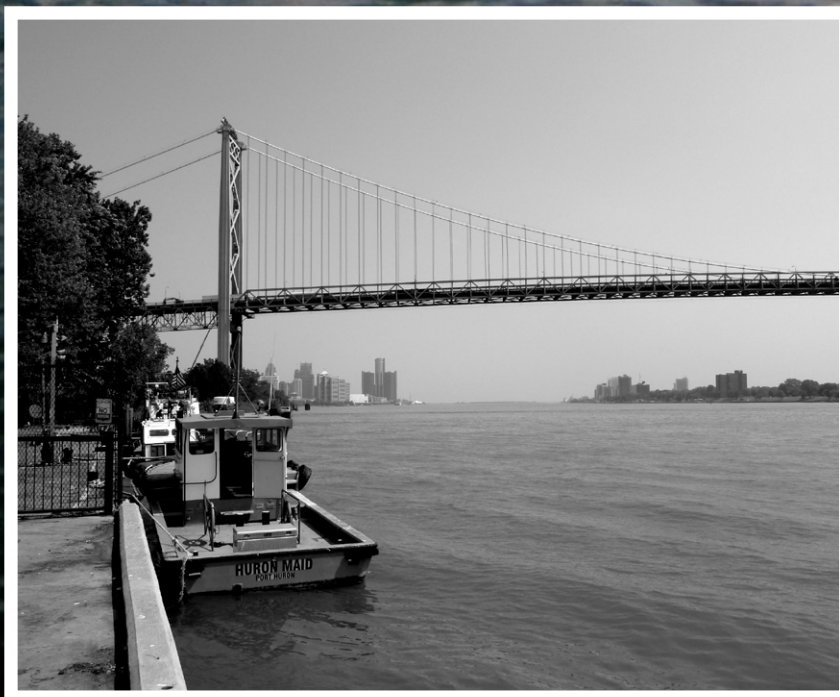
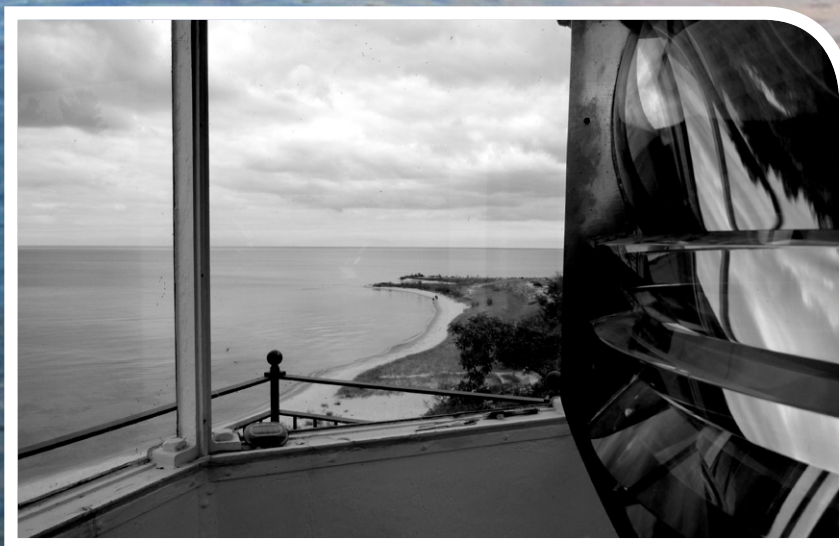
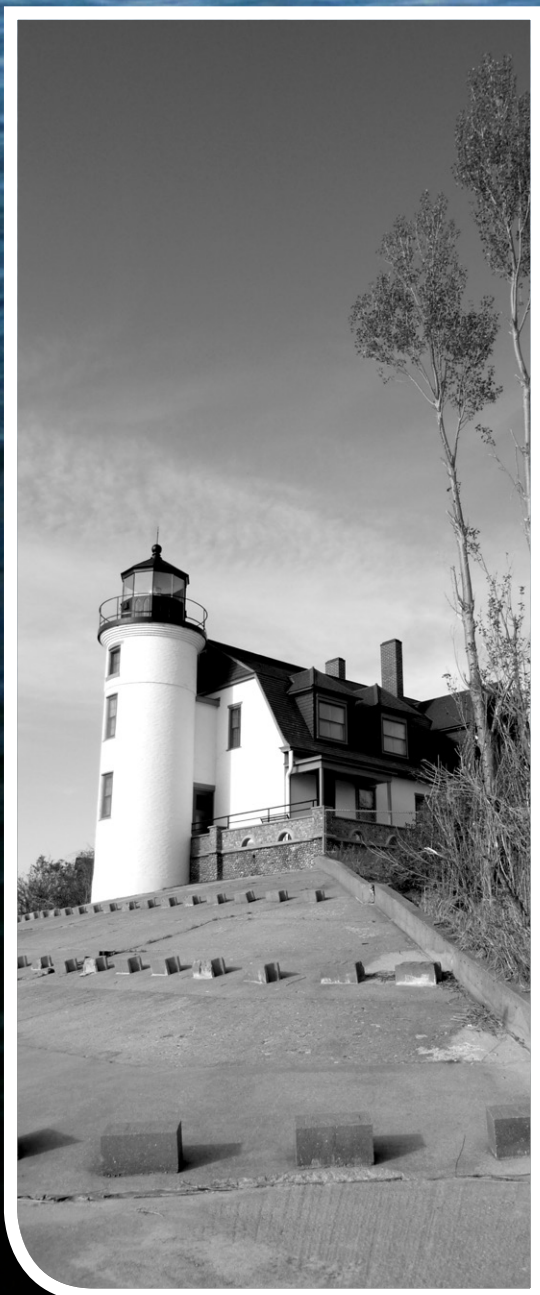




