spanned at least the last 4,000 years, including the Moorehead phase, Susquehanna, and much of the Ceramic period.

The authors examined and briefly tested the site in the fall of 1986 for additional information relating to the site's National Register potential. As a result of the examination the site was nominated to, and has since been placed on, the National Register of Historic Places. We also decided that the site deserved further examination, both to refine our understanding of existing collections and to address a number of research questions. Accordingly, during the summer of 1987 the Abbe Museum of Bar Harbor and the Center for Northern Studies of Wolcott, Vermont joined forces for an excavation and field school at the site. The field school complement included students from Bowdoin, Middlebury and Hunter Colleges as well as members of the general public. The excavation was conducted during the period June 9 through July 3, 1987, a total of four weeks.

RESEARCH BACKGROUND

The Watson site was of particular interest because of its similarities to the Goddard site of Blue Hill Bay (Bourque and Cox 1981). The Goddard site (30.42) is a large (2.3 acres) mostly shell-free black soil coastal midden. Virtually all prehistoric components known from the coast of Maine 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 shell remains. The site was 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 in the Goddard site is the prototype for the large summer villages

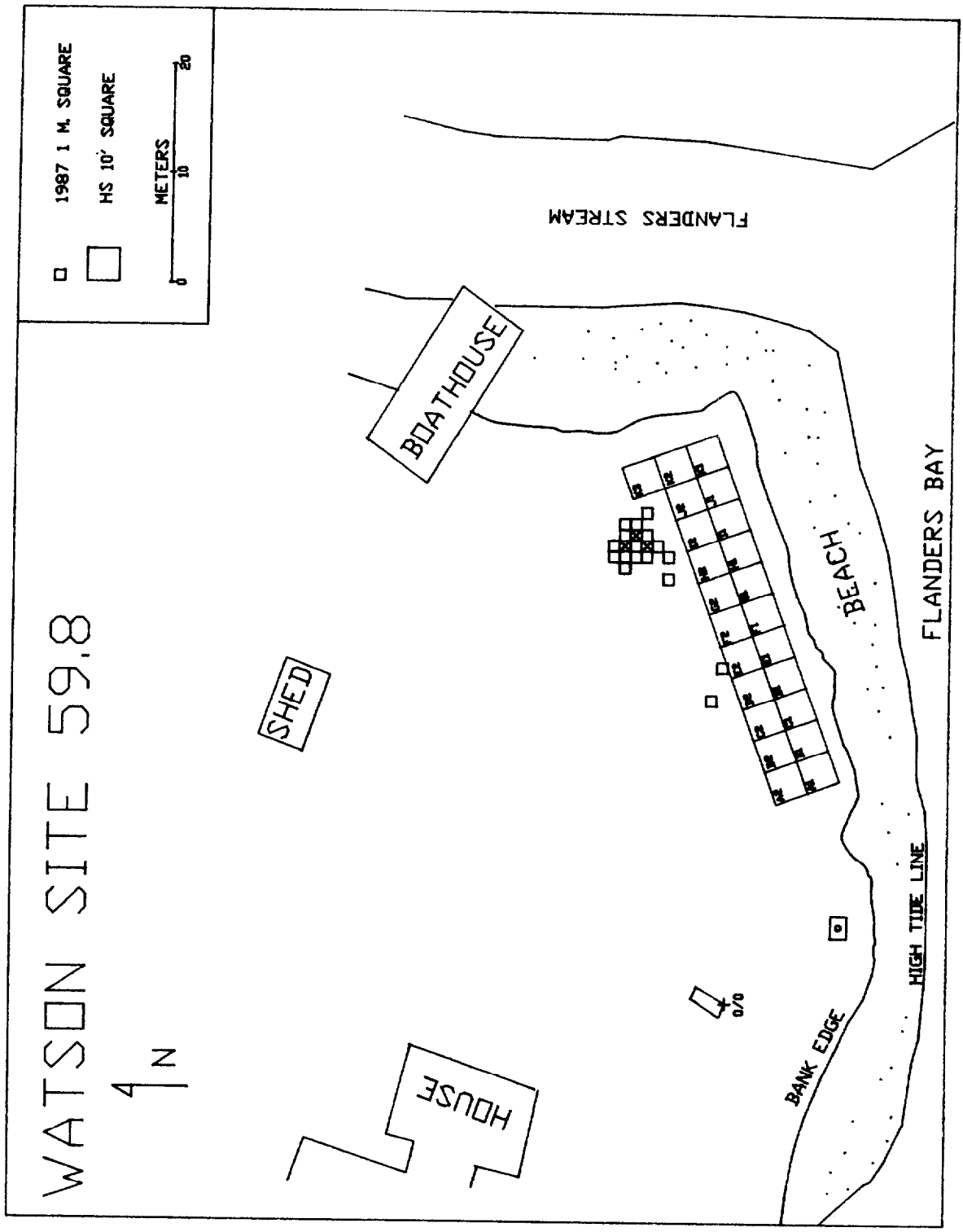

Figure 1. The Watson Site.

reported during the early contact period, villages which were the focus for a variety of social and economic activities, including long-distance exchange.

The Goddard site raised a number of questions. Was Goddard unique in terms of its shell-free midden, size and richness? If our hypothesis that Goddard was a large summer village was correct, it seemed unlikely that it was unique, but we had not found shell-free coastal sites of similar size and productivity elsewhere. Subsequent to the Goddard excavation in 1979-80 we had tested a number of sites which appeared to be shell-free middens, and in most cases had found them to be merely remnants of heavily eroded shell middens (e.g. Cox 1987).

Could the Goddard site have been similarly the back edge of an unusually large and rich shell midden that had been largely destroyed by erosion? Certainly Goddard had undergone a significant amount of erosional damage, and the former presence of a shell midden deposit was suggested by pockets and small lenses of shell, more common toward the front of the site, in the Goddard midden. However, no known Maine shell middens exhibit rear shell-free areas even approaching the size and richness of the Goddard midden, and given the span of occupation of the site some shellfish utilization would hardly be surprising.

