

## Appendix L

### Native American Special Topics

#### Damariscotta Shell Middens

The Damariscotta oyster shell heaps as well as the hundreds of other clam shell heaps located in the estuaries between the Kennebec and Penobscot rivers document the existence of thriving communities of Native Americans in coastal Maine. While this area was the dominion of the Wawenoc Indians, the numerous trails leading from the Norumbega back country to these coastal sites indicate that these were shared resources used on a seasonal basis by other tribes such as the Kennebecs and Penobscots, who in turn would share their resources such as the Kenduskeag alewife run with the Wawenocs and other tribes. The following list represents a compilation of all the articles and annotations in the Museum files on this subject. Additional citations are welcomed.

Allison, Roland. (1964). Shell heaps around Deer Island. *Maine Archaeological Society Bulletin*. 2. pg. 3-5.

Backman, Dave. (1996). The Lady Slipper Midden Site (14.31). *Maine Archaeological Society Bulletin*. 36(1). pg. 1-16.

Berry, George S. (1898). The great shell mounds of Damariscotta. *New England Magazine*. 19. pg. 178-188.

Castner, Harold W. (1948). *The prehistoric oyster shell heaps of the Damariscotta River*. Damariscotta, ME.

Ceci, L. (1984). Shell midden deposits as coastal resources. *World Archaeology*. 16. pg. 62-74.

Chadbourne, H.P. (1859). Oyster shell deposit in Damariscotta. *Maine Historical Society Collections*. 6(1). pg. 345-351.

Cushman, David. (January 27, 1864). *Clam shell deposits*. col. 110, box 3c/35, manuscripts collection, Maine Historical Society, Portland, ME.

**Cushman, David Quimby.** (1882). *The history of ancient Sheepscot and Newcastle, including early Pemaquid, Damariscotta, and other contiguous places, from the earliest discovery to the present time; together with the genealogy of more than four hundred families*. E. Upton & Son, Printers, Bath, ME.

- A most elegant history of the ancient Sheepscot.
- On clam shell deposits, Cushman notes "There is one of them on what is called the Hawthorne farm in the town of Cushing, once owned by Mr. Isaac Burton. It is a peninsula extending Southward into the St. George's river about ten miles... Here the Indians had their encampment, raised their corn, and continued to live through untold generations. The clam shell deposit was near the bank, helped to form the bank, and was from one to eight or ten feet deep. The whole deposit was about three rods wide and fourteen rods long. It is the accumulation of ages. ...It makes capital soil; and the seed which is cast there, whether it be corn, oats, potatoes or turnips, is sure to produce a plentiful crop. I have never seen better. It is the richest, surest, best part of the farm, by far. The river fogs moisten the crops in summer, and the influence of the salt water keeps back the frosts in autumn. The crop is as certain as anything can be." (pg. 310-311).
- "Here they spent their winters, and when the cod and whale fishery could not be pursued, they resorted to the clam banks for food. These never failed them. In the spring they went up river and caught salmon and shad, and at other seasons of the year they pursued the game..." (pg. 311).
- "In the town of Bremen, on a farm owned by Mr. Jacob Keene is another of these clam shell deposits. It is not so extensive as that in Cushing, yet it is near the water, in a fine, sunny, warm place, at the edge of the river looking Southward, near a spring of water, and defended in the rear by rising grounds and dense forests. ...Excellent corn grew there in the summer of 1863." (pg. 312).
- "On the upper end of Loud's Island, formerly Muscongus Island, is found another of these beds of clam shells. It was once undoubtedly quite extensive; but the most of the bank containing it, has been washed away by the heavy seas that roll in, during Southeasterly storms, from the broad Atlantic." (pg. 321).
- "The spot chosen for encampment was similar to the others described;--on the bank, and near the mouth, of a river; never in the interior; with fresh water at hand, and an easy water communication in different directions. The spot was level and sunny, looking Southward, and defended from the cold raw winds which swept down from the interior. The clam banks were near." (pg. 313).
- "Oyster shell deposit in Newcastle. ...On that rich and beautiful peninsula, was their encampment. Here they lived, and died, and were buried. All the marks of savage life found at clam shell deposits are found here. In this place they cooked and eat their oysters; and the shells were carried out and deposited in a precisely similar manner that the Indians did the clam shells at the mouths of the various rivers. But where did they get their oysters? In the stream that ran by their place of settlement in the large bay above and in Oyster Creek which enters into this bay on the eastern side. Here they used to be found in abundance, but when the mills were put upon the river, which was done at an early period of the settlement, they were killed out. An occasional one is now found; and Captain Samuel Glidden who was born upon this point, and till within a short time (1852, when this was written) owned and resided here, has told me that within the period of his remembrance a bushel of oysters have been taken out of this creek in a single tide. ...The chief deposit is at the Eastern point on the bank of the river and opening into the bay above, and on the Northern point upon the bay, and opposite to the island where was their place of interment." (pg. 313-314).