Michigan Maritime Heritage Special Resource Study



EXECUTIVE SUMMARY

In December of 2006, Congress passed the Michigan Lighthouse and Maritime Heritage Act (Public Law 109-436), which required the National Park Service (NPS) to work in consultation with state and local public agencies to do the following:

1. “establish the potential for interpretation and preservation of maritime heritage resources” in Michigan
2. identify management opportunities for “long-term resource protection and public enjoyment”
3. “address...increasing public awareness of and access” to resources
4. “identify sources of financial and technical assistance,” and
5. identify opportunities for parks and historic sites to coordinate efforts

This study examines the existing condition of Michigan’s maritime heritage resources and heritage tourism programs and evaluates the potential for NPS assistance through existing programs.

BACKGROUND SURVEY

Michigan maritime resources are historic resources that derive their significance from their coastal location and from their contributions to seafaring industries and activities in the state. Michigan has a vibrant tourism sector and there are many maritime resources preserved by government, private entities, and volunteers.

A survey was completed of interpretation programs, preservation efforts, public awareness of, and access to resources for Michigan’s maritime heritage resources, to establish a baseline from which suggestions for enhancement could be made. NPS staff undertook an extensive data gathering effort in summer 2010; the survey results detail the diversity of resources and management scenarios that exist among Michigan’s maritime resources.

Among the conclusions were that resources related to the shipping and mining industries, such as ore docks, are a threatened resource in the Great Lakes.

There are many active and formerly active heritage tourism programs regionally and statewide in Michigan, and these have been summarized and compiled in an administrative history. The diverse programs showcase the dedicated efforts to expand awareness of maritime heritage tourism and experience of the maritime areas of Michigan.

Since the survey in 2010, there have been many developments in Michigan’s landscape of maritime heritage resource programs, most prominently the development of new water trails. These water trails, although not directly related to maritime heritage resources, encourage experiencing the coastline from the water where many of the maritime resources can be seen from the perspective of the mariners who used them. Another development was the expansion of the boundary of the Thunder Bay Marine National Marine Sanctuary that protects many fascinating Great Lakes shipwrecks.

MANAGEMENT OPPORTUNITIES

The study team examined different management models the National Park Service uses to manage or assist in the management of historic resources to gauge their applicability to Michigan’s resources. The study briefly considers whether any unit of the national park system composed of nationally significant maritime resources in Michigan could meet the goals of the study. Collectively, however, these resources do not lend themselves to management as a unit of the national park system and do not meet the criteria to be designated as such.

Several options for NPS management other than through a designated unit were also considered and are presented in this study as opportunities that could be further pursued by interested entities. No single opportunity would meet all the goals for preservation, interpretation, promotion, and coordination among maritime heritage resources in Michigan. Management models that could address some of the goals or assist a geographic or thematic subset of resources are a statewide coordinating body, national heritage area, national scenic trail, national scenic byway, and national historic trail (NHT).

Two potential NHT proposals were conceived as part of the study process. “Lake Huron Beacon of Hope Trail: Michigan’s Lighthouses, Life Savers & Shipwrecks” would follow the Michigan coast of Lake Huron from the southernmost point to the Straits of Mackinac. “Jiimaan to Mi-shi-ne-macki-nong: Odawa Trade Routes” would follow as closely as possible the original routes of travel used by Anishnaabek mariners and later European American explorers in the Great Lakes. These proposals are presented as possibilities for further action in the state. National historic trails need strong partner organizations to be designated and to operate, and, should such entities be formed, the proposals for these trails could be further pursued.