SITE DESCRIPTION

The Watson site lies on the west bank of Flanders Stream at its mouth, overlooking Flanders Bay to the south and the stream to the east. Flanders Stream is a small stream draining Flanders Pond about 5 kilometers NNE of the site. The stream supports a major alewife run in June and eel runs in late spring and early fall.

The site lies in a grassy field and presently measures approximately 50x30 meters. The site midden is an organic black silty loam generally 20-30 cm. thick. Unusually, the midden overlies fine silt of the Presumscot Formation. Along the stream bank *Mya* shell is exposed, the remnants of a shell midden, but this shell deposit does not extend far inland, as neither the High School nor our excavations encountered it.

The site appears to have undergone a significant amount of erosional loss along the seaward (southern) bank. Geologist Tom Lowell inspected the site and estimated that perhaps 50 meters of the southern end of the site had been lost in the last 4,000 years (pers. comm. 7/87). Erosional loss along the stream (eastern) edge of the site was not estimated, but would presumably have been much less severe.

RESEARCH RESULTS

During the 1987 field school we excavated 17 one meter squares, located mostly near the eastern end of the site. This appears to be the most productive portion of the site, perhaps because there has been less erosional loss in this area than on the seaward margin. The site area has been plowed, and historic material was found throughout the top half of the midden, and occasionally deeper. We encountered no significant sub-midden features, perhaps not surprising in the hard-packed Presumscot Formation silt. As a result, cultural identifications are based almost entirely on typological grounds.

Preliminary analysis of material recovered from both the high school excavations and those of the 1987 field school suggests that the major component of the site is late Ceramic, followed in order of size by middle Ceramic, Susquehanna Tradition, Moorehead phase and early Ceramic.. The Moorehead component is small, represented by a few plummets, adzes and fragments of ground slate (Plate I:A-D). Of particular interest is a fragment of a ground slate unilaterally barbed point, perhaps a copy of a bone form (Plate I:A). The 1987 excavation turned up little recognizable Moorehead material.

Susquehanna Tradition material from the site includes a series of stemmed and non-stemmed bifaces generally attributable to the Atlantic phase, ca. 3700-3500 B.P.

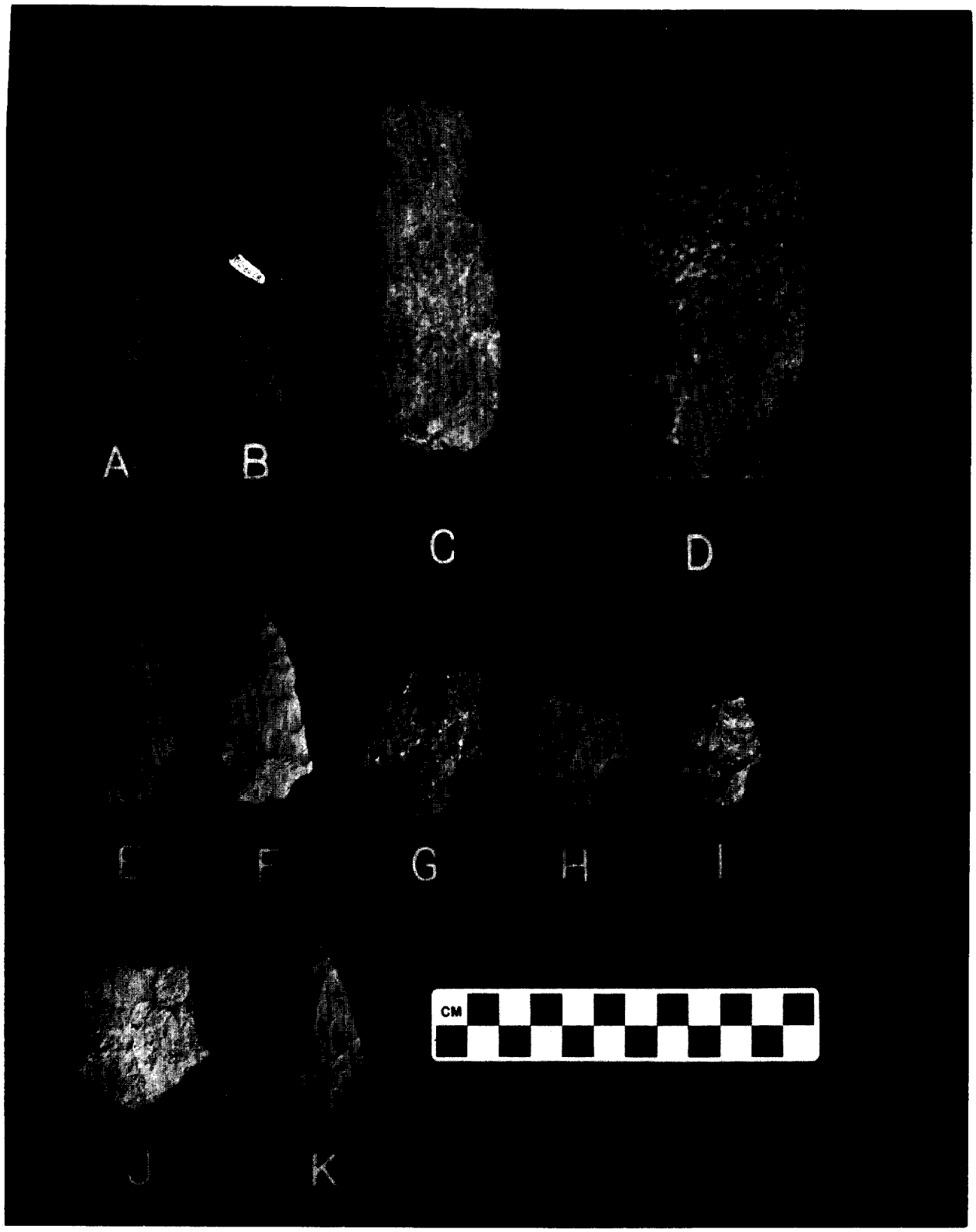

Plate 1. Archaic artifacts from the Watson Site

(Plate I:E-K). Susquehanna artifacts are considerably more numerous than those of Moorehead at the site, but this may reflect on-site settlement differences more than intensity or duration of settlement. Most of the Moorehead material that has provenience was recovered at the southern (seaward) edge of the site, whereas the Susquehanna material was more common at the eastern end, along the stream bank. Thus, it is likely that the Moorehead occupation, oriented primarily toward Flanders Bay, has been largely lost to erosion, whereas the Susquehanna occupation was more oriented to Flanders Stream and thus survived relatively intact.

