

Today's Agenda

- "Great Bays"
- More Hydrology of Merrymeeting Bay
- Early Peoples at Merrymeeting Bay
- > Fish
- Walk: Dresden Falls Archaic Preserve
- Bonus Walks:
 - Pownalborough Court House
 - Green Point Preserve

Maine's Four Great Bays

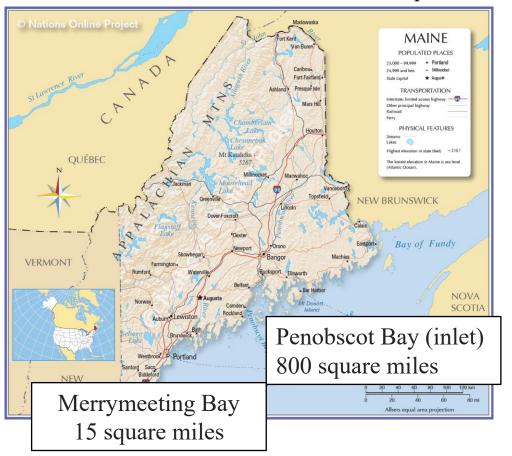


Great Bay – Fore River (Portland)

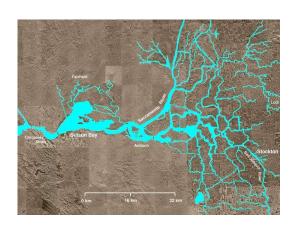
9.4 square miles



Passamaquoddy Bay St. Croix River - Bay of Fundy inlet
(US-Canada)
3,600 square miles



The World's Four Great Inland Bays



Sacramento-San Joaquin River Delta, California



Ganges—Brahmaputra-Meghna Delta, Bangladesh



Tigris and Euphrates Rivers, Iraq



Merrymeeting Bay, Maine

Merrymeeting Bay Salinity

- Surface waters in the Gulf of Maine are 34 parts per thousand salt.
- In the Atlantic Ocean beyond Georges Banks the salinity is 36 parts per thousand salt.
- Freshwater from rivers has a salinity value of 0.5 ppt or less.



Merrymeeting Bay average overall water salinity does not exceed .5 parts per thousand, about the same as river water.

Composition of Merrymeeting Bay

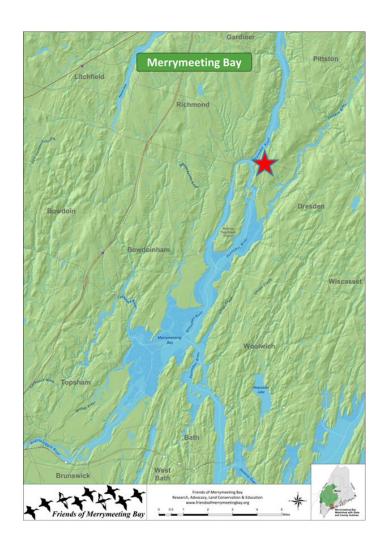
- Rivers contribute ~95% of water in the Bay.
- The Kennebec River contributes the most water.
- The Androscoggin River contributes the most sediment.
- Salinity in the Bay is highly variable, by season, location, tides, river volumes, etc.

The Chops Create a Classic "Salt Wedge"

Less dense freshwater flows out of the estuary over the top of the denser saltwater

Tides push the dense saltwater into the estuary where it moves under the less dense freshwater

First Peoples at Merrymeeting Bay



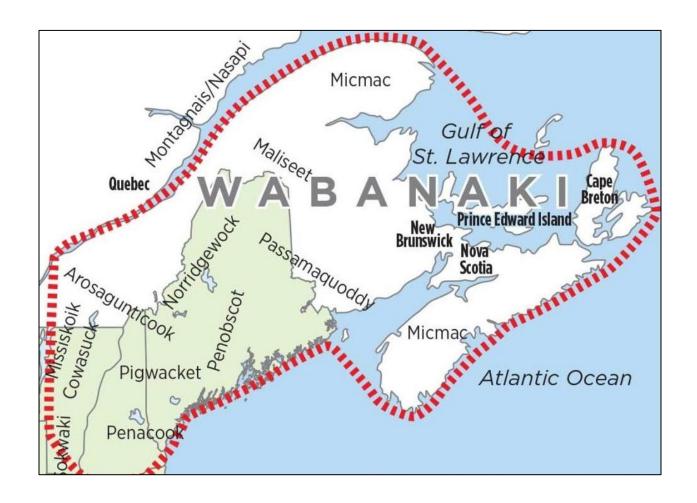
Wabanaki Occupation Site

Dresden Falls Archaic Preserve





Northeastern Wabanaki Peoples

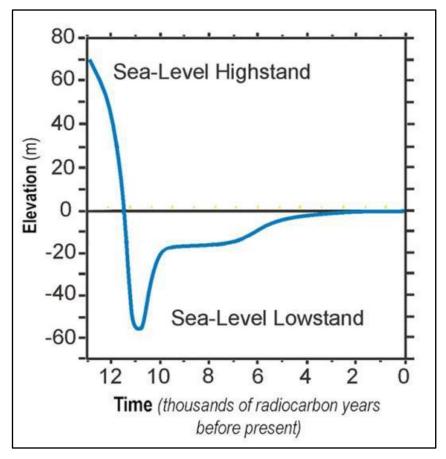


TRIBES:

- Maliseet
- Passamaquoddy
- Micmac
- Penobscot
- Abenaki (not federally recognized)

Evolving Geology in Archaic Period





Early Peoples' Food Sources

Timeline

- 12,000 years before present (YBP): Glaciers withdrew
- 8,000 5,000 YBP: warming climate

