

In 1928, the Abbe Museum became the first institution in Maine to support archaeological research. Today, that tradition continues with ongoing research, testing, and the field school. In this exhibit you will visit a few of the sites that the Abbe has excavated since 1928. Discover what the archaeologists set out to learn and what information they actually uncovered. View artifacts, illustrations, and photographs from the following sites:

- Jones Cove, 1928
- Taft Point, 1936-1937
- Ellsworth Falls, 1946-1955
- Ruth Moore, 1991-1994
- Seboomook Lake, 2004
- Ewing-Bragdon, 2008-2009

JONES COVE, 1928

The Jones Cove shell midden in eastern Maine was the Abbe Museum's very first excavation. The excavation took place in August 1928, the same month that the Museum opened at Sieur de Monts Spring. The dig, along with the new museum, generated a great deal of interest in both archaeology and local Indian history, as well as the Abbe. Visitors from afar came to watch and the *New York Times* even reported on the excavation.



Dr. Warren K. Moorehead, curator at the R.S. Peabody Museum of Archaeology in Andover, Massachusetts, directed the dig for the Abbe and had conducted archaeological surveys and excavations in Maine for 20 years.

What did they want to know?

In 1928, as today, both archaeologists and members of the public shared a great interest in learning how people lived in the past.

Some of the questions asked by the volunteers who dug at Jones Cove were:

"Did Native Americans chew gum?"

"Did they hunt whales?"

What have we learned?

We don't know if Native Americans chewed gum. Today, many people enjoy spruce gum—the resin from the spruce trees that hardens into a bitter, chewable gum. This gum, also known as pitch, was historically used by Native Americans to seal their birchbark canoes.

You will find evidence in this exhibit that indicates that Native Americans made use of whales, either hunted or scavenged as beached carcasses.

What did we find?



Stone Tools Animal Jaws Bone Tools

References

The Jones Cove Shell-Heap at West Gouldsboro, Maine. Robert Abbe Museum, Walter B. Smith. 1929.

TAFT POINT, 1936-1937

Taft Point is one of only a handful of coastal sites with a record of human occupation extending back several thousand years, a time period referred to as the Archaic. Archaic Period sites date to 3,000 years ago or older.

Wendell Hadlock excavated Taft Point under controlled excavation conditions. A table in the site report illustrates the pattern of artifact distribution.

The figure reproduced here illustrates the pattern of artifact distribution from the earliest Archaic Period level to the Ceramic Period levels. What patterns do you see?

Relative distribution of artifacts at Taft Point	Lowest Horizon of black humus	Lowest Horizon of shells & fire dirt	Upper Horizon of shells & fire dirt
Plummets	59	1	0
Hammerstones	36	5	15
Slate points	12	3	0
Adzes	8	22	7
Grooveless axes	2	8	7
Knives		VILLE	100
large	11	5	1
small	13	18	12
Arrowheads	200	200-1	1100
straight stemmed	23	1	0
notched	21	52	43
Scrapers			
large	19	7	0
small	13	63	44
Projectile points (stone)	8	10	0
Drills	3	9	6
Bodkins	0	21	6
Needles	0	3	6
Awls		10	20
Projectile points (bone)	3 2	0	0
Harpoons			
large	11	2	2
small	0	16	7
(moose and deer bone)	0	4	0
Flakers (antler)	6	9	3
Beaver teeth (artificially sharpened)		53	38
Bone beads	7	0	0
Stone ornaments	8	1	ō
Pottery	0	35%	65%

Archaeologists uncovered a pilot whale skull during the 1937 excavation at Taft Point, pictured here. In 1997, Dr. Greg Early from the New England Aquarium in Boston confirmed that it is a pilot whale (*Globicephalia melaena*), also known as a blackfish or pothead whale. At the time, Dr. Early said that this archaeological specimen was 10-15% larger than the Aquarium's living pilot whale, a young female. Pilot whales are medium-sized whales, weighing 360-900 lbs. and reaching a length of up to 16 feet. This toothed whale feeds primarily on squid.