- "It is supposed by many that in this vicinity was the lost 'city of New England' called Norumbega, or the ancient city of Arumpeag which is thought to mean the place of men. And on an island in the beautiful bay above, traditions says, was the place where they used to bury their dead." (pg. 315).
- "When the settlers first came to these parts, vessels used to come from the Westward to dig for oysters and carry them away and they found it a profitable business. But as soon as the thick deposit of saw dust which constantly came down from the mills situated above that the English erected there, began to accumulate on the bottom, and sunken slabs and other lumber increased, the breathing holes of the oysters were stopped, their sustenance was cut off and they perished." (pg. 315).
- There is extensive commentary on the Indian cemetery at the northern tip of Loud's Island, now washed away. "The specimens carried away have been almost endless, and some are found there at the present time. The sea has also done its part in carrying away these relics of the dead. About twenty acres have been washed away within the memory of man, and with it the entire cemetery of these sons of the forest." (pg. 317).
- See the other annotations for this text in the Ancient Pemaquid bibliography.

Goldthwait, Richard P. (1935). The Damariscotta shell heaps and coastal stability. *American Journal of Science*. Series 5. 30. pg. 1-13.

Johnson, F. (1935). *Excavations in the Glidden shell heap on the Damariscotta River, Newcastle, Maine*. Unpublished manuscript. R. S. Peabody Foundation, Andover, MA.

Loomis, G.F. and Young, D.B. (1912). On the shell heaps of Maine. *American Journal of Science*. 34. pg. 17-42.

- "...it must be then deduced that the original object, of coming to the sea shore, was not clams but rather fishing, and possibly hunting, but especially fishing." (pg. 20).
- "...Sawyer's Island is characterized by the tremendous abundance of deer remains, so that it would appear that the hunting must have rivalled the fishing, as doubtless this island was then a part of the mainland." (pg. 20).
- "...and staple food, on this Island [Sawyer] was the great auk, the bones of which occurred in large numbers, as did those also of many other birds, many of which we have not been able to identify." (pg. 21).
- "That they were spring camps is also confirmed by the condition of the horns on the crania of the male deer, which were found in the heap." (pg. 22).
- "Lastly these heaps are also testimony to the sinking land, for the camps were beyond doubt originally well above the tide's reach." (pg. 22).
- Large numbers of deer jaw bones were recovered from Sawyer's Island. (Table, pg. 24).
- "The absence of individuals with partly developed or perfect antlers indicates, further, that the camps were simply spring camps, which also coincides with the best fishing season, and is the evidence that these heaps were made during periodic visits to the sites." (pg. 25).

Mercer, Henry C. (1897). An exploration of aboriginal shell heaps revealing traces of cannibalism on the York River, Maine. *Publications of the University of Pennsylvania, Series in Philology, Literature and Archaeology*. 6. pg. 111-137.

Morse, Edward Sylvester. (1868). Evidence of great antiquity in the shell heaps at Goose Island. *Boston Society of Natural History Proceedings*. 11. pg. 301-302. W.

Moses, T.F. (1878). Shell heaps of Maine. *Proceedings, Central Ohio Scientific Association*. 1. Urbana, OH. pg. 70-76.

Myers, A.C. (1965). *The Damariscotta oyster shell heaps: Some further considerations*. Unpublished senior thesis. Department of Anthropology, Princeton University.

Prentiss, D.W. (1903). Descriptions of an extinct mink from the shell-heaps of the Maine coast. *Proceedings of the U.S. National Museum*. 26. pg. 887-888.

Putnam, Frederick Ward. (1883). Shell heaps on the coast of Maine. *Science*. 1. pg. 319.