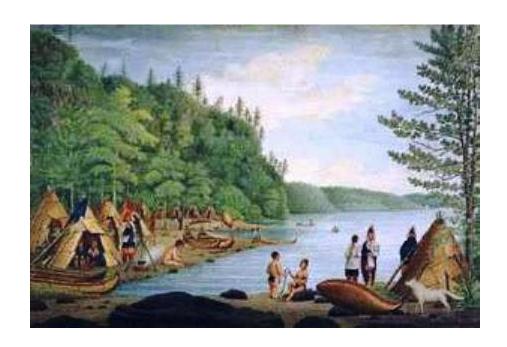
• 3,000 YBP

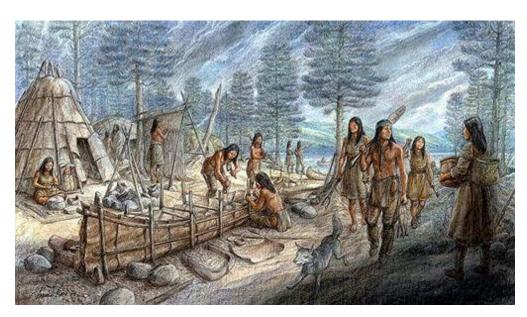
500 YBP

Wabanaki Activities

- Seasonal camps: hunted caribou, mammoths, rabbit, walrus, seals, seabirds.
- Deer, moose, seals;
 Fishing using plummets, weirs and spears.
- Dugout canoes; ceramics technology; beginnings of growing corn, squash, beans.
- European contact.

Archaic Period Peoples in Maine





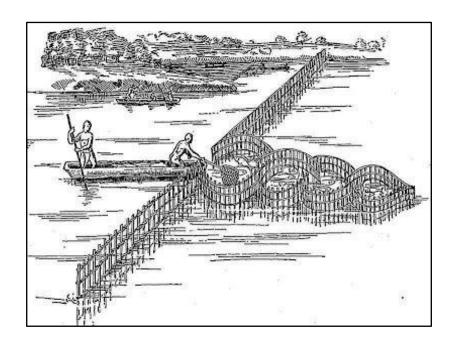
Archeological Dig in Upper Field



9000 Years Ago in Dresden

(watch on your own,~1 hr)

Fish Weir Designs



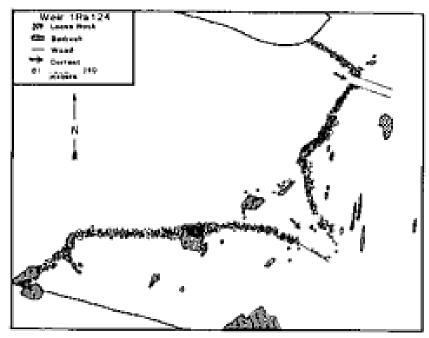


Figure 7

Remnants of a Fish Weir on the Sebastacook River



Archeology of Wabanaki Sites

- Maine State Museum, Augusta (closed for renovations)
 - **Arthur Speiss lecture on 13,000 years of Maine
 Native American Life
- Abbe Museum, Bar Harbor
 - The Abbe Museum's collections focus on contemporary and historic Native American art, artifacts, and objects from Maine and the Northeast, totaling over 70,000 items.
 - People of the First Light Core Exhibit



Some Anadromous Fish of MMB



Striped bass *Morone saxtilis*



Alewife Alosa pseudoherengus



Atlantic salmon Salmo salar



American shad Alosa sapidissima



Sea-run brook trout Salvilinus fontinalis



Rainbow smelt Osmerus mordax



Blueback herring

Alosa aestivalis

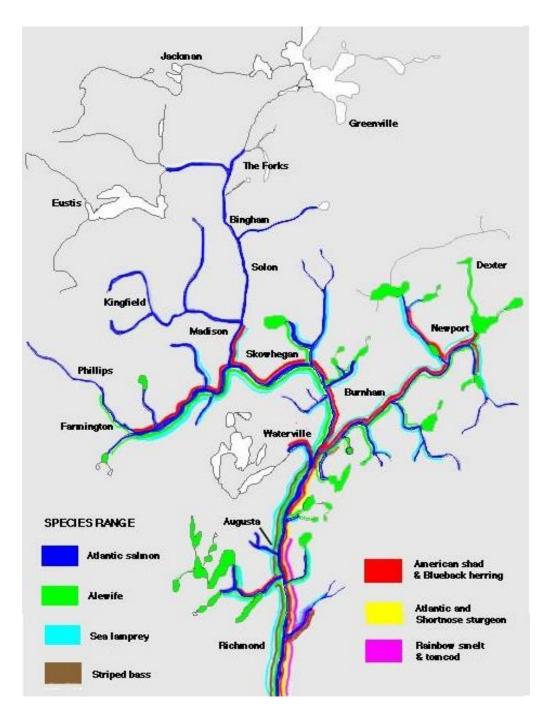


Atlantic tomcod

Microgadus tomcod



Anadromous Fish of the Kennebec River



Alewife migration - 2017 YouTube

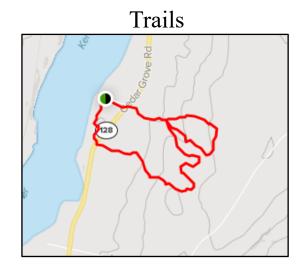
Bonus Walk 1: Pownalborough Court House Trails



MUSEUM
23 Court House Rd
Dresden, ME 04342

HOURS
•Sat, Sun, & Mon:
10:00 am – 4:00 pm





Bonus Walk 2: Green Point Wildlife Mgmt Area



- A flat, easy walk through old fields and an orchard. Approx. 1 mile.
- Brings you to a pine grove at the upper reaches of Merrymeeting Bay.
- Excellent walking, birding, wildlife viewing.