STUDY CONCLUSIONS

The National Park Service finds that Michigan has a wealth of maritime heritage resources, many of which are available for the public to experience, as well as many access points and opportunities for visitors to experience the inland sea. These resources have different ownership and management patterns, are in various conditions, and have had various levels of success. The broad variation in resource management and public access is likely to continue. The sheer number and geographic distribution of maritime resources in the state does not lend itself to a single management option that would provide long-term protection and public awareness for all resources.

The National Park Service found only one notable gap in maritime resource interpretation and preservation. There is a lack of indigenous heritage resource identification and interpretation. Some significant stories and resources could be better preserved, and more cultural connections between the land and its early peoples could be highlighted for visitors.

A diverse suite of local and regional efforts have been effective in the past at achieving preservation, interpretation, and public awareness goals in Michigan. The National Park Service finds that the collected efforts are well suited to the present and future challenges of preserving, interpreting, and promoting Michigan’s maritime heritage resources. The National Park Service further finds that many opportunities exist for collaboration, cross-promotion, and connectivity between their various efforts as well as the possibility for resurrecting dormant programs.

The study team found that any management opportunities to better preserve and interpret Michigan Maritime resources in the future must

- provide sustainable funding sources,
- coordinate administration of multiple programs,
- promote Michigan maritime resources holistically,
- provide program design (such as education and interpretation) for partner organizations,
- provide technical support and assistance,
- build partnerships, and
- provide protection mechanisms.

Currently, programs are in place to preserve, interpret, promote, and coordinate among Michigan's maritime heritage resources, but opportunities exist to better leverage existing programs, fund sources, and access new opportunities. No single option would meet all the requirements of the study legislation or meet all seven goals above, but improving coalitions within the state would provide the most options for optimizing fund sources and new initiatives. As mentioned above, a statewide coordinating body may be desirable to coordinate efforts to preserve and interpret Michigan's maritime heritage.

Managing entities and other groups are encouraged to continue to seek assistance through existing NPS programs by working with parks, National Historic Landmarks, the Rivers and Trails Conservation Assistance program, and others. As an agency, the National Park Service is committed to supporting opportunities at the local and state levels to provide for preservation and public enjoyment.

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CHAPTER 1: INTRODUCTION AND HISTORIC CONTEXT

In December 2006, Congress passed the Michigan Lighthouse and Maritime Heritage Act (Public Law 109-436).¹ The law directs the National Park Service to undertake a special resource study of resources related to the maritime heritage of the State of Michigan. The law states that the purpose of the study is to determine suitable and feasible options for the long-term protection of significant maritime heritage resources in the state and the manner in which the public can best learn about and experience the resources.

The law required the National Park Service to work in consultation with state and local public agencies to do the following in this study:

1. “establish the potential for interpretation and preservation of maritime heritage resources” in Michigan
2. identify management opportunities for “long-term resource protection and public enjoyment”
3. “address...increasing public awareness of and access” to resources
4. “identify sources of financial and technical assistance”
5. identify opportunities for parks and historic sites to coordinate efforts

This chapter describes the study process and presents a brief overview of Michigan’s history and the development of its coastline and maritime resources.

HOW THE STUDY PROCESS WAS DESIGNED

The first step the National Park Service took in designing this study was determining its scope by defining which types of resources should be considered “Michigan maritime resources” for the purposes of complying with the study. That definition was:

Michigan maritime resources are historic resources that derive their significance both from their coastal location and from their contributions to seafaring industries and activities in the state.

The National Park Service also specified what would NOT be considered a maritime resource for the purpose of conducting this study:

Resources that are coincidentally or tangentially on the coast for some reason other than that they are directly related to the sea are not Michigan maritime resources.

Once the definition of which resources would be included in this study was clear, the National Park Service convened a study team, including representatives from history preservation programs in the state of Michigan, and researched resources that met this definition. (See “Chapter 5: Consultation and Coordination” for additional information about the study team.) The study team designed a survey to assess to what extent Michigan maritime heritage resources are currently preserved and interpreted for the public. The purpose of this step was to collect information for both quantitative and qualitative analysis of the maritime heritage resources of Michigan.

