



MAINE HISTORIC PRESERVATION COMMISSION
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AUGUSTA, MAINE
04333

JOHN ELIAS BALDACCI
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

May 9, 2007

Mr. Lewis N. Flagg
34 Turkey Lane
Winthrop, ME 04364

Dear Mr. Flagg:

I will try to answer your specific questions of May 3 about alewife presence in archaeological sites in and near the St. Croix river within the body of this letter. To start with your last questions first, our office is the repository of a copy of most archaeological reports generated in Maine, and we also have many from our colleagues in New Brunswick. Moreover, it is part of my job to be current in archaeological research that affects the understanding of archaeological sites in the region. Therefore, with reasonable assurance, the summary provided herein is complete, and you do not need to contact any other archaeologists for further data.

The pre-Contact (pre-European Contact, or "prehistoric") Native Americans of eastern Maine and western New Brunswick were hunter-fisher-gatherers, not agriculturalists. They moved seasonally, to be near food sources. The food animal bone, plant and shellfish remains (with one exception) from their sites always seems appropriate to the local ecology. They did maintain long-distance trade networks, trading rocks, furs and other high-value commodities. We do not have any evidence of trade in food stuffs. The one exception to the "food animal bone locally caught" rule seems to be movement of bone that was used for tools and/or attached to pelts (such as in the form of medicine bags). The only fish bone that was used as a tool, and therefore moved across some distance, was swordfish sword.

In short, we conclude that food was gathered within perhaps ½ day travel radius maximum, and often much less, from a camp site. We know from ethnographic records that camps were often made at good fishing locations, and the archaeological record seems to support this pattern.

As for specific identifications of animal bone, there are a few specialists who are quite good at the task, and we (I am included) use comparative collections as much as possible. When a bone is identified as "alewife" it is specifically differentiated from the larger shad on size.

The number of archaeological sites with preserved food animal bone, and thus the amount of data relevant to your question, is rather low, because many sites on the St. Croix above tide, and on the lakes, have been heavily damaged by erosion from water impoundment construction. Many sites on the tidal portions of the St. Croix have been heavily eroded by an uncommonly rapid relative sea level rise over the last few thousand years.

There are, in fact, only three archaeological sites with alewife bone that are relevant to your question, two on the St. Croix and one on the Dennys.

The Mud Lake Stream site (BkDw 5) is located at the confluence of Mud Lake Stream and Spednic Lake on the New Brunswick side. Excavated in 1983/4, the archaeologists recovered 17 alewife bones from a hearth and/or garbage pit (Feature 21). Charcoal from the pit was radiocarbon dated to 4000 ± 100 years.



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p. Spiess to Flagg May 9, 2007

The reference is: Michael Deal, 1985, Final Report on the 1983/4 Excavations at the Mud Lake Stream Site (BkDw 5), Southwestern New Brunswick. Manuscripts in Archaeology 15, New Brunswick Historical and Cultural Resources.

The second site relevant to your questions is the Devil's Head site (97.10) on the tip of that landform in Calais. It is composed of multiple seemingly individual "wigwam" areas, with fire hearths and clam shell dump areas, both of which yielded food animal bone. The associated artifacts date from as early as 1500 years to about 1800 A.D. Unidentified fish bone is the most common food animal bone category, and alewife is (by far) the most common bone identified to genus/species. I have enclosed the relevant pages from the report (Spiess and Cranmer 2005). Harvesting alewife was an important subsistence activity at this camp site. They were the most abundant species harvested, but specifying exact numbers is impossible.

The third relevant site is the N'tolonapemk site (site 96.2), at the outlet of Meddybemps Lake, on the Dennys River. This is the most important site so far discovered on an interior lake or river setting in Downeast Maine. The reference is: Michael S. Brigham et al., 2005, The Archaeology of N'tolonapemk (96.02 ME), "Our Ancestor's Place": Phase III Data Recovery at the Eastern Surplus Superfund Site, Meddybemps, Washington County, Maine. Archaeology Research Center, University of Maine at Farmington. Approximately 200 "features" (fire hearths, storage pits, and/or garbage pits) yielded a range of radiocarbon dates (and appropriate artifact) from 8500 years to 550 years. This site covers nearly the entire range of cultural occupation in Maine. Over 70,000 fragments of animal bone from this site were examined, and about 23,000 identified to class (mammal, bird, fish), family or genus/species. Throughout the sequence, the most common genus/species identification is alewife (906 bones), and fish (not further identified) numbers 9781 bones. (Most of those were small fish that could be alewife.) The record of alewife anadromous behavior, reaching Meddybemps Lake on the Dennys River, over 8000 years, is quite clear.

In summary, the Mud Lake Stream site provided evidence of alewife above the head of tide on the St. Croix 3000 years ago, and the Devil's Head site provides evidence of alewife inshore in tidal waters just below Calais sometime between 1500 years ago and 1800 A.D. Site 95.2 at the outlet of Meddybemps Lake provides evidence that alewife harvesting was a major seasonal activity for almost 8000 years at the headwaters of the Dennys River. Unfortunately, no site of the quality of 95.2 has been found on the St. Croix drainage, but we presume that 95.2 can be used as a proxy statement that alewives have been a major anadromous fish presence in the downeast Maine rivers for millennia.

Sincerely,

Dr. Arthur Spiess
Senior Archaeologist

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