Sanger, David and Kellogg, Douglas E. (1983). Preliminary report on sea-level rise in the Damariscotta Estuary, central Maine coast. In: *New England seismotectonic study activities in Maine during fiscal year 1982*. Thompson, Woodrow S. and Kelley, Joseph T. Eds. Maine Geological Survey, Augusta, ME. pg. 137-145.

Sanger, David and Sanger, Mary Jo (Elson). (1986). Boom and bust on the river: The story of the Damariscotta oyster shell heaps. *Archaeology of Eastern North America*. 14. pg. 65-78.

- "As sea-levels rose throughout the Holocene, head of tide pushed upstream and over bedrock sills in the Damariscotta River. Oysters followed, and found a fertile niche that was basically predator free. Some time around 2400 B.P. Native Americans discovered the oysters, and by 1500 B.P. had built shell middens up to 30 ft (9 m) high. Increasing sea-level rise resulted in higher salinity levels, and eventually predators such as oyster drills joined forces with the Native Americans. Shortly thereafter the oysters were annihilated and the humans moved on, seeking more fertile ecosystems." (pg. 65).
- "We construct a series of events that attests to a heavy dependency on a single species, such that when the species was eliminated, the Native Americans abandoned the area." (pg. 65).
- "In the nineteenth century, few archeological sites in northeastern North America attracted as much attention as did two large oyster shell heaps and numerous lesser ones along the Damariscotta River in Maine." (pg. 165).
- "Native American oysters no longer flourish in the Damariscotta River, and likely did not in numbers for several centuries." (pg. 67).
- "All of these discussions related to the cultural significance of the oyster shell middens were severely limited by the poorly developed state of knowledge of regional prehistory. Even in

1965, Myers had to refer to outdated concepts in place since the 1930s, especially as reviewed by Willoughby (1935)." (pg. 69).

- "Local folklore also claimed that the sites were major Native American settlements occupied in the 17th century (Castner 1954), despite the total absence of any evidence to support the assertion." (pg. 69).
- "Gamage's notes and sections, ...led to speculation about the length of time that the site was used, and the presence of three distinct periods of occupation. A recent analysis of the Whaleback collection at the Peabody Museum indicated a rather different interpretation." (pg. 70).
- "The ceramics constitute the bulk of the diagnostic artifacts." (pg. 70).
- "The analysis of the two largest middens, Glidden and Whaleback, suggests that the middens began to accumulate somewhere around 2400 B.P. and were probably abandoned before 1000 B.P., or long before Europeans colonized the area in the 17th century. The period of greatest utilization, based on the ceramics, would be from about 2200 to 1500 B.P. It should be noted that some later occupation along the banks of the Damariscotta is indicated by the presence in a local collection of very late prehistoric to Contact period artifacts from a small midden downstream of the Glidden site. Significantly, the collector told Sanger that he found the artifacts in a clam midden context overlying an oyster midden." (pg. 72).
- "Downstream of the study area, recent surveys by the University of Maine have documented nearly 200 clam shell middens in the estuaries of the Damariscotta and the adjacent Sheepscot rivers, many of them with Late Ceramic period (post-1200 B.P.) occupations." (pg. 76).

Sewall, Rufus King. (1895). *Ancient voyages to the western continent: Three phases of history on the coast of Maine*. The Knickerbocker Press, NY, NY. IS.

- More quotations and annotations on this text can be found in the Ancient Pemaquid information file: The First Colonial Dominion of Maine and in the essay on Sylvanus Davis.
- The following quotation is taken from pages 24 - 28:

#### SITE.

Damariscotta river is an inlet of the sea, inland off Monhegan Island, in the County of Lincoln ; an effluent of the tide-waters of Pemaquid, expanded into a shallow bay or basin above the flow of the Salt-water Falls, at the foot of a fifty-foot fresh-water cascade, over which a great lake above, embracing the waters of Muscongus and Damariscotta Lakes rush to reach the salt sea below. The Indians called the site, with its environment, 'Ped-auk-go-wack,' 'place of thunder.'

Popham colonists wrote of this river. They called it 'Ta-mes-cot,' embodying native sounds, descriptive of the food resources of its waters.

The Indian said of it : 'Na-mas-coota' : 'fish water place.' The Penobscots still call it 'Madamas-couta,' as Sabattis interprets it : 'Many fish (alewices) water.'

Father Rasle, in *Jesuit Relations*, records 'that during a month fish ascend in such numbers, one could fill fifty thousand barrels a day, could the labor be endured -- the fish crowding one upon another, a foot deep.'

