

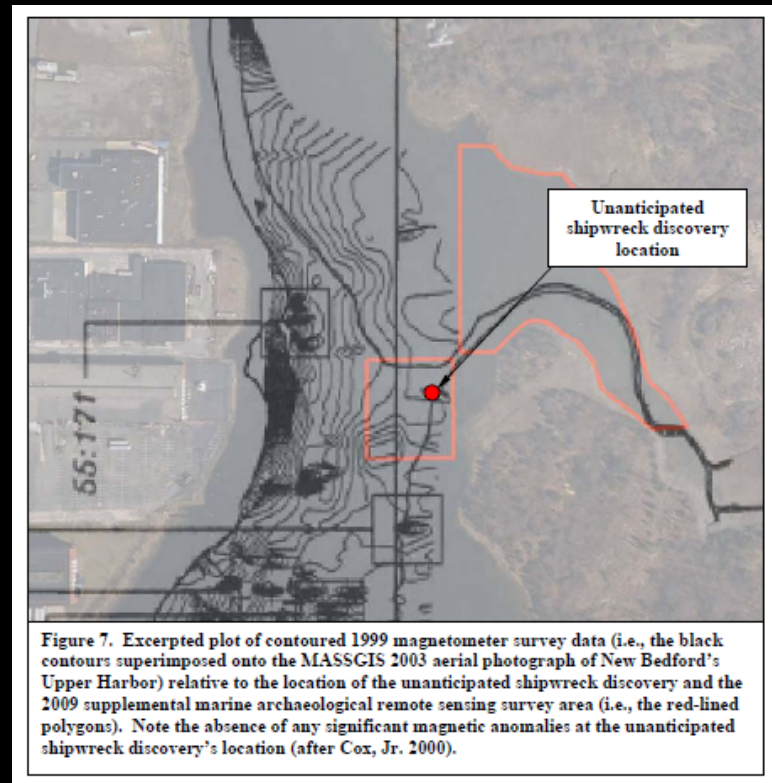
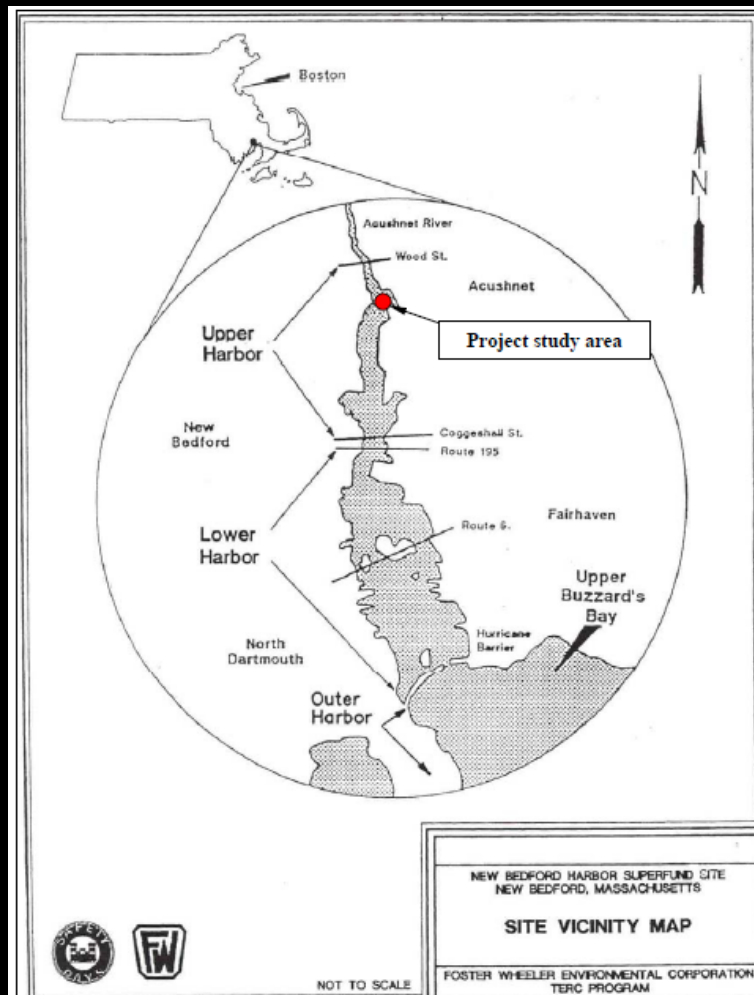
# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