What did they want to know?

"How old were the lowest levels of Taft Point and did they represent a culture different from the upper level?" Hadlock observed that the upper levels of the site contained pottery, while the lower levels were potteryfree. He also saw differences in the kinds of tools represented in each zone.



What have we learned?

The lowest level of Taft Point did represent an older, distinctly different culture from the upper levels. The earliest level at Taft Point produced an assemblage of tools including plummets, ground stone tools, slate points, hammerstones, and stemmed projectile points. This tool kit grouping is associated with the Late Archaic Period by archaeologists and dates to between 5,000 and 3,000 years ago. We have also learned that the pottery-bearing levels of Taft Point date to the Ceramic Period. Dating to the most recent 3,000 years of the archaeological record, the Ceramic Period tool kit includes clay pottery, small notched projectile points and bone tools.



The site was mapped with a grid system and profiles of the stratigraphy pictured here, that enabled Hadlock to pinpoint the exact location of artifacts horizontally and vertically.

References

The Taft's Point Shell Mound at West Gouldsboro, Maine. Wendell S. Hadlock. Robert Abbe Museum, Bar Harbor, ME, 1939.



ELLSWORTH FALLS, 1946-1955

The Ellsworth Falls project was the beginning of a long collaboration between Wendell Hadlock (pictured here at left), of the Abbe Museum and Douglas Byers (right), director of the Robert S. Peabody Museum of Archaeology, Andover, Massachusetts.

The first radiocarbon dates in the Northeast for the Archaic Period were obtained from Ellsworth Falls. Three dates were run on charcoal samples and the results ranged between 4,100 and 3,400 years ago. These dates were much earlier than anyone had previously expected.

At Ellsworth Falls, archaeologists identified and dated a sequence of layers of cultural occupations extending from colonial times back thousands of years.



What did they want to know?

By the 1940s, archaeologists were interested in going beyond excavating single sites to putting together the chronology of cultures within a geographic region. They asked such questions like: "How old are the sites and what is the sequence of cultures?"

What have we learned?

Byers and Hadlock identified four occupations in the Ellsworth Falls sequence. Byers named each occupation and identified a characteristic assemblage of tools and technologies. Today, Byers's named sequences from Ellsworth Falls are not used, but his basic chronology of changes in tool types is still used as a framework for understanding cultural chronology.

What did they find?





Stratigraphy

References

The Eastern Archaic: Some Problems and Hypotheses. Douglas S. Byers. American Antiquity Vol. 24, No. 3, 1954.

The Contributions of Wendell S. Hadlock to the Pre-European Archaeology of Maine. David Sanger. Maine Archaeological Society Bulletin, Vol. 45, No. 2, 2005.

RUTH MOORE SITE, 1994-1996

The Ruth Moore site, a shell midden on an offshore island, came to light during the 1985 Frenchman Bay Archaeological Survey.

A shell heap or midden is a site where people lived and discarded food refuse such as clamshells and food bones, along with broken tools made of stone and bone. Over thousands of years, the middens built up—some to depths of many feet.



Shell middens are unique: they allow archaeologists to discover artifacts that don't survive at other types of sites. The shells, composed largely of calcium carbonate, reduce the acid in the soil, which helps preserve organic remains, such as burned plant materials and food bones. From these materials, archaeologists can determine the plants eaten, animals hunted, time of year people lived at the site, and how people shaped bones into tools.

Moore, an author famous for her novels about Maine, grew up on the island and collected artifacts from the site. After seeing her collection, which contained artifacts representing the Late Archaic through European contact periods, Abbe curator Diane Kopec and research associate Dr. Steven Cox realized the potential of the site. Further testing by Dr. Cox led to an Abbe Museum field school.

What did they want to know?

"When did people start living on offshore islands and how did they make a living?"

What have we learned?

The Ruth Moore site contained dense and deep layers of alternating clamshells and shell-free black soil—the stratigraphy. Each layer relates to a period when people lived there. By sorting out the layers and associated artifacts, the archaeologists began to assemble a picture of approximately 4,000 years of occupation.