Early Ceramic is represented by a single Vinette I sherd. Middle Ceramic material includes ceramics with dentate, rocker dentate, pseudo-scallop shell and wavy line decoration. A series of stemmed and notched bifaces probably also belongs to this period (Plate II:A-I). Late Ceramic artifacts include small notched points, non-stemmed bifaces, small endscrapers, and cord-wrapped stick decorated ceramics, largely grit tempered (Plate II:O-T). Several native copper artifacts probably also belong to this component (Plate II:J,K). A ground stone chisel-like object may belong in either a Late Archaic or Ceramic period component (Plate II:N). In general the late Ceramic component closely resembles that of Goddard, and probably dates within the period 1000-700 B.P.

Lithic raw materials within the Watson late Ceramic component were of particular interest because of the evidence for long-distance exchange at Goddard. Table 1 presents a comparison between the Goddard and Watson sites of lithic materials used in selected late Ceramic tool classes. The Watson site lithic identifications are preliminary (done in the field as part of student projects), and include both high school and 1987 field school artifacts. Although the figures may change somewhat with continuing analysis, it is clear that the Watson and Goddard late Ceramic components are similar in raw material usage, with both showing significant percentages of exotic lithic materials, particularly among endscrapers. Exotic materials present at Watson include Ramah chert from Labrador, cherts and native copper from the Bay of Fundy, Nova Scotia, Onondaga chert from western New York, and Pennsylvania jasper. Plate II:M is a Ramah chert notched biface base. Most of the exotics appear to belong to the late Ceramic component.

Faunal preservation at the Watson site was variable, ranging from poor to fair. Midden areas with pockets of shell generally had better bone preservation, but rarely was delicate bone such as that of fish, small birds and small mammals preserved. Although it is likely that virtually all of the bone dates to the Ceramic period, and we suspect that most of it belongs to the late Ceramic component, none of the faunal remains have secure cultural provenience. Faunal analysis is not yet complete, but as in the Goddard late Ceramic assemblage seal and sturgeon are prominent, suggesting that the Watson Ceramic period occupation may have included a summer component. Of particular note are two caribou molars, possibly from the same individual, identified in the high school collection. To our knowledge, this is the westernmost occurrence of caribou in an archaeological assemblage from the Maine coast.

CONCLUSIONS

Analysis of data from the Watson site is still in its early stages, but we are able to draw some conclusions at this point. The site was occupied from at least the Late Archaic to the late Ceramic period. Apparently the favorable location of the site, with access to both marine and freshwater anadromous and catadromous fish resources, outweighed the disadvantage of the poorly drained Presumscot Formation substrate.

Although considerably smaller, the Watson site resembles the Goddard site in many respects. Both are predominantly shell-free black soil middens, and artifact