## Marine Archaeological Documentation and Assessment



# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

## Project Location & 1999 Cultural Resources Survey



# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

## Dredging and Debris Removal





## New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

- Timbers encountered and recovered July 2009
- Examined by USACE-NAE, MBUAR, and Fathom Research archaeologists



# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

- Timbers recovered in July 2009 included:
  - Keel
  - Frames (“ribs”)
  - Exterior hull planking fragments
- Timbers appeared to be from a sailing vessel dating from the late 1700s to early 1800s
- Timbers were charred – clue that ship had burned – possibly linked with 1778 British attack on New Bedford and Acushnet when 30 to 70 ships were reportedly burned
- Fathom Research of New Bedford hired to document and assess shipwreck remains and site



# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

- Step 1: ship find area surveyed with magnetometer, side scan sonar and sub-bottom profiler
- Additional wreckage found; required removal and documentation



Figure 3-2. Color-coded contour plot of magnetic data recorded during the 2009 geophysical survey of the NBHSS shipwreck study area (image courtesy of CRE).

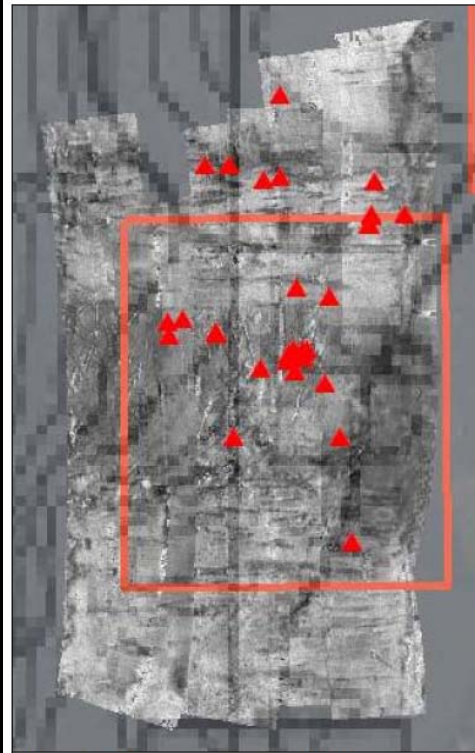


Figure 3-1. Sidescan sonar image of plotted acoustic anomalies at the NBHSS shipwreck survey area (image courtesy of CRE).

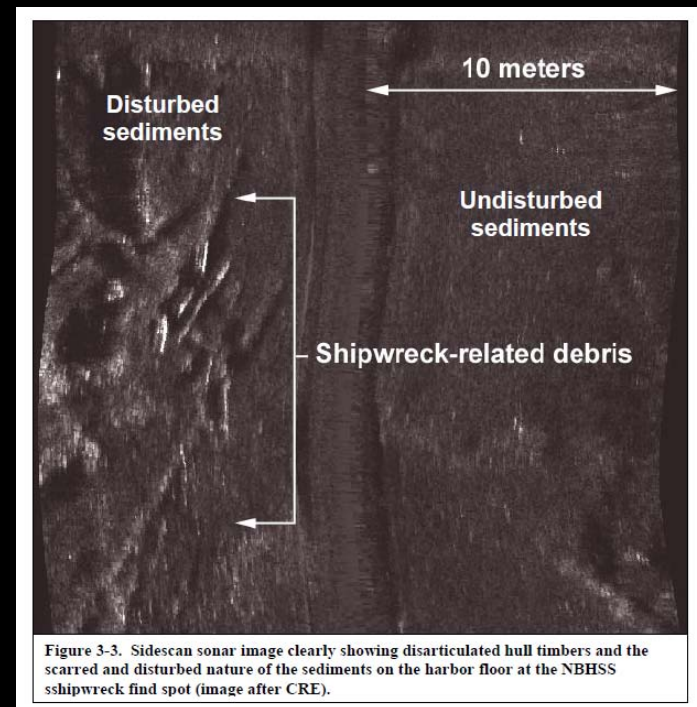


Figure 3-3. Sidescan sonar image clearly showing disarticulated hull timbers and the scarred and disturbed nature of the sediments on the harbor floor at the NBHSS shipwreck find spot (image after CRE).