What did they find?

A Cache of Stones

These three stone points, found lying one on top of the other near the base of the Ruth Moore site midden, are a mystery. Although found together, they show considerable variation in the shape of their bases. Such variation is often interpreted by archaeologists to be representative of the cultural group who made them – styles change over time.



Unfortunately these points are not associated with pottery or a radiocarbon date, thus we cannot be sure of their age. At this time we believe they belong with the Early Ceramic component (3,000 - 2,100 years ago), but Middle Ceramic (2,100 - 1,200 years ago) or even older Archaic Period (9,500 - 3,000 years ago) associations are possible!

Bones

Fish, bird and mammal bones were all present and preserved in the midden.

Indian Dog Skeleton

This dog was buried just as you see it, in a small pit extending down from the base of the midden at the Ruth Moore site.

Archaeologists measured, sketched, and photographed the skeleton in place before carefully removing it from the ground in one piece.

The dog was one or two years old at the time of death and stood about 18 inches at the shoulder. It would have been about the size of a terrier or beagle. One of the dog's bones was radiocarbon dated to 4050±70BP (before present).





Wall Profile

The Ruth Moore site contained dense and deep layers of alternating clamshells and shell-free black soil-the stratigraphy. By sorting out the layers and the related artifacts, archaeologists assembled a picture of 4,000 years of human occupation at the site.

Top: Present – 400 years ago
A hay field covers the site today. Beneath the thick grass sod, finely

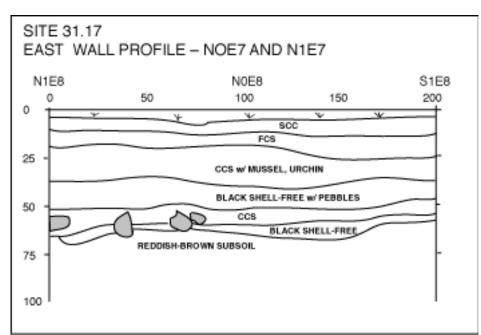


Figure 5. Profile of square N0E7 and N1E8, east wall

crushed clamshells (FCS) are evidence that the site was historically plowed. A French family and an English family both settled on the island in the late 1600s. They probably farmed and fished.

Middle: Fine crushed shell (FCS), Late Ceramic and Contact Periods, 400 – 1,200 years ago
Pottery decorated with a cord-wrapped stick pattern identifies the Late Ceramic Period. Arrowheads have side notches for hafting. Clay pipe stems and brass fragments are European trade items. People were fishing for cod in the late winter to early spring spawning season. Dogfish, sturgeon, and goose bones suggest that people were also occasionally on the island during summer and into the fall.

Bottom: Coarse crushed shell (CCS), Middle Ceramic Period, 1,200 – 2,100 years ago Middle Ceramic pottery is decorated with rectangular, toothed (dentate) designs. Tools include small arrowheads with stems. Cod bones are very common, with sculpin, wolffish, deer, seal, sea mink, and beaver also present.

References

The Indian Shell Heap: Archaeology of the Ruth Moore Site. Steven Cox and Gary Lawless. Blackberry Books, Nobleboro, ME, 1994.

SEBOOMOOK LAKE, 2004

The Seboomook Lake Field School, under the direction of Dr. Richard Will and Abbe curator Rebecca Cole-Will, continued the Abbe's archaeological research.

Seboomook Lake is located in northwestern Maine, north of Moosehead Lake. It is a manmade lake, created when the Penobscot River was dammed to create a sluiceway to carry logs downriver in 1893. Historically, the area was important to the lumbering industry and Great Northern Paper Company logged it for many years.



But for thousands of years before that, Native people traveled along the Penobscot River and this area was particularly important to them. Seboomook Lake is located at the confluences of the North and South Branches of the Penobscot River. Think of it as one of the large rest stops off a very long stretch of highway.

Native canoeists camped at the junction of the river's branches. From here, they could travel north to the St. John River, and eventually to the St. Lawrence River. Paddling east, they could follow the West Branch of the Penobscot and end up in Penobscot Bay.