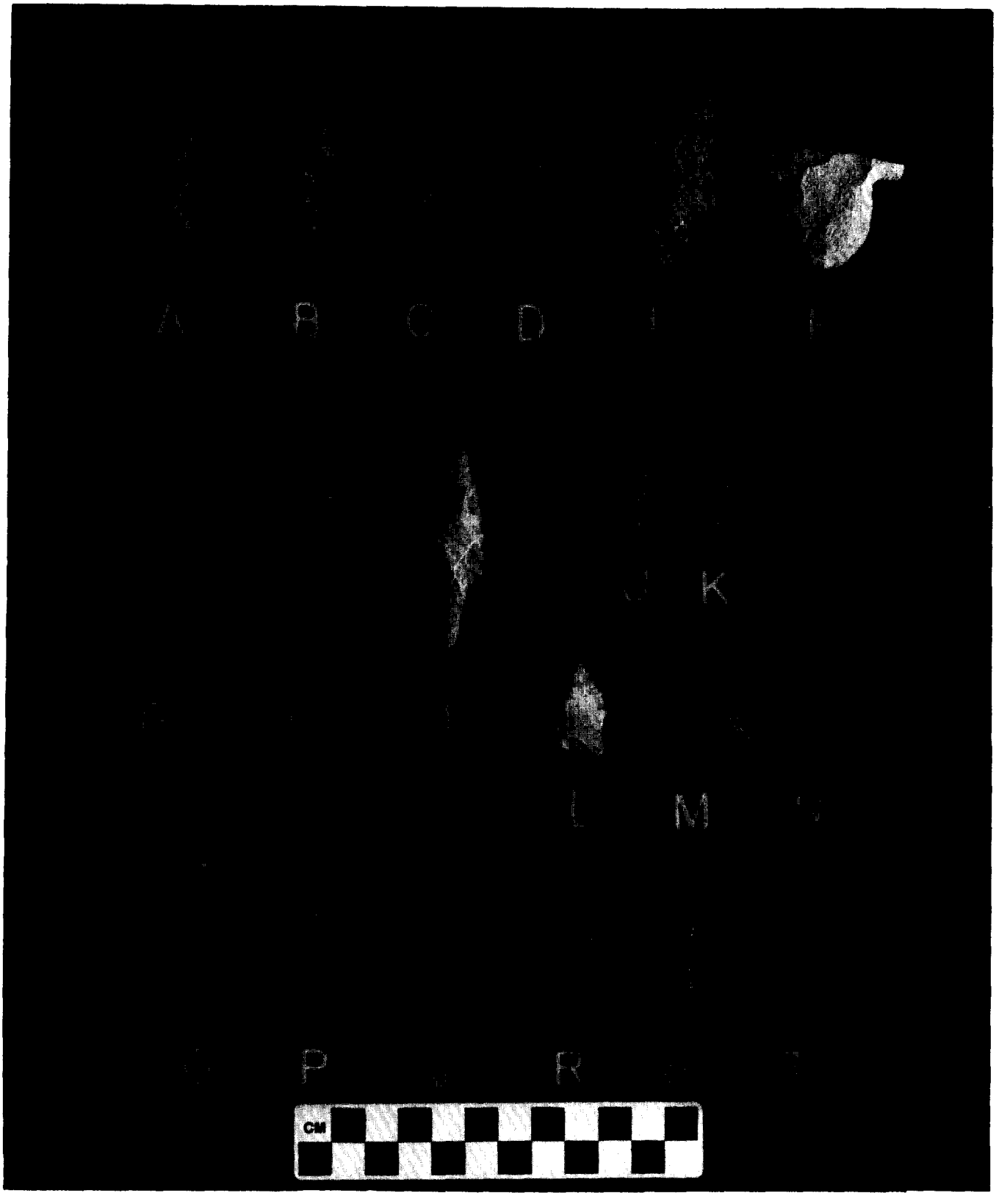

Plate 2. Ceramic period artifacts from the Watson site.

density at Watson was comparable to that of Goddard. At Goddard much of the black midden was deposited during the late Ceramic occupation - Archaic materials tended to occur at the midden/subsoil junction and the early and middle Ceramic components were relatively minor. At Watson the late Ceramic component is also the most important one in terms of amount of material, but middle Ceramic is more important relative to Goddard and the source of the black midden deposit is therefore less clear.

At Goddard the lack of shell in the midden appears to be related to seasonality. Late Ceramic occupation of the site occurred primarily during the summer and early fall months, a time of the year when shellfish were apparently not a major portion of the diet. We believe that technological, economic and social factors led to increasing population nucleation into major summer villages during the late Ceramic period, or perhaps somewhat earlier. At this stage of the analysis we cannot determine the seasonality of the Watson late Ceramic component, but the similarities to the Goddard faunal assemblage and the site's location adjacent to summer anadromous fish resources are suggestive.

The Watson site collections support the hypothesis of increased long-distance exchange, perhaps associated with the growth of summer villages, during the late Ceramic period. Exotic lithics from Nova Scotia, Labrador and the Great Lakes region form a significant part of the Watson late Ceramic assemblage, paralleling the situation at Goddard. It is our hope that study of additional late Ceramic components, from sites on both the coast and along inland waterways, will allow us to reconstruct the patterns of movement of these materials. For example, was Ramah chert moving into Maine through interior canoe routes from the St. Lawrence or was it moving down along the coast from the Maritimes? Did coastal exchange involve long-distance maritime transport as it did in the early historic period, or was it a slow movement of materials from village to village along the coast?

The Watson site represents the first close analog to the Goddard site that we have found. It strengthens our belief that such sites are not simply the eroded remnants of large shell middens, but represent a different type of occupation-major villages established during seasons of resource abundance which served as the center of a complex range of economic, social and political functions.

ACKNOWLEDGEMENTS

The authors would like to particularly thank Gavin and Ruth Watson for their kind permission to dig up their front yard, and for their hospitality and assistance while we did so. Our field school students - Kevin Anglin of Middlebury College, Kathy Barone of Hunter College, Tim Kupferschmid of Bowdoin College, Charles Edwards of Bar Harbor, Martha McCormick of Hulls Cove and Mike Rubashkin of Richmond - did an excellent job. We are also grateful to the Maine Historic Preservation Commission for its support of the Abbe Museum's Frenchman Bay survey, including preliminary testing of the Watson site prior to the field school. Finally, we very much appreciate Jeffrey Smith's donation of the Sumner Memorial High School material from the site, which has given us a much fuller picture of the prehistoric occupations of the Watson site.

TABLE 1. Lithic raw materials in the late Ceramic components, Goddard (30.42) and Watson (59.8) sites. Watson site figures are preliminary.

	NOTCHED PNTS.		NON-ST. BIF.		ENDSCRAPERS	
	30.42	59.8	30.42	59.8	30.42	59.8
	N=322	N=35	N=216	N=51	N=374	N=68
Local Volcanics	67%	74%	78%	90%	26%	34%
Munsungan Chert	15%	14%	9%	8%	36%	25%
Nova Scotia Chert	6%	0%	7%	2%	16%	21%
Onondaga Chert	2%	0%	0%	0%	5%	3%
Other Exotic Ch.	5%	9%	2%	0%	9%	7%
Quartz	3%	3%	1%	0%	7%	9%
Other	5%	0%	3%	0%	2%	0%

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BOOK REVIEWS

Depaoli, Neill with French, Hugh. *Beneath the Barracks: Archaeology at Fort Sullivan: A Report on Preliminary Investigations.* Eastport, Maine: Border Historical Society, 1986. 105 p. softbound, illustrated.

In *Beneath the Barracks* Neill Depaoli has created a work valuable on several accounts, first, the novice will find Depaoli's discussion of historic archaeology helpful in understanding the basic conceptual ideas and terminology found in field situations, second, the seasoned veteran, who may choose to skim the discussion on site layout and trench notation methods, will find of wealth of artifact information appropriate to site interpretation and analysis. Depaoli succeeds in serving both of these audiences by presenting his findings in a readable style not found in many site reports.

Conceived in 1808 as part of America's second system of fortifications, Fort Sullivan. located in Eastport, for most of its existence remained a peaceful outpost where officers and enlisted men went about their daily activities of drilling, guarding and keeping watch. Captured by the British in 1814 without a struggle, the fort and surrounding area returned to U.S. possession in 1818. In 1877 the garrison was decommissioned, the land purchased and a farmstead erected. As a result, Fort Sullivan presents an ideal setting for an anthropologically based study of military life. A criticism of historical archacology in the past has been, and with some justification, that it is mere antiquarianism: restating the written history of the site with little interest in anthropologically based questions. Depaoli's work, though not at the point of refuting the criticism entirely, points in the right direction.