## DEPOSIT OF SHELLS

They are heaped chiefly in marginal aggregation, along the shores of the outlet of the basin described, near the 'Salt-water Falls,' so called at the meeting of the bay above, with the tide waters below, on both shores.

The shells are chiefly of the oyster in mature condition, and of very large size. Gilbert of the Popham Colony wrote home in 1607, 'their men found oysters there, nine inches long, and heard of others twice as big.' The nine-inch oyster was a shell-fish of the river, 'Ta-mes-cot,' and the bigger ones in a river near on the other side, *i.e.*, the Sheepscott, where big fat fellows still grow.

The shells are horizontally disposed, shell on shell, ends to the shore. They are seldom found in pairs, but laying on the side instead of on edge, shell within shell.

There is a central heap on the east shore, back of high-water mark, left as if rolled in a mighty wave, thirty odd feet deep, oval shaped, terraced with smaller heaps, from five to fifteen feet diameter, as seen in 1859. This ridge has since been dug over for grinding up the shells into hen-food. High-water mark was found to be the base-line of the shell heaps on both shores of the outlet. On the west, the shells are piled from the water-line at a sharp angle, twenty-five to thirty feet, showing nearly a vertical fall, the shells horizontally disposed, shell lying in shell, layer on layer, no shells mated, quite perfect in condition.

This deposit is interleaved with dark, rich vegetable mould, indicating lapse of periods of time intervening, sufficient to make a few inches of soil.

An arched tunnel for twenty-five feet by three feet in diameter had been cut into the deposit on the west shore side, and disclosed only shells in different stages of decay, bleached on the surface, cream colored and friable beneath. Many shell mounds are distributed over the entire shell-covered area of the peninsula of the west shore of the outlet of the bay or basin, at the foot of the great falls of 'Ped-auk-go-wack.'

'The great heaps are made up of the oyster, exclusively. The shells are of extraordinary size, and belong to a variety not much found on this coast, the long-necked species. The heaps are immense in size, covering acres.'

## GEOLOGICAL MEASURE.

These shell deposits were measured by Dr. Jackson in 1838 for his geological survey of Maine, and his official report makes them 'one hundred and eight rods long by eighty to one

hundred wide, and twenty-five or six feet deep ; making not less than forty-four million, nine hundred and six thousand cubic feet.'

#### RELICS, INDUSTRIAL AND KITCHEN.

In and throughout these deposits are bits of charcoal, bones of fish and animals, and of the human frame ; stone hatchets, chisels, and deep-sea sinkers ; bone stilettos, and tools of art and the chase ; pottery, sometimes ornamented ; and even lumps of clay...

Smith, Walter B. (1929). *The Jones Cove shell-heap at West Gouldsboro, Maine*. Bulletin I, The Robert Abbe Museum, Bar Harbor, ME.

- Out of print.

Snow, D.R. (1972). Rising sea level and prehistoric cultural ecology in northern New England. *American Antiquity*. 37(2). pg. 211-222.

- This article contains extensive discussion of the shell middens along the Maine coast including those at the Damariscotta estuary.
- "The earliest date from the Damariscotta midden indicates that a shift toward the exploitation of shellfish along the Maine coast was underway by 1900±250 radiocarbon years: A.D. 50 (Snow 1969:3). Bourque (1971) infers a similar beginning date for midden accumulation at his sites on Deer Isle on the basis of ceramic attributes cross-dated with sherds of known age from New Brunswick and New York. It is convenient for the present to use A.D. 1 as the probable beginning of shellfish exploitation." (pg. 212).
- "Most middens are made up almost exclusively of the common clam; in a few instances, they are composed almost entirely of quahog shells. It is not clear which of these represent early 'pre-clam' middens, and which (if any) are early historic accumulations that resulted from the florescence of wampum manufacture from quahog shells. Finally, there are huge middens in 1 locality that are made up almost entirely of oyster shells." (pg. 214).
- "The largest heap, Whaleback, was removed for commercial purposes in the 1880's. Whaleback was originally 347 ft long, 123 ft wide, and 16 ft thick at the center." (pg. 214).

Varney, Lloyd H. (1971). A Blue Hill Bay coastal midden site. *Maine Archaeology Society Bulletin*. 2(1). pg. 14-32.

Wyman, Jeffries. (1867). An account of some of the kjøkkenmøddings, or shell-heaps, in Maine and Massachusetts. Essex Institute Press, Salem, MA.