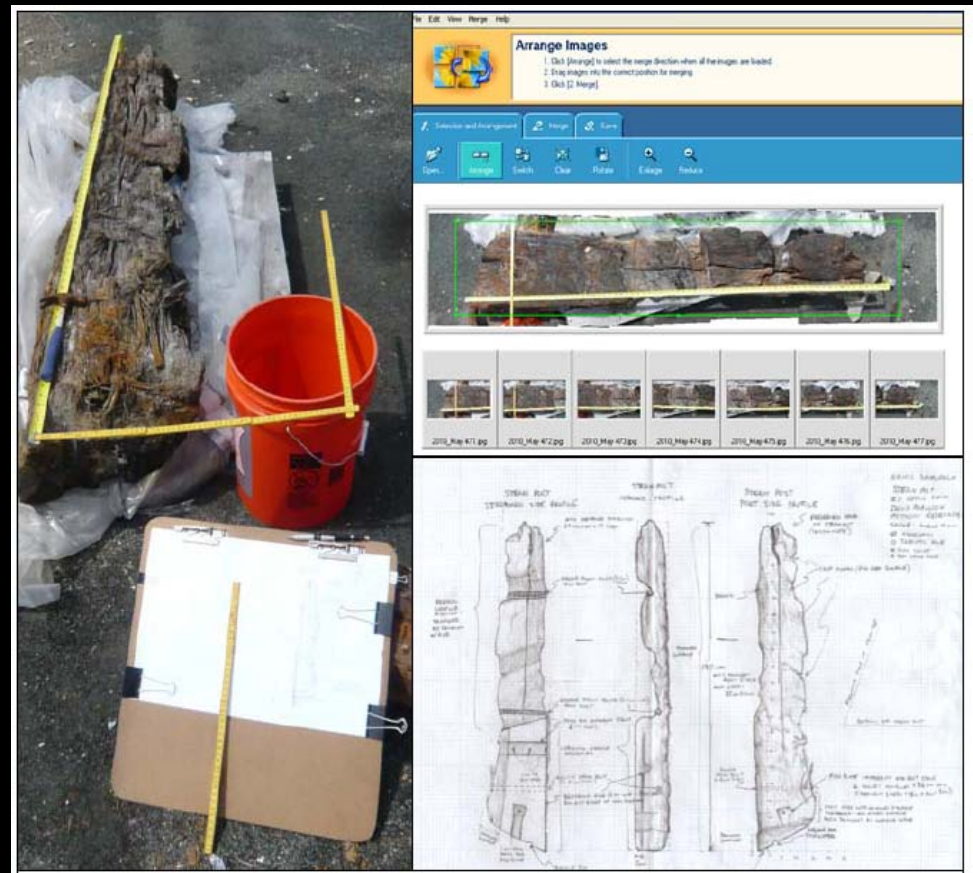
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- Step 2: recover additional ship timbers from find area under supervision of archaeologist; keep timbers wet until documentation



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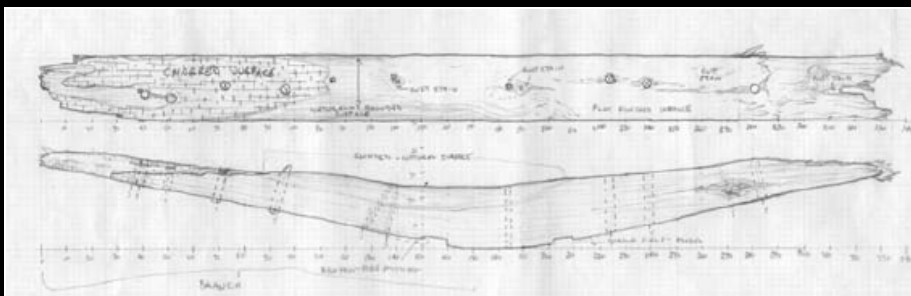
- Step 3: document ship's timbers and conduct archival research to attempt to identify vessel's name and assess its historical significance