During July and August 2010, the NPS internal team researched and physically surveyed hundreds of sites on the coasts of both peninsulas of Michigan. The research and surveys in the Upper and Lower Peninsulas identified a total of 539 resources that were related to Michigan maritime heritage. The NPS internal team personally surveyed 261 of these resources. The remaining sites were surveyed via the Internet. Chapter 2 of this study describes the survey process and results in detail. (See “Chapter 5: Consultation and Coordination” for additional information about the teams and study process.)

1. See appendix A for full text of the study legislation.

The next step after the NPS internal team identified and gathered information on these specific Michigan maritime heritage resources was to see if those resources would meet criteria for inclusion in the national park system. The study legislation asks that the National Park Service identify management opportunities for “long-term resource protection and public enjoyment,” both of which are provided for national park units, so the potential for a new unit for a maritime heritage resource or a collection of resources was analyzed in appendix D.

The next step of the study process was to determine options for managing the resources that had been identified and surveyed. A working group, a subset of the study team, began by identifying goals for this management by answering the question: “What should be done to preserve and interpret Michigan maritime heritage resources?” Once goals for management options had been developed, the NPS internal team researched existing types of programs run by the federal government, states, local government, and nonprofit organizations that meet these goals.

The final step was to determine which programs would be best suited to preserving Michigan’s maritime heritage resources. This assessment was completed through a second meeting of the working group. Following the development of options, the study team engaged a broader audience of professionals working to preserve Michigan’s maritime history to gather their feedback in meetings held across the state in targeted external scoping.

The results of the process are documented in this study document. Chapter 3 describes in detail the management options the study identified. Two preliminary national historic trail proposals were developed and peer reviewed as part of the study process – these are summarized in chapter 3 and can be found in the appendix E. Chapter 4 contains a summary of sources of financial and technical assistance and concludes the study. Chapter 5 further describes consultation and coordination as well as the members of the study team and organizations contacted for targeted external scoping.

HISTORIC CONTEXT FOR MARITIME HERITAGE RESOURCE TYPES

The Great Lakes have shaped Michigan, both literally and figuratively. From trade, natural resource industries, and manufacturing to cultural and community traditions, these freshwater inland seas made Michigan’s two peninsulas a maritime place unlike any other in the nation. The maritime use of these lakes over centuries has wrought physical changes on the landscape, some of which are used today.

Humans have occupied the shores of the Great Lakes since the last glacial retreat, continually moving northward as the environment became more hospitable. Many artifacts from the permanent settlements of the indigenous people of the Great Lakes are related to fishing activities. Fishing equipment from upper Great Lakes archeological sites includes bone and copper fishhooks, gorges and spears, and notched pebble net sinkers. Extensive fishing and lake travel in Michigan began during the Woodland Period (2,500–500 years ago) when indigenous peoples expanded their use of the lakes for water transportation. Their boatbuilding technologies and traditions often reflect this maritime connection.

The American Indians of this area—the Odawas/Ottawas, Ojibways/Chippewas, and Potawatomis—are collectively referred to as Anishnaabeks. These peoples spoke similar dialects of Anishnaabamowin (part of the Algonquian language family) and were organized socially and economically as the Three Fires Confederacy, a nation that intermarried, traded, were allies in war, and shared religious beliefs. Odawa by definition means “to trade” and each family owned a section of trade route that was both a geographical path or waterway and a set of relationships with trading partners along the way. Extensive trade across the Great Lakes predates European settlement. Copper mining on the Keweenaw Peninsula and Isle Royale began approximately 7,000 years ago, and copper was traded extensively. Michigan’s first mariners navigated in small boats, typically dugout canoes on the inland waterways and bark canoes on the big lakes.

Canoes facilitated trade, communication, and social travel, and served as platforms for hunting, fishing, and gathering aquatic resources from the region's biologically rich shoreline wetlands.

The Odawas supplied the Ojibways to the north with corn, tobacco, roots, and herbs harvested by the Odawas and their southern Huron neighbors and, in return, received skins and fur to be used locally or to be traded southward. More than just a highway for material goods, the Anishnaabek routes facilitated cultural exchange throughout the Great Lakes region. Thousands of burials on the shorelines of the Great Lakes, as well as on its many islands, are part of the strong connection between the Anishnaabeks and the water. The lakes were important and sacred to the Anishnaabeks and remain so to this day.

Trade routes extended thousands of miles across lakes and inland waterways and helped define tribal communities for centuries. Economic and political advantages that came through the trade and its routes would become important leverage for the Odawas during French, British, and later American control of the Great Lakes.