#### **The Indian Pandemic of 1617-1619**

Ashburn, Percy M. (1947). *The ranks of death: A medical history of the conquest of America*. Ashburn, Frank D., Ed. NY, NY.

Cook, Sherburne F. (1973). Interracial warfare and population decline among the New England Indians. *Ethnohistory*. 20(1). pg. 1-24. X.

- "The tremendous decline in numbers suffered by the North American Indians in the early days of European colonization may be ascribed to a number of factors. Among these is disease introduced by the whites, which accounted certainly for more than half the population loss. Also of outstanding significance was warfare." (pg. 1).
- "There were three periods of intense military effort, the Pequot War, 1634, the Dutch War, 1643, and King Philip's War, 1675-1676. The number of Indians killed on the field of battle is estimated as 2,950, or close to eight percent of the total population loss suffered by the tribes concerned during the period from 1620 to 1750." (pg. 1).
- "The second serious conflict involved the inhabitants of the central Maine coast, an Algonkian group known as the Etechemin. Gorges (1837) places a great war just prior to 1616-1618: '...for that war had consumed the Bashaba and most of the great sagamores ... and those that remained were sore afflicted with the plague (of 1617) so that the country was in a manner left void of inhabitants.'" (pg. 2).
- "Nevertheless, as Williamson (1839) pointed out, the great Sagamore, or Bashaba, held in dominion the valleys of the Penobscot, Pemaquid, Kennebec, and Saco. He was undoubtedly killed, together with most of his subordinate chiefs, the villages were destroyed, and the survivors subject to famine. All this happened, according to Gorges, prior to the plague which finished them off, and indicates extraordinary devastation. It will be noted that we have here no exact estimates of the number of lives lost. On the other hand, the evidence is strong that there was almost total destruction." (pg. 3).

Cook, S.F. (1973). The significance of disease in the extinction of the New England Indians. *Human Biology*. 45. pg. 485-508.

Crosby, Alfred W., Jr. (1972). *The Columbian exchange: Biological and cultural consequences of 1492*. Greenwood Press, Westport, CT. IS.

Crosby, A.W. (April 1976). Virgin soil epidemics as a factor in the aboriginal depopulation in America. *William and Mary Quarterly*. 23(2). pg. 289-299. IS.

- "Virgin soil epidemics are those in which the populations at risk have had no previous contact with the diseases that strike them and are therefore immunologically almost defenseless." (pg. 289).
- "...many of the most important events of aboriginal history in British America occurred beyond the range of direct observation by literate witnesses." (pg. 290).

Dobyns, Henry F. (1966). Estimating aboriginal American population: An appraisal of techniques with a new hemispheric estimate. *Current Anthropology*. VII. pg. 395-449.

Dobyns, Henry F. (1983). *Their number became thinned*. University of Tennessee Press, Knoxville, TN.

Hoornbeek, Billee. (1976-1977). An investigation into the cause or causes of the epidemic which decimated the Indian population of New England 1616-1619. *New Hampshire Archaeologist*. 19(7). pg. 35-46.

Jacobs, Wilbur R. (1974). The tip of an iceberg: Pre-Columbian Indian demography and some implications for revisionism. *William and Mary Quarterly*. 3rd ser. XXXI. pg. 123-132.

Malone, Patrick M. (1991). *The skulking way of war: Technology and tactics among the Indians of southern New England, 160 - 1677*. Madison Books, Lanham, MD.

Massachusetts Historical Society. (1837). Gorges' brief narration. *Massachusetts Historical Society Collections* 6. Third Series. American Stationers' Company, Boston, MA.

- "See Chapter 10, pg. 57, for information on the plague of 1616-1620." (Ray, *The Indians of Maine*, pg. 41).

Miller, Virginia P. (Spring 1976). Aboriginal Micmac population: A review of the evidence. *Ethnohistory*. 23(2). pg. 117-127. IS.

- See the annotations in the Native Americans Principal bibliography.

Snow, Dean R. and Lanphear, Kim M. (1988). European contact and Indian depopulation in the northeast: The timing of the first epidemics. *Ethnohistory*. 35(1). pg. 15-33. X.