With the site undisturbed by battles, the author and his crew focused their attentions on the early millitary occupation and activities. In the attempt to reconstruct military life at a frontier fort in the early nineteenth century, several questions comprised the excavation strategy. Since none of the structures still stand on the site, of prime concern was discovery of structural military components--where the structures stood and in what relation to each other; second, recovery of artifacts and their context; third, development and change of use patterns for the site. Documentary evidence mentioned changes in building use, but how did this change take place? What alterations did inidividuals at Fort Sullivan take to facilitate this change? And how will this site eventually compare with other second system fortification findings?

Unlike many historic sites, a great deal of documentary evidence on Fort Sullivan remained for Depaoli in the National Archives including maps, documents and drawings. He includes an 1837 sketch of the fort as a frontispiece. A period map would help the reader analyze the excavation findings and mapping. Numerous trenches and test pits were dug over the two year project, 1982-1983, and the finely drawn layout and wall profiles aid the reader in visualizing the description of what was found there and in what context.

The chapter on artifacts breaks into several sections: ceramics, glass containers, personal, household, building material, weaponry and equipment, and faunal material, with a discussion of each. Quantities of each group and percentage of total artifacts found are included as a table for direct comparison. In addition, photographs of many reconstructed bottles, pottery fragments, and other artifacts found are included. The author makes reference to several standard works on objects for further research, a nice inclusion considering that for many readers this may be a first exposure to such treatises. Identification of artifacts at other sites in the area will also improve as a result.

Several appendices apear at the end of the book covering artifact findings. Two appendices are contained on microfiche cards found in a pocket on the inside back cover. Appendix B discusses clay pipe fragments. Depaoli might have done a better job in organizing his material if he had not included these appendices and instead included the material in the artifact chapters. The layout of the information is similar and it would have been more convenient for the reader if he had done so. As presented, one flips through pages more than necessary when comparing artifacts and tables.

The appendices create a minor point of irritation. Somewhat more distressing is the short analysis of site use and development, a point noted by Depaoli himself. This may be due in part to the rudimentary archaeological knowledge of the site, however. Sustained occupation and development of the site did not occur until after the U.S. regained the garrison from the British in 1818. Prior to this date, many occupation periods were of brief duration leaving scanty remains to document use with present technique. A comparison of the 1818-1836 period at Fort Sullivan with two other early nineteenth century military sites, Fort Independence on Castle Island in South Boston, and Fort Snelling in St. Paul, Minnesota, presents an intersite analysis of period military life. This certainly is an avenue for further exploration.

Depaoli's *Beneath the Barracks* stands as a useful work on historic archaeological methods and as a site report for Fort Sullivan. Combined with David Zimmerman's *Coastal Fort: A History of Fort Sullivan, Beneath the Barracks* provides a unique opportunity for an in-depth study of this site. Depaoli's work will be a starting point for further work on Fort Sullivan or on other second system fort sites on the east coast, and should be on the shelf of anyone interested in historic archaeology in Maine.

Gregory Kendall-Curtis

Editor's Note: The volume reviewed above is available as part of a two volume set that includes Zimmerman's *Coastal Fort: A History of Fort Sullivan* from Border Historical Society, Eastport, Maine. Price $20.00 for the set.

The Carson Site and the Late Ceramic Period in Passamaquoddy Bay, New Brunswick. DAVID SANGER. Canadian Museum of Civilization, Mercury Series, Archaeological Survey of Canada Paper 135, Ottawa, 1987. xii + 157pp., illus., figures, tables, references. $8.00 Can. (Paper)

I believe that Bruce Bourque was the first to articulate the dissimilarity between the late prehistoric archaeology of southern and western New England with that of the Maine coast north of Penobscot Bay (Bourque 1971:102). William Ritchie's research in New York, in the Champlain Valley, and on Martha's Vineyard has consistently demonstrated that the Late Woodland cultures in these areas, however disparate, all shared a preference for triangular stone projectile points (Levanna and Madison types, in Ritchie's typology). Prehistorians working in Maine, partially in an effort to distance themselves from the New York and the southern New England cultural sequences, and partially to make the distinction between the agricultural Northeast and the regions in which hunting and gathering remained preeminent, have taken to calling the late prehistoric period in Maine the Ceramic Period. Both the varieties of ceramic wares and the small side and corner-notched projectile points from these Ceramic Period sites evidence the existence of a distinctly different cultural tradition in northern Maine and the adjacent Maritimes.

In this monograph, David Sanger presents the results of his investigation of the Carson Site, in Passamaquoddy Bay, New Brunswick. The site report serves as an introduction to the late prehistoric period of the coast of northern Maine and neighboring New Brunswick and sets the stage for Sanger's interpretation of a regional late prehistoric cultural manifestation which he calls the Quoddy Tradition. Sanger defines the Quoddy Tradition as a well adjusted, continuous "lifestyle" adopted by the native inhabitants of the Bay of Fundy-Passamaquoddy region between 2200 B.P. and the arrival of Europeans in the 16th century. This is a period of stable settlement-subsistence patterns based on the exploitation of local terrestial and-significantly- maritime resources. Sites of the Quoddy Tradition are best known from a number of small components at the coastal shell middens, typified by the Carson site itself.

Ever the consummate field archaeologist, Sanger's meticulous excavation of the Carson site forms the nucleus of this volume. A quick overview of the site's setting includes discussions of the geology of the region (with implications for the local source of the preferred lithic raw materials used by prehistoric populations), paleooceanography (the significance of changing sea-levels for the maritime environment of the region and for site preservation), as well as introductions to floral and faunal regimes of the Passamaquoddy Bay region.