What did they want to know?

"What can we learn about how people lived in the interior?"

What have we learned?

From many years of surveys done along lakes and rivers in Maine, we know that people lived and traveled these watery highways. At Seboomook Lake, sites are found at "intersections" - places where the rivers met or where a stream emptied into a larger river.

Burned turtle bones were preserved in the shallow, acidic soils at the site. The bones are tiny pieces of the shells of painted and snapping turtles. From this information, we know that people were living there during the summer when they could easily catch swimming or basking turtles.

The people traveled or traded to get distinctive red rock from the Munsungan Lake region to make their tools. This rock, a fine-grained shiny stone called chert, outcrops in a region northeast of Seboomook Lake visited by Native flintknappers for 12,000 years. They prized the rock for its fine qualities to make tools. They could reach Munsungan Lake by canoe routes.

What did they find?



Stone Abraders
Stone Points

Finding Archaeological Sites in Northern Maine

It's not easy to find and excavate sites in far northern Maine since the dense forests are difficult to get around in. While most sites are located close to the waterways, archaeologists need to get to them. This means long drives on logging roads where huge trucks and moose can pose hazards. The summers are short and insect pests are intense.

Archaeological sites in the interior tend to be small and shallow, as compared to coastal shell middens. Because bones do not generally preserve in the acidic soils, we have less information on how people were living away from the coast. Only burned bone fragments are recovered and these are sometimes too small to be identified.

Most sites are also very shallow, because there is very little new material added to northern forest soils. So, this means that



thousands of years of time may be compressed into a few inches of soil.







EWING-BRAGDON, 2008-2009

The Ewing-Bragdon site, a large shell midden, was re-excavated in 2008-2009 by the participants in the Abbe Museum Field School. The site was previously excavated in the 1930s and 1940s by Wendell Hadlock, an archaeologist who wanted to know more about how Native people may have used the land. Modern excavation methods, such as screening, allowed Field School archaeologists to find items overlooked by Hadlock. Participants were able to uncover stone flakes, bone tool fragments, food animal bones, and many shell disc beads. All of these artifacts tell us what the people ate, what time of year they ate it, and other activities they enjoyed besides hunting, such as jewelry making and painting.

What did they want to know?

To "test inside the 1939/1945 back dirt area and screen it, to quantify what was missed... to try to pick up one or more corners from the 1939/1945 excavation so we can map it accurately on the modern map... "
-Arthur Spiess, 2008 Field School notes

What have we learned?

People lived here in the winter. The excavations gave archaeologist a deeper insight into how the land was used, what the Native people were doing at the Ewing -Bragdon site, and what time of year they lived there. Many of the fish bones belonged to sculpin and flounder, suggesting that Native people may have been using an intertidal fishing weir. Tomcod bones were also found. Tomcod school inshore on the coast of Maine in the winter and early spring. Because the bones found at the site were charred, we know that the Native people living there were cooking fresh fish, so they were living at the site during the same time of year that the fish were present. The shell beads indicate there was time for leisure activities, telling us that life was probably quite comfortable for these people.

Much of this has been discovered thanks to modern methods of excavation, such as screening and careful examination of artifacts. Screening is when archaeologists use fine mesh to sift through soil samples. This helps them discover artifacts that would have been overlooked by older methods. Archaeologists are also able to look at the designs imprinted on ceramic pots to determine when during the Ceramic Period (3000-500 years ago) they were made.

What did they find?



Pottery Barbed Bone Point Shell Beads Ceramic Period, CP 4-5, 1400-700 years ago Cord-wrapped stick and punctuate decoration, grit temper

References

Three Shell Heaps on Frenchman's Bay, by Wendell S. Hadlock, Abbe Museum, 1941.

"From Earth to Hearth: A Ceramic Analysis of the Ewing-Bragdon Site Collection," by Kessi Watters Kimball, Maine Archaeological Society Bulletin, Vol. 51, No. 2, Fall 2011.

Please note that the artifact photos are not to scale.