In addition to facilitating economic, social, and spiritual connections, trade routes served as war routes in times of conflict. Control of these routes was won through bloody conflict. Following the conclusion of the French and Indian War and the transition of power from the French to the British, hostilities with the British drew indigenous people together in what is known as Pontiac's War. The routes were also heavily used by the Anishnaabeks during the War of 1812. Pivotal battles took place on the shores of the Great Lakes and on the lakes themselves—battles at Niagara and Mackinac Island saw hundreds of Odawa and Ojibway warriors using the water as a means to wage war.

Early European Americans arrived in Michigan in the 17th century and worked closely with the indigenous people of the Great Lakes and engaged in fur trading. This trade, and the protection of key trade routes and resources from competitors, led to the construction of forts, many of which survive today. Other forts are known archeological remains or have been reconstructed.

Michigan lands, waters, and trading relationships with indigenous people were sought after by French, English, and American powers. The introduction of European trade goods and technology radically altered the lives of the American Indians. Increasing settlement impacted indigenous peoples as well. Following the end of international hostilities after the War of 1812, many of the early European American residents of the Great Lakes were seasonal fishermen who built their shanties on the shores and extracted their fill from the rich waters. The ease of shipping on the Great Lakes was also attractive for farmers who, while moving westward, began to cultivate grain in Michigan and ship it eastward.

The land along the Great Lakes was rich in mineral and lumber resources, and the lakes provided transport to national and world markets. Improvements in navigation, such as the "Soo" locks on the St. Mary's River at Sault Ste. Marie and the Portage Lake and Lake Superior ship canal on the Keweenaw Peninsula, further facilitated the connection of the Great Lakes to population centers on the east coast. Access to the lakes shaped not only industry but human settlement in Michigan—population centers flourished near the lakes and at critical shipping junctures. Maritime shipping remained a mode of choice even after the introduction of railroads and highways.

The safety of maritime travelers and the security of goods transported in waters controlled by the United States (US) was a compelling interest for the federal government. In 1789, the first United States Congress created the US Lighthouse Establishment, an entity whose name and departmental affiliation changed over time but was continually dedicated to providing hazard warnings for mariners through the evolving technology of light stations, light ships, and fog signals. The first light station in Michigan (Fort Gratiot Light) was built in 1825 at the entrance to the St. Clair River at the southern end of Lake Huron. That same year, the Erie Canal across New York State opened, providing a direct link between the Atlantic Ocean and the Great Lakes that facilitated trade and migration. As traffic on the lakes increased, so did the need for navigational aids.



Whitefish Point

All of the lighthouses were distinctly different in appearance, particularly those along the same stretch of coastline, to avoid visual misidentification of the light and consequent location approximation by mariners. To provide help when disaster did strike, the United States Life-Saving Service began as a federal agency in 1848 to save the lives of shipwrecked mariners and passengers. A series of lifesaving stations were likewise established across the Great Lakes beginning in the 1870s, and, by 1915, the state of Michigan had 35 lifesaving stations.

The population of the upper Great Lakes quadrupled in the decade following the canal's opening. Because of Michigan's direct access to four of the five Great Lakes, the state experienced more shoreline development than neighboring states. As a result, the Anishnaabeks were threatened with removal to Kansas under the Indian Removal Act of 1830. Many engaged in treaties to avoid that fate. In many instances, tribes chose village locations on the shores of the Great Lakes to fish and have access to the burial sites of their ancestors.

Whether it was for fish or animal hides, lumber or grain, limestone, salt, taconite, or coal, many of the small communities that border the Great Lakes were settled and developed where natural resources were abundant. The availability of commercial shipping made extraction and transport of these resources viable.

Thousands of ships would sail the Great Lakes carrying immigrants, coal, and finished goods westward and return to American industrial centers such as Detroit, Michigan; Toledo, Ohio; Cleveland, Ohio; and Buffalo, New York, with raw materials, particularly forest products, iron and copper ore, grain, and cement. By the 1850s, businessmen from Detroit, Cleveland, and the east coast had moved northward seeking to exploit the old-growth white pine and hardwood forests of northern Michigan and the Upper Peninsula. The lumber industry boomed. The product was used primarily to construct cities and towns across the region. Dams were constructed for transporting logs downstream to lakeshore sawmills. Individual sawmills could easily process over 1 million board feet of logs a season.

This, multiplied by the hundreds of sawmills in operation throughout Michigan by the mid-19th century, accounted for the rapid depletion of a once abundant natural resource.

Although the lumber industry provided Michigan with a new source of wealth, agriculture remained the backbone of the state's economy. By 1850, Michigan was producing 5,500,000 bushels of corn and only a slightly lesser amount of wheat. Oats, wool, potatoes, butter, cheese, and maple sugar likewise made