The Carson site is a small, multi-component shell-midden and habitation site situated on the eastern shore of Digdeguash Harbour, about 15 km east of the U.S.-Canada boundary at the St. Croix River. Two contiguous block excavations (section A & B) were completed, revealing the remains of a single oval semi-subterranean structure (Feature 8) and eleven adjacent hearths with associated activity areas. The recovery of three broad side-notched projectile points were attributed to an ephemeral Late Archaic visitation to the site; while a small collection of historic materials, including glass trade beads, attest to a brief camping episode during the 16th or 17th century. A radiocarbon date of 420±90 is thought to date this latter occupation. With this material aside, the principle component at Carson is derived from a series of closely overlapping occupations during the late Ceramic Period.

Two radiocarbon age determinations were derived from charcoal recovered from the hearths at the Carson site: 925±80 and 1120±65 B.P. These dates are associated with an artifact assemblage that includes

diagnostic small side and corner-notched projectile points, leaf-shaped triangular bifaces, small scrapers, ground and polished celts, a variety of bone and antler implements and ceramic vessels with impressed cord-wrapped stick designs.

Sanger provides a full discussion of the features, the artifacts, and the faunal materials recovered from the Carson site. The monograph is well illustrated with maps and plans. There are many photographs of the excavations in progress, the carefully exposed features, and the artifacts. A more detailed site plan showing the actual composition of the hearth features, with debitage and artifacts plotted, would help to assess the contemporaneity of associated features, as would a more elaborate discussion of the site formation processes. However the absence of these details does not detract from the advantages of having such a precise, descriptive statement on this aspect of Maine's prehistoric record in print.

The Carson site, like many Ceramic Period shell middens, was blessed with excellent bone preservation. In addition to the ubiquitous shellfish remains, a rich complement of marine fauna (at least three species of seals, and a wide variety of waterfowl including many winter ducks, loons, merganers, even a Great Auk!) and terrestial fauna (lots of beaver and other small fur bearers, but also bear, caribou, moose and deer) were recovered, evidencing the rich, varied diet of the site's inhabitants. Analysis of the faunal data suggests that the Carson site was occupied from the late fall through the early spring. The remains of a single white-tailed deer were recovered from four contiguous hearths in Section A enabling Sanger to make a strong case for their contemporaneity, and by inference deducing the size of the regional band that occupied the site.

Having provided us with an excellent description of the "type site" Sanger concludes the Carson Site monograph with a brief description of a number of other similar sites in the region which form the basis of his identification of a distinct regional cultural manifestation which he calls the "Quoddy Tradition".

The excavation and analysis of an archaeological site spotlights a very specific point in time and space, frequently obscuring or overlooking the dynamic aspects of cultural development and adaptation. The Carson site, dating to about A.D. 1000 is a representative component of a cultural tradition whose antecedents appear in Maine about A.D. 250 and which remain traceable in the archaeological record up to the Contact Period. Sanger has reserved elaborating on the cultural development and interregional relationships of the Quoddy Tradition for a separate monograph on which he is presently at work. These concluding comments perhaps anticipate some of the directions that Sanger intends to explore in that they attempt to look at the Quoddy Tradition in the larger cultural and geographical context of the "Far Northeast".

Both Sanger (1979:113-114) and Dean Snow (1980:341) comment on the two styles of projectile points that are coterminous in Maine during the late prehistoric period. However they avoid wrestling with the implications posed by the presence of the two separate cultural traditions. Snow suggested that the projectile points mark the prehistoric divergence of Eastern Abnaki groups (using the broad triangular Levanna projectile points) from the Maliseet-Passamaquoddy (with side and corner-notched projectile points) but he does not attempt to explain why such stylistic differences should emerge, nor why they are not apparent between other neighboring groups in the Northeast.

In an earlier publication, Sanger (1971) suggested that the origins of the late Ceramic Period cultures in eastern Maine would have been derived from the movement of new ideas, or even new populations, into Maine from "areas to the south". However, the lack of clearly delineated "parent" cultures, in coastal and interior

southern New England and New York, pose some challenge to this suggestion. It is in this context that we might briefly consider the implications of recent archaeological investigations in Newfoundland and Labrador where archaeologists now recognize a series of local cultural traditions that are both contemporaneous with the Quoddy Tradition and which share a remarkably similar stone tool inventory.

Along the central and northern coasts of Labrador the Point Revenge culture (Fitzhugh 1972, 1978; Loring 1985, 1988) is antecedent to the Montagnais-Naskapi (the Innu) encountered by the early European explorers. The late prehistoric period in Labrador begins about A.D. 200 when a series of radiocarbon dated hearths from coastal encampments attest to the presence of a small dispersed population of maritime hunters adept at killing seals and walrus as well as caribou and bear. The earliest sites are characterized by projectile points with broad side-notches. Through time the projectile point styles change, the points get smaller with corner-notching replacing side-notching. Point Revenge lithic assemblages also include triangular bifaces, a large variety of unifacial cutting and scraping tools and ground-stone celts. A few ceramic sherds have been recovered from the Pt. Revenge sites in Labrador, but it is apparent that ceramic vessels never attain the popularity in the north that they enjoyed in Maine and New Brunswick.

Ramah chert, a transparent, coarse-grained lithic raw material with exceptional flaking qualities, was used nearly exclusively for the manufacture of chipped-stone tools at the Pt. Revenge sites. The only known occurrences of Ramah chert are in outcrops in the mountainous regions of northern Labrador. The copious amounts of Ramah chert debitage found at Pt. Revenge sites gives the impression that access to a ready supply of the raw material was never a problem. The procurement and distribution of Ramah chert dramatically attests to a sophisticated maritime adaptation and the existence of long-distance social networks.

