GREAT LAKES FISHERIES HERITAGE Trail

EDUCATION ALIGNMENTS

Floating Legacies: Documenting the Stories of Michigan's Historic Fishing Vessels

Story Summary

Floating Legacies: Documenting the Stories of Michigan's Historic Fishing Vessels explores how historic fishing vessels—like the *Katherine V*—serve as powerful artifacts that connect people to the working history of the Great Lakes. Through partnerships with the Historic American Engineering Record (HAER) and regional collaborators, these vessels are documented using advanced methods such as 3D laser scanning, photogrammetry, and archival research, transforming them into enduring public resources. This work bridges engineering, history, and storytelling, ensuring that the knowledge, labor, and communities behind Michigan's fisheries are preserved and shared through a growing maritime heritage network.

(Working vessels → artifact-based storytelling → HAER documentation → digital preservation and interpretation → maritime heritage network)

Overarching Relevance to Education Standards

- Vessels function as both **engineering systems (science)** and **primary historical evidence (social studies)**, making them ideal for integrated learning.

Education Alignments - Michigan Science (MSS) / Social Studies (MSSS)

Elementary (Grades 3–5)

Science (MSS)

- **3–5-ETS1-1:** Define a simple design problem based on a need (why fishing vessels were built differently for Great Lakes conditions).
- **3–5-ETS1-2:** Compare possible solutions (different vessel types—gill net tug vs. small craft).

Social Studies (MSSS — history-forward)

- **Grade 3 – History (H3):** Use artifacts and local stories to understand Michigan's past (boats as primary sources of history).
- **Grade 3 – History H1 (Historical Inquiry):** Use photographs, artifacts, and oral histories to learn about the past.
- **Story linkage:** The vessel documentation story introduces boats as artifacts that tell stories of Michigan's past, while the broader fishery narrative connects these vessels to everyday life and work on the Great Lakes.

Middle School (Grades 6–8)

Science (MSS)

- **MS-ETS1-2:** Evaluate design solutions (how vessel structure supports fishing methods, endurance, safety).
- **MS-ETS1-3:** Analyze data to determine the best design (link to hull forms, ice protection, gear configurations described).

Social Studies (MSSS — history-forward)

- **Grade 8 – USHG Era 6 (1870–1930):** Industrialization and technological change shaping industries and labor.
- **P3 (Inquiry & Evidence):** Use multiple sources (vessel documentation, archives, oral histories) to construct explanations.
- **Story linkage:** The vessel story illustrates how technological changes in boats and gear shaped fishing practices, while fishery history explains how these innovations supported industrial growth and changing harvest patterns.

High School (Grades 9–12)

Science (MSS)

- **HS-ETS1-3:** Evaluate design solutions based on tradeoffs (efficiency, durability, environmental conditions).
- **HS-ETS1-4:** Use models/simulations (digital documentation, 3D scans as representation tools).

Social Studies (MSSS — history-forward)

- **HS USHG (Industrial → Modern transitions):** Evaluate how technological innovation shaped regional economies and industries.
- **HS P3/P4 (Civic reasoning):** Interpret historical evidence to inform preservation, public history, and heritage decisions.
- **Story linkage:** The vessel documentation story highlights the intersection of engineering, history, and preservation, while broader fisheries narratives provide economic and environmental context for how these vessels fit into larger systems.

Anchor Facts / Story Linkages

- Historic vessels such as the *Katherine V* (1928 gill-net tug) represent the working backbone of Great Lakes commercial fisheries and provide a direct, tangible link to Michigan's industrial and maritime past.
- The HAER–GLFHT collaboration combines engineering documentation, historical research, and community partnerships—demonstrating how science, history, and preservation intersect.
- Advanced documentation tools such as 3D laser scanning, photogrammetry, and archival recording transform vessels into long-term public resources archived at the Library of Congress.
- Vessel design features (enclosed "turtle-back" cabins, ice protection, gear adaptations) illustrate how engineering solutions evolved in response to Great Lakes environmental conditions.
- The vessel network (e.g., *Katherine V, Chinook, Evelyn S*) shows a transition from commercial harvest to scientific research and stewardship, linking past and present fisheries.