- "The efforts of Dobyns (1966, 1983) notwithstanding, there is still little certain knowledge about pre-1500 population levels." (pg. 15).
- "While the 1616 epidemic was the first to appear in the Northeast, the sources clearly indicate that it did not spread far into the interior. The first epidemic to reach the interior was probably the 1633 smallpox epidemic." (pg. 23).
- "We conclude that it was the introduction of susceptible and possibly infected children along with the shortened transatlantic crossing that determined the timing of the first smallpox epidemics in the Northeast." (pg. 28).
- "It is unnecessary to assume a series of pandemics in the Eastern Woodlands during the sixteenth century. Indeed, given the known effects of the epidemics in the Northeast, the assumption of earlier equally severe epidemics would necessarily entail the projection of unrealistically high population levels for 1520." (pg. 28).

Spiess, Arthur E. and Spiess, Bruce D. (1987). New England pandemic of 1616-1622: Cause and archaeological implication. *Man in the Northeast*. 34. pg. 71-83. IS.

- "Between 1616 and 1622 a virulent pandemic spread through coastal Massachusetts, New Hampshire, and southern Maine. Local mortality ranged close to 100%, causing dramatic social change. Symptoms of the diseases reported by European explorers implicate hepatic failure. The causative agent may have been a hepatitis virus. ...The current lack of archaeological visibility of the catastrophe should be considered by research archaeologists." (pg. 71).

Starna, William A. (1992). The biological encounter: Disease and the ideological domain. *The American Indian Quarterly*. 16(4). pg. 511-519. X.

Williams, H.V. (1909). The epidemic of the Indians of New England 1616-1620, with remarks on Native American infections. *Johns Hopkins Hospital Bulletin*. 20. pg. 340-349.

### **Pathways and Canoe Routes of Native Americans in New England**

Cook, David S. (1985). *Indian canoe routes of Maine*. Covered Bridge Press, North Attleborough, MA. IS.

- Cook, a Maine archaeologist and teacher, has spent a lifetime canoeing through the back woods of northern Maine. Cook uses Fannie Eckstrom's research, many of them unpublished papers from the Folger Library in Orono, including her unpublished *Indian Trails of Maine* (ca. 1920) as a jumping off point for his description of the canoe routes of Maine.
- "All rivers have places where the fishing is still excellent. On the major canoe routes such a spot is most assuredly an ancient campsite. These places are particularly evident when ascending a river in a canoe. The rapids that today require a portage are the same as they have been for the last few thousand years. Most towns have their old mill dams built over falls where Indians fished. The falls made the fish easy to catch for the Indian, and provided power for the mill wheels of pioneer industry, nuclei for many small towns." (pg. 26).
- "The Indians first burned one side of the log and then dug out the charred wood with stone tools until they had a depression suitable for cooking. Cold water and the meat were put into the hollowed log and red hot rocks were dropped in until the meat was cooked to the broth they loved." (pg. 28).
- "Old beaver ponds were free of obstructions for canoes because the dead wood and stumps had been rotted away by years of flooding. In the old days canoe travelers would break open small dams allow the water to run for an hour or so to fill up a small brook so that their canoes would float. The industrious beavers would repair the hole during the night to save the precious water for their own purposes." (pg. 40).
- "The prehistoric canoe routes of Maine fall into four general categories: major routes, short routes, cut-offs, and neighborhood routes. The major routes were along the great north-south rivers; the Saco, Androscoggin, Kennebec, Penobscot, St. John, and their major tributaries. These routes ended in some important place, such as a large town or tribal center, ...The short routes went over the interconnecting tributaries and allowed direct travel between *watersheds when water levels permitted*. ...The cut-offs were used for safety and convenience and are

characterized by the numerous portage points that have been found on the coastal peninsulas. The ocean is very dangerous for canoes and the carry paths across the long and narrow capes saved the paddlers many miles of dangerous paddling in cold waters and high waves. ...neighborhood routes, were byways through hunting and trapping regions but had poor connections as canoe routes to any other place." (pg. 42-44).