On the island of Newfoundland, the late prehistoric period begins around A.D. 100 and develops in situ into the proto-historic Beothuk Indians (Austin 1984, Pastore 1984, Penney 1985, Schwarz 1984, Tuck 1982). Part of this cultural continuum, the Beaches complex (A.D. 800-1200), is characterized by a stone tool assemblage (including side-notched projectile points and triangular bifaces) that share a number of similarities with artifact styles at the Pt. Revenge sites in Labrador and with the Quoddy Tradition sites in Maine and New Brunswick (see Figs. 1 and 2).

There are pronounced regional differences between these three sequences, but for the purpose of this review I am interested in questioning the significance of their similarities. All three evidence a similar settlement-subsistence pattern characterized by a prolonged residence on the coast with short, resource procurement excursions into the adjacent interior regions. All are characterized by a generalist economic strategy in that both maritime and terrestial resources are utilized.

One consequence of adopting a settlement pattern dependent on maritime resources is that the resulting linear arrangement of neighbors has the potential of restricting social networks. In such cases, social mechanisms must serve to facilitate access to marriage partners as well as to resources during times of regional scarcity. Evidence of just such a social structure can be inferred from the archaeological record. Several late prehistoric Pt. Revenge sites have been identified along the North Shore of the St. Lawrence and in the region about the Strait of Belle Isle. The stone tool assemblages from these sites are nearly identical to those from northern Labrador, both stylistically as well as being manufactured from the distinctive Ramah chert. A site at Pinware, on the Strait of Belle Isle, produced thousands of flakes of Ramah chert attesting to the distribution of Ramah

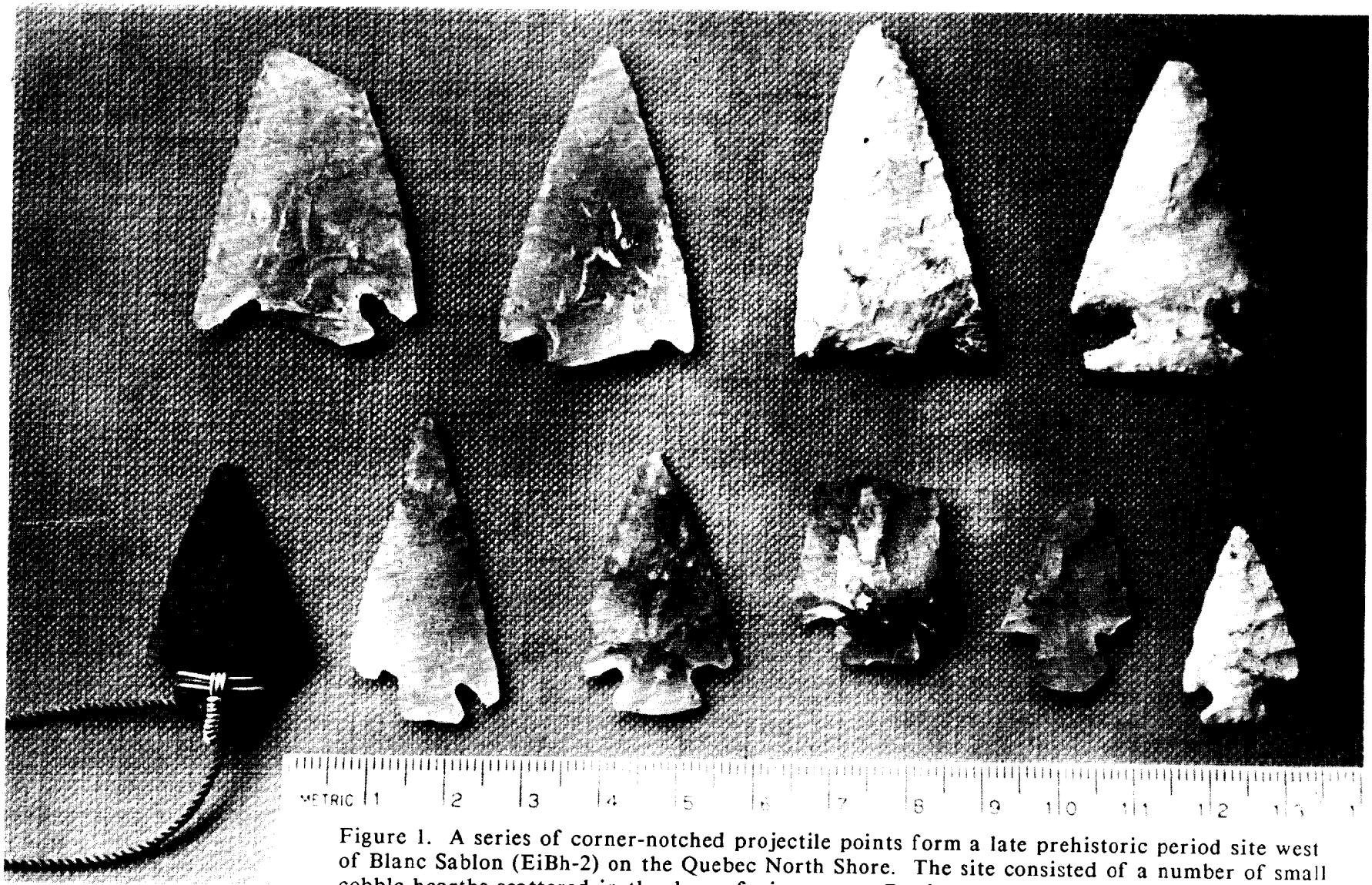
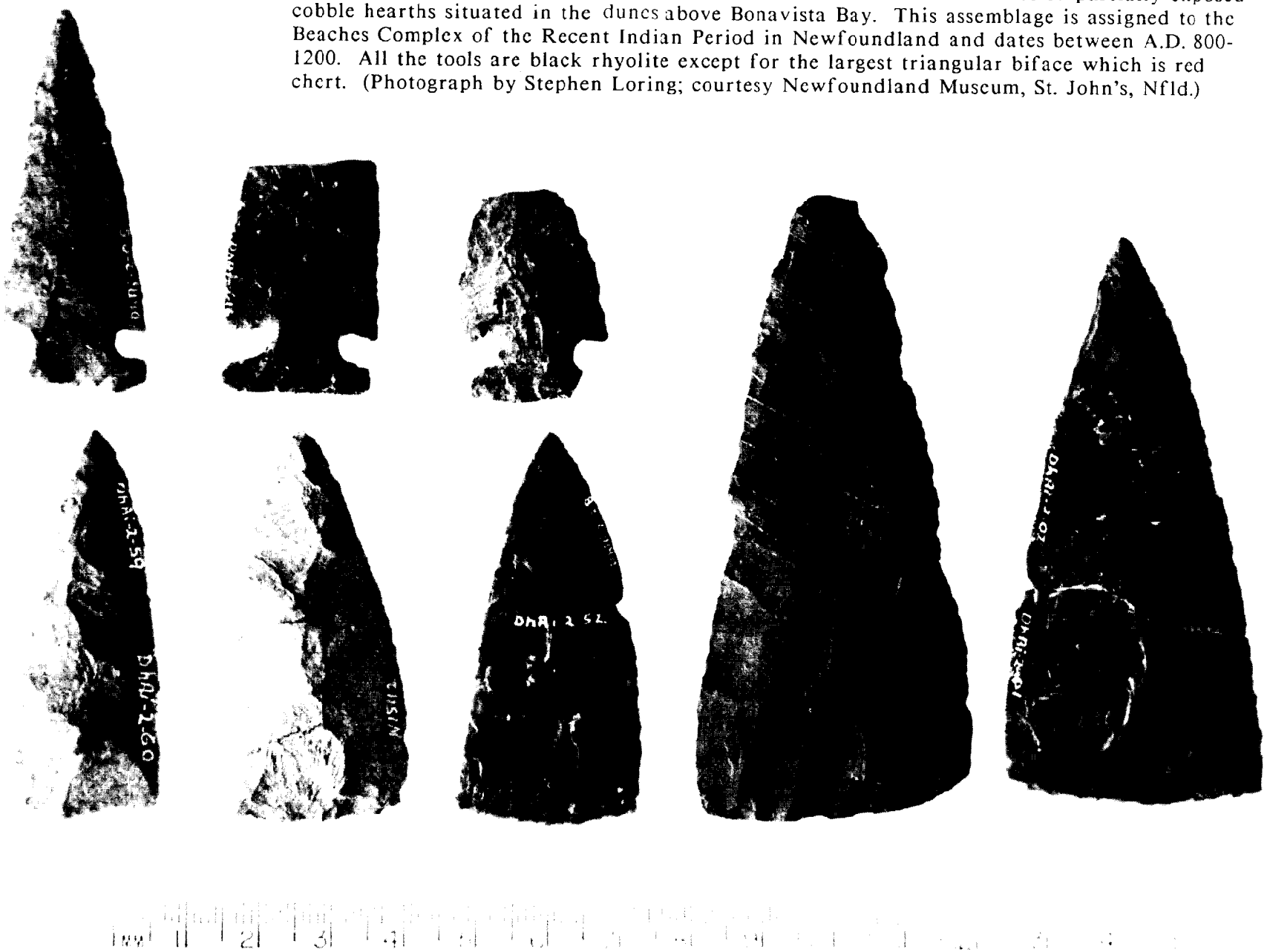


