

Trees & Fish

Enduring Understanding:

The geography and resources of Manitowoc/Two Rivers contributed to its early settlement, industrial development and continued growth.

Essential Questions:

1. What is our exact location in the world?
2. What geographical features of our community make it unique?
3. What natural resources contributed to settlement and development?
4. How will the geographical features and natural resources of your community continue to have an influence?

Vocabulary:

bay	gill net	Ben Jones	Native American Tribes:
hemlock	hides	Joseph Edwards	Algonquin
inland	mackinaw boat	European settlement	Menominee
peninsula	reels	French Canadians	Ojibwa
white pine	sawmills	Frontier settlers	Ottawa
	schooners	New Englanders	Pottawatomie
	tannery		
	vats		

Standards addressed:

A.2.2-Demonstrate ability to locate specific oceans, continents, landforms on maps and globes. A.2.4- Compare/contrast how climate/environment affects types of homes and how land is used. A.2.5-Analyze simple charts, graphs and maps to gather information about local communities.

Suggested Activities:

1. Find your exact location in the world. Access your community from an aerial view by visiting the following website (Student handout: [Where in the World?](#)):

<http://edcsns17.cr.usgs.gov/EarthExplorer/>
2. Identify the unique geographical features of your community. Use this resource to complete a Venn diagram comparing natural and/or manmade characteristics of the neighboring harbor towns, Manitowoc and Two Rivers.

www.wisconsinharbortowns.org/ Click on your harbor town, scroll down to: Click here for an area map.

Venn diagram:<http://www.eduplace.com/graphicorganizer/pdf/venn.pdf>

3. Create a salt map of the geographical features of your shoreline community.
<http://www.cooks.com/rec/doc/0,179,153173-238201,00.html>

Schooners & Steamers

Enduring Understanding

Changing needs and evolving technologies inspire innovation and adaptation, allowing for the growth of the maritime industry.

Essential Questions:

1. What are schooners and why were they necessary?
2. How and why did schooners and other ships evolve to meet the needs of your community?
3. What people were leaders in the maritime industry within your community?
4. What companies or innovations started by these people are still in existence today?

Vocabulary:

clipper schooner	Norwegians
draft	revenue
dry dock	schooners
flagship	steamers

Standards addressed:

B.2.3 Gather information/ask questions/discuss information as related to biographies, stories, narratives, and folk tales about important historical people.

B.2.4 Compare and contrast changes in contemporary life with life in the past looking at social, economic, political, and cultural roles played by individuals and groups in Wisconsin and the nation.

B.2.8 Gather information about past and present technologies and ask questions regarding effects of technological changes.

Discussion: People in your community advanced and improved large cargo carrying ships over the years, beginning with the schooner. These changes impacted the livelihood and interdependence of many Great Lakes shoreline communities.

Suggested Activities:

1. Create a timeline to show shipbuilding changes from wooden schooners to the present.
Timeline link <http://www.eduplace.com/graphicorganizer/pdf/timeline.pdf>

Visit the Burger Boat website at <http://www.burgerboat.com> Click on: About Burger scroll down and click on Historical timeline.

Also visit this website to find more information on ships mentioned in this segment
<http://www.2manitowoc.com/shipwrks.html#shipsbuilt>

Suggested timeline inclusions:

- Citizen (first ship built in Manitowoc)
- Challenge (first ship built by William Bates)
- Clipper City (Innovative hull design developed by Bates)

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2. Build a scale model clipper schooner that highlights William Wallace Bate's innovative shipbuilding improvements. (i.e., shallow hull, centerboard)
Make it Work! Ships by Andrew Halsam ISBN 1-58728-373-5
(Pg. 12-13 Hulls)
3. Coordinate field trip to Wisconsin Maritime Museum.
(920)684-0218 Ext. 115 or contact via email wlutzke@wisconsinmaritime.org

Wreck & Rescue

Enduring Understanding

The prosperity and progress of the maritime industry creates unique dangers, opportunities, and responsibilities for the people of Manitowoc-Two Rivers.

Essential Questions:

1. What made travel on Lake Michigan dangerous?
2. What opportunities did people pursue despite the dangers they might encounter?
3. How was the community prepared to promote safety and respond to disaster?
4. What water safety organizations exist in your community?
5. Why is the protection and preservation of shipwrecks important to maritime history?

Vocabulary:

ancient	littered
batter	marine archaeologists
“bottom time”	motto
collision	preserved
cultural materials	radar
deep impact	starboard bow
deteriorate	surf men
distress	survey
frigid	tiller

Standards Addressed:

A.2.6 Gather information on the effects of predictable/unpredictable weather/seasonal changes on people.
B.2.4 Compare and contrast changes in contemporary life with life in the past looking at social, economic, political, and cultural roles played by individuals and groups in Wisconsin and the nation.

Suggested Activities:

1. Travel on Lake Michigan always has the potential to be dangerous. Study the current marine forecast for the Manitowoc/Two Rivers area at <http://www.wunderground.com/MAR/LM/543.html>

Consider the following to decide whether you would recommend being on Lake Michigan for travel or recreational purposes:

- Wave height
- Wind speed and direction
- Water temperature
- Sky observation

Extension Idea: Revisit this activity and site. Have your recommendations for water use changed? Why or why not? What factors influenced your decision?

2. Preservation and protection of shipwrecks is important to maritime history. Be a diver. Observe and bring back information about the Niagara. Watch the videos: *The Niagara: Identifying the Remains* and *The Niagara: Measuring and Sketching* at http://www.wisconsinshipwrecks.com/tools_videogallery.cfm

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Consider the following:

Why is it important to understand the story of shipwrecks?

How do you (the divers) contribute to revealing and preserving the story?