- "The mid-coastal region from the Kennebec to the Penobscot, like the rest of the Maine coast, has many excellent canoe routes. The Eastern, Sheepscot, Damariscotta, Medomac, and St. George Rivers all rise in the area south of Soudabscook Stream, a Sebasticook/Penobscot canoe route. These rivers roughly parallel each other and outlet in the ragged coastal region so popular with tourists today. Many tourists would be surprised to know just how long people have been going there for clams, lobsters, and cool sea breezes." (pg. 55).
- "Coastal canoeing is very dangerous. The rocky shores, strong tides, and sudden storms make canoe travel difficult at best. The Indian canoe travelers sought the safest way and took advantage of the numerous options offered by the various rivers and lakes. These are situated in such a way as to afford interior canoe routes paralleling the coast and traversing good hunting terrain with no exposure to the sea. The many islands of the coast provide protected inside passages for canoe travelers while sheltering them from the rough conditions in the Gulf of Maine." (pg. 56).
- "At places like Pemaquid Point, open for miles to the sea, the coast was impossible for canoes. To avoid this dangerous stretch the Indians had a cut-off from the Damariscotta River to New Harbor, and another to Round Pond and no doubt another higher up to Broad Sound." (pg. 56).
- "The Indians had an inside route from the blue hills of Camden east to Belfast. On the east side of Penobscot Bay the coastal rivers provided interior canoe routes all the way to Lubec in extreme eastern Maine." (pg. 56).
- "The Aroostook River, important for its many canoe routes, also runs very close to important outcroppings of 'Munsungun cherts,' that the native people valued for making stone tools." (pg. 93).
- "These Munsungun cherts, like the felsite of Mount Kineo, have acted as a magnet drawing people into the Munsungun Lake region since the end of the last Ice Age. At some point in the distant past, they began coming by canoe. A careful study of the canoe routes and the distribution of Munsungun chert in archaeological collections may yield important insights about canoes and ancient trade in this material." (pg. 93).
- For more comments on this book see the essay on pathways and canoe routes of Native Americans in the Norumbega Reconsidered and the Wawenoc Diaspora Section.

Groening, Tom. (September 23, 2000) Augusta road less traveled. *Bangor Daily News*. pg. B3.

Hallett, Leaman F. (April 1956). Indian trails and their importance to the early colonists. *Bulletin of Massachusetts Archaeological Society*. XVI. pg. 41-46. X.

- "Thomas Purchas came to Maine from England about the year 1626, landing at Saco. From the eastern part of Casco Bay there was an Indian thoroughfare that led to the falls of the

Penobscot in what is now the town of Brunswick. Skirting the shores of Casco Bay and journeying by this route, Purchas reached the falls and found a very favorable location for trade with the Indians as they descended the river in passing from their villages to the mouth of the Sagadahoc, or to the camping grounds on the shores or islands of Casco Bay. In establishing himself at the falls he secured the Indian trade of the Androscoggin in the same way as the Pilgrims of Plymouth, in erecting their trading house at Cushenoc, now Augusta, secured the Indian trade of the Kennebec." (pg. 41-42).

- "The Connecticut path from Boston to Windsor, Hartford and Weathersfield saw generations of colonists pass along the way before it widened for cart or coach travel. For a long period the ancient Indian trail remained a path, although it admitted the passage of footmen, horsemen and driven cattle. It played a major part in the establishment of the postal system in this country. The first colonial post route was started in 1672 between New York and Boston by way of Hartford, and the post rider of that day traveled over the old Indian trails between these points. The many lakes and ponds along its course were bountifully supplied with fish, and an occasional Indian village offered its crude hospitality to the early settlers. Wilderness homes sprang up at favored places long before towns were settled. Then, as now, the ninety-five miles to Windsor and the one hundred and two miles to Hartford pay tribute to the Indian facility in choice of terrain." (pg. 44).

Haviland, William A. (2005). A safe passage to the sea: An ancient canoe route at Deer Isle, Maine. *Maine Archaeological Society Bulletin*. 45(1). pg. 25-30. IS.

Marlowe, George Francis. (1942). *The old bay paths: Their villages and byways and their stories*. Hastings House, Publishers, NY, NY. IS.

Stark, William. (1988). *Indian trails and superhighways*. American Canal and Transportation Center, York, PA.

Wallace, Paul A. W. (1965). *Indian paths of Pennsylvania*. Harrisburg, PA.

Williamson, Joseph. (1859). Castine and the old coins found there. *Collections of the Maine Historical Society*. Volume VI. pg. 105-126.