Figure 1. A series of corner-notched projectile points form a late prehistoric period site west of Blanc Sablon (EiBh-2) on the Quebec North Shore. The site consisted of a number of small cobble hearths scattered in the dunes facing out on Bradore Bay and the Strait of Belle Isle. All the projectile points are made of Ramah chert from northern Labrador, except for the two on the right of the tip row, which are made of mottled brown and tan chert from the west coast of Newfoundland, and the last specimen on the right of the bottom row, which is made from a weathered chalky chert. On the basis of stylistic attributes this assemblage is closely allied with the Point Revenge components on the central Labrador coast that date between A.D. 1000-1200. (Photograph by Stephen Loring; Jackson collection, Goose Bay-Happy Valley, Labrador).

Figure 2. A series of corner-notched projectile points and triangular bifaces from Cape Freels-2 (DhAi-2) on the Island of Newfoundland. The site consisted of a series of partially exposed cobble hearths situated in the dunes above Bonavista Bay. This assemblage is assigned to the Beaches Complex of the Recent Indian Period in Newfoundland and dates between A.D. 800-1200. All the tools are black rhyolite except for the largest triangular biface which is red chert. (Photograph by Stephen Loring; courtesy Newfoundland Museum, St. John's, Nfld.)



chert as a raw material for tool manufacture. In this instance the chert had been transported over 1200 kms! The existence of a large scale network of social relations, facilitating this distribution, is a dramatic feature of the late prehistoric period in Labrador; one that contrasts markedly with the notion of tightly bounded social units once popular with ethnographers in the Northeast and which still persist in some archaeological circles.

Further evidence of the pervasiveness of these exchange and information networks is attested by the recognition of Ramah chert artifacts and debitage from late prehistoric sites in Quebec (along the north shore of the St. Lawrence), the Champlain Valley, Maine (especially at the Goddard site), and near the mouth of the Connecticut River. Surprisingly, no Ramah chert has been reported from any of the Quoddy Tradition sites (Sanger, pers. comm.), but this may be indicative of the relatively few sites that have been excavated and by the fact that the debitage from these sites has yet to be analyzed.

Archaeologists frequently suffer from a kind of myopic vision where the mists of time and space obscure the nature of cultural dynamics beyond the immediate confines of the site excavation. Far from just being the static repository of cultural residue, archaeological sites are indicative of complex. interwoven social systems. I would suggest that the broad similarities in the late prehistoric period Indian groups in northern Maine, New Brunswick, Newfoundland and Labrador are evidence that much of the region participated in an, as yet, poorly defined social network that facilitated access to information and distribution of raw materials. It is only with the clarification of regional cultural sequences that the larger patterns will become apparent; and to that end, Sanger's research program in Passamaquoddy Bay is a very important contribution.

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