What tools are used to record and describe what you find on site?

3. For more information on Underwater Archaeology and a shipwreck activity (scroll down to Activity 2, Shipwreck! Documenting Underwater Site, pg. 69 of document) go to:
http://www.wisconsinhistory.org/shipwrecks/kids/waterways_tg.pdf

Making Headlines

Enduring Understanding

Local entrepreneurial spirit encourages growth and industry through innovation and diversification.

Essential Questions:

1. What local leader made Two Rivers critical in the improvement and advancement of printed mass communication?
2. What industry, products and services were improved upon as a result of Hamilton's innovations?
3. What changes within the country propelled the innovation of Hamilton's wood-type?
4. What natural resources contributed to the success of Hamilton's industry?
5. Why was geographical location specifically important to Hamilton's quick, widespread success?
6. Where do you see Hamilton's innovations influencing your work in the classroom and school?

Vocabulary:

converting	producers
distributing	prototype
diversify	reputation
economy	revolutionized
efficient	scroll saw
exhilarating	"the sky was the limit"
frontier	wood type
mass communication	

Standards addressed:

C.4.8 Explore the natural characteristics of materials and their possibilities and limitations.

B.4.5 Understand that their choices in art are shaped by their own culture and society.

Suggested Activities:

1. Have students experiment with different fonts to create a poster displaying the daily classroom schedule. The fonts should reflect the subject highlighted or their feelings about it. Discuss similarities and differences between the wood type printing process and the modern printing process.
2. Art Extension: Making relief prints, go to <http://www.kinderart.com/printmaking/> Compare the relief printing process to the font activity and what you know about the wood type printing process. Which of the last two activities was the relief printing process most closely related to? Support your opinion.

Vits' College of Aluminum Knowledge

Enduring Understanding

Community-minded leadership integrates industry into the social fabric of Manitowoc-Two Rivers through investment in the improvement of its workforce and products.

Essential Questions:

1. How did community-minded leadership result in the education and welfare of the worker?
2. How did this lead to increased production and worker pride?
3. How did competition lead to diversified products and community notoriety?
4. What industry in your community is evidence of production, worker pride, and community identity?

Vocabulary:

aluminum	paneled
engraved	“punch a clock”
merged	Adolph Kumerow
novelty items	Joseph Koenig
tannery	Vits family

Standards addressed

B.2.3 Gather information/ask questions/discuss information as related to biographies, stories, narratives, and folk tales about important historical people.

Suggested Activities:

1. Write a newspaper article including the 5 W's about the history of aluminum manufacturing in Manitowoc. Go to <http://www.wisconsinhistory.org/turningpoints/search.asp?id=1207>
*Click on “View the Document” for pictures and pages from The Mixing Bowl 60th Anniversary created by the Aluminum Manufacturing Company 1955.
2. Create a headline for the article above using the wood type method or select a computer font compatible with wood type print style of the time.

Home front

Enduring Understanding

World War II resulted in a community war effort that showcased the local pride and talent of a skilled and productive workforce.

Essential Questions:

1. What industries were already in place, capable of producing goods in increased numbers?
2. What industrial skills and labor forces were in place, and adaptable to aid in the war effort?
3. How did the community adapt and involve themselves in the successful effort to increase production and/or modify product line?
4. Could any of these industries and skills be necessary now or in the future?

Vocabulary:

agriculture	“jack-of-all”	Carronet Company
aluminum	“round-the-clock”	Kahlenberg Company
camouflage		Burger Boat Company
contract		Manitowoc Shipbuilding Co.
destroyer		
launch		
minesweeper		
retool		
sub chaser		
submarine		
vocational school		
weld		

Standards addressed

A.2.7 Give examples of how/why people in communities are interdependent.

A.2.8 Identify, describe, and illustrate major changes in communities such as environmental degradation, construction, and natural disasters.

B.2.4 Compare and contrast changes in contemporary life with life in the past looking at social, economic, political, and cultural roles played by individuals and groups in Wisconsin and the nation.

Suggested activities:

1. Students become participants in the mass production of “contemporary” wind powered vehicles (sail cars) at http://www.acadiau.ca/~gmackinn/pub/pdf/TC_article.pdf

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Waves

Enduring Understanding

Building on a past rich in tradition and innovation, the people of Manitowoc and Two Rivers continue to reinvent themselves to meet the challenges of the new global market.

Essential Questions:

1. What industrial adjustments made with old resources contributed to the revival of the community in the global market?
2. How can preserving natural resources and geographical surroundings help maintain community significance and value in the world?

Vocabulary:

bow & stern	prosperity
bulk commodities	resilience
community identity	revival
E.L. Ryerson	rolling mill
efficient	rustbelt
freighters	shipyard
greener energy	Teflon coated pans
innovation	wind turbines
iron ore/limestone/coal	work ethic
industrial economy/post industrial economy	vessels
maritime heritage and tradition	yachts

Standards Addressed

A.2.2 Demonstrate ability to locate specific oceans, continents, landforms on maps and globes.

A.2.5 Analyze simple charts, graphs, and maps to gather information about local communities.

A.2.7 Give examples of how/why people in communities are interdependent.

A.2.8 Identify, describe, and illustrate major changes in communities such as environmental degradation, construction, and natural disasters.

Suggested Activities:

1. Complete the following activity using these links (Student Handout: Navigate the Trail):
<http://www.marinerstrail.net/images/TrailMap.net>
<http://www.marinerstrail.net>
<http://www.tworiverseconomicdevelopment.org/bike.htm>
<http://www.manitowoc.org/marinerstrail.htm>
2. Plan a class walk on the trail that includes sightseeing, trail maintenance, and use of trail map legend. <http://www.marinerstrail.net/images/TrailMap.net>