- "It was not on the peninsula that these coins were found, nor within the limits of the town of Castine, but on the banks or shore of the Bagaduce River, about six miles from the site of Castin's fort, in the town of Penobscot. This river, at its mouth, forms the harbor of Castine, and is navigable for small vessels for several miles above the village. At about six miles above, is a point called 'Johnson's Narrows,' or 'Second Narrows,' ...A path leads across the point, and from the adaptation of the shore as a landing place, it is probable that the usual passage from Biguatus to Mt. Desert, was up this river as far as the narrows. Near the narrows the coins were discovered. ...some twenty-five yards from the shore, and in the direct line of a beaten track through the bushes, which has been used as a path across the point for a time beyond the remembrance of the oldest inhabitants. At the termination of this path on the shore, is an indentation or landing place, well adapted for canoes, and the natural

features and facilities of the spot are confirmatory of a tradition that one of the Indian routes from the peninsula to Mount Desert and Frenchman's Bay was up the Bagaduce river, and from thence across to Bluehill Bay." (pg. 114-115).

## Petroglyphs in Maine

The petroglyphs of Maine constitute one of the most interesting archaeological fragments that remain as testament to the thriving Native American communities who once inhabited the shores and rivers of coastal and inland Maine. This section of The Davistown Museum bibliography is dedicated to the memory of Joan Haskell Brack (1939-1999), a distant descendant of Native Americans, who was interested in and helped facilitate the documentation of the petroglyphs on her property at Holmes Point in Machias Bay. The Native American displays in The Davistown Museum are also dedicated to the memory of Joan. We hope to expand this special topic bibliography as time allows and provide a complete listing of all the citations on this topic. The following is a preliminary listing.

Hedden, Mark H. (1983-1987). *Maine Archaeological Society Bulletin*.

- The following articles in the *Maine Archaeological Society Bulletin* are all on petroglyphs. References courtesy of Ray and Faulkner.
  - Vol. 23, no. 1 (Spring 1983)
  - Vol. 23, no. 2 (Fall 1983)
  - Vol. 24, no. 1 (Spring 1984) "Sexuality in Maine Petroglyphs"
  - Vol. 24, no. 2 (Fall 1984) "The Form of the Cosmos in the Body of the Shaman"
  - Vol. 25, no. 1 (Spring 1985) "Petroglyphs on Hog Island, Machias Bay"
  - Vol. 27, no. 1 (Spring 1987)
  - Vol. 27, no. 2 (Fall 1987) "Canoe Figures at Embden and Machiasport."
  - Vol. 31, no. 1 (Spring 1991) "A winged figure incised on a slate pebble."

Hedden, Mark. H. (Spring 1989). Petroglyph evidence for a possible 19th century survival of Algonkian (Passamaquoddy) shamanism in eastern Maine. *Maine Archaeological Society Bulletin*. 29(1). pg. 21-28.

- The article deals with the Elliott site, Grand Lake Stream, Maine. Reference courtesy of Ray and Faulkner.

Hedden, Mark. H. (2002). Contact period petroglyphs in Machias Bay, Maine. *Archaeology of Eastern North America*. 30. pg. 1-20. IS.

Lahti, Eric. (1976). *Oil rubbings of petroglyphs*. *Maine Archaeological Society Bulletin* 16(1). pg. 30-31.

Lahti, Eric. (1976). *The Machias petroglyphs*. Maine Archaeological Society Bulletin 16(2). pg. 3-6.

Lahti, Eric. (2001). *Goodwill-Hinckley archaeological survey 1996*. Maine Archaeological Society Bulletin 41:1. pg. 25-34.

Mallery, Garrick. (1893). Picture-writing of the American Indians. *Tenth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1888-1889 by J. W. Powell, Director*. Government Printing Office, Washington, D.C. Reprinted in 1972 in 2 vols. by Dover Publications, Inc., New York, NY. IS.

Ray, Roger B. (1985). The Machiasport petroglyphs. *Maine Historical Society Quarterly*. 25(1). pg. 22-39.

Ray, Roger B. (1987). The Embden, Maine petroglyphs. *Maine Historical Society Quarterly*. 27(1). pg. 14-23.

Ray, Roger B. (1991). The petroglyphs at Grand Lake Stream, Maine. *North American Archaeologist*. 12(3). pg. 257-268.

Snow, Dean R. (1976). The Solon petroglyphs and eastern Abenaki shamanism. In: *Papers of the Seventh Algonquian Conference*. Cowan, William, Ed., Carleton University Press, Ottawa, Canada. pg. 281-288.

Whitehead, Ruth Holmes. (1992). A new Micmac petroglyph site. *The Occasional*. 13(1). pg. 7-12.