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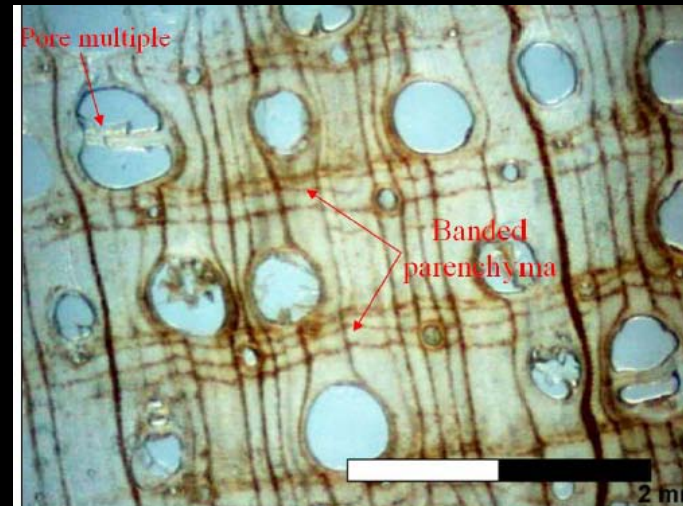
- **Hull timbers:** 45 timbers (i.e., 5 keel fragments, 1 sternpost, 1 stem, 15 floors, 10 large planking fragments, 3 cant frames, 9 futtocks, and 1 miscellaneous timber)
- **Artifacts:** 1 intact hearth brick; 25 brick fragments (two of which were intrusive, the remainder of which were hearth bricks), two vegetable-fiber rope fragments, broken base of a glass case-bottle, iron barrel hoop, a wooden bucket base fragment, two wooden barrel base fragments, a wooden box panel fragment, a square-in-section piece of wood stock, and leather shoe sole (possibly intrusive)



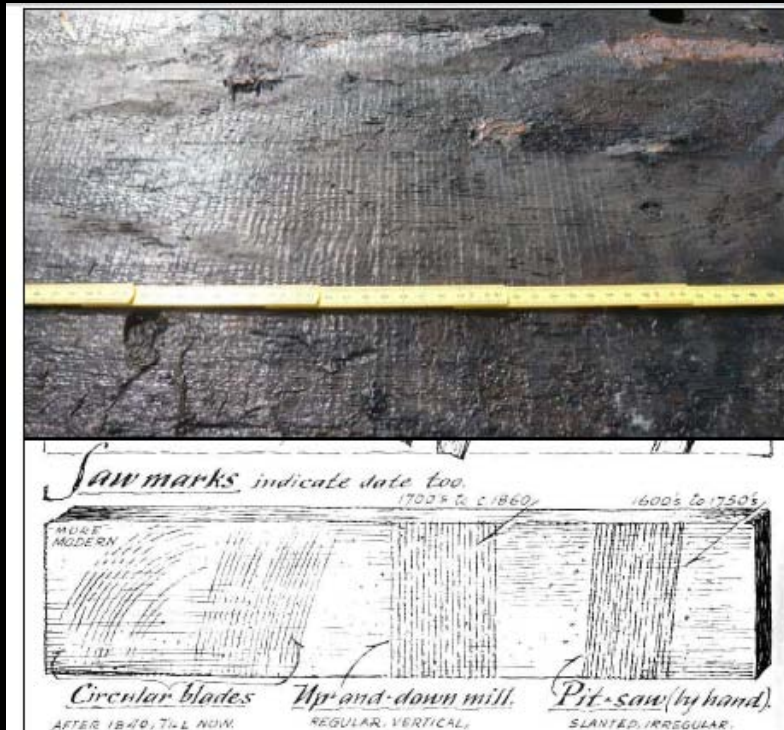
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- **Macro/microscopic Analyses of Hull Timbers:**

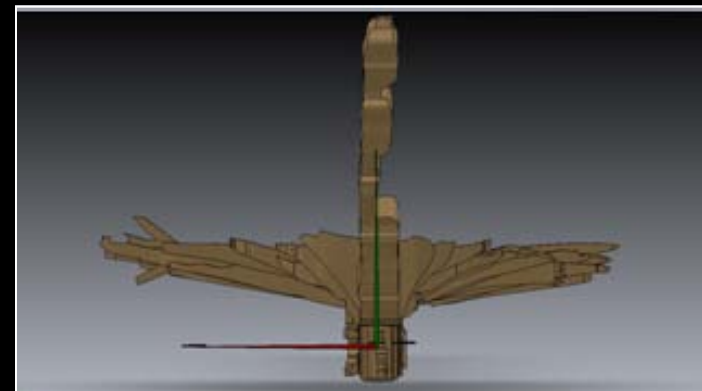
- All “Old Growth” compass timbers consisting of oak and hickory
- Indicated earlier (1700s) date and southern New England to Middle Atlantic origin



# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery



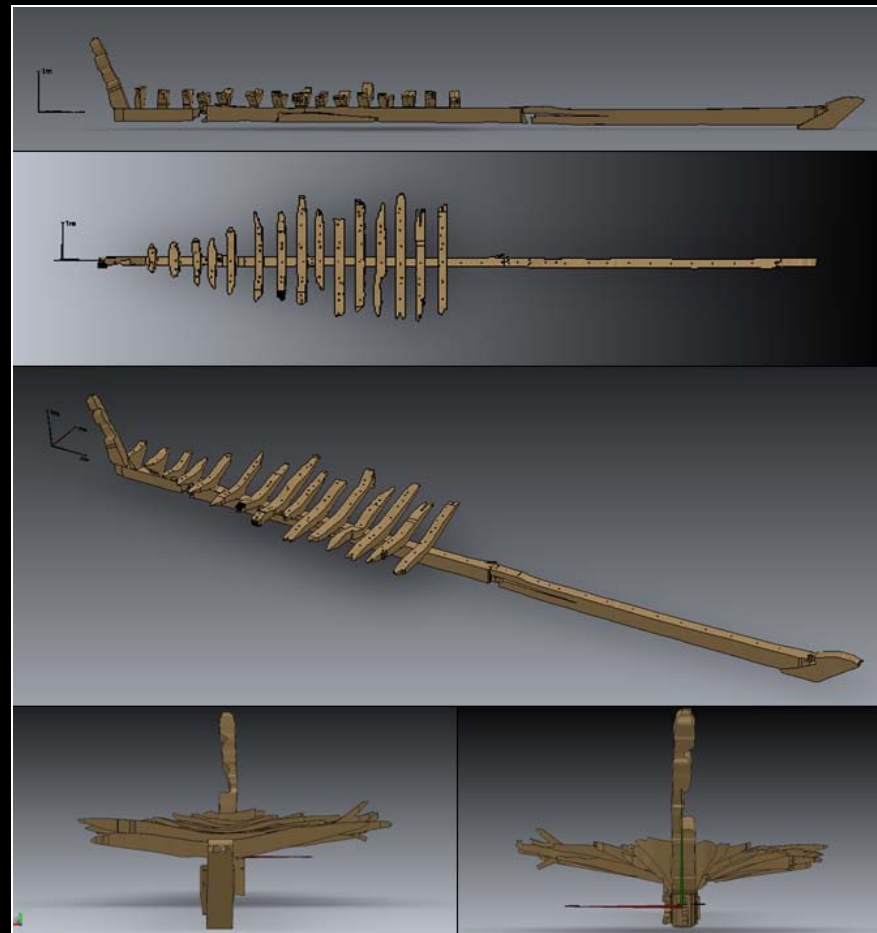
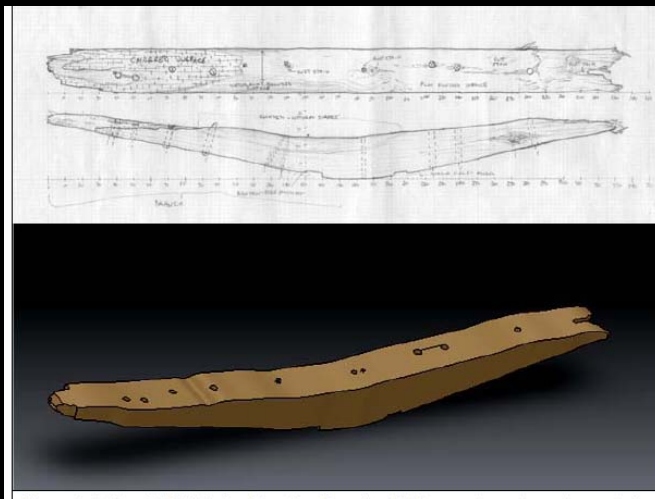
- Saw marks, hull shape and size, use of “old growth” wood, compass timbers, and faceted, hand-cut tree-nails all pointed to a late 18<sup>th</sup> century date for the shipwreck
- Use of White Oak and Hickory indicates vessel was built somewhere between southern New England and the Middle Atlantic region
- Vessel’s hull shape (full vs. fine or narrow) is suggestive of a merchant ship designed to have increased cargo capacity





# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

- 3-D digital modeling from 2-D drawings:
- Enabled virtual reconstruction of vessel's disarticulated remains



# New Bedford Harbor Superfund Site – Unanticipated Shipwreck Discovery

## So, what ship was it?

Archival research to date has not been able to identify the name of the ship; however, archaeological research indicates that the NBHSS shipwreck appears to be that of an abandoned 70 ft long, 100-ton merchantman sloop or schooner used in the inter-colonial/West Indies trades (evidence of wooden hull sheathing indicates usage in southern/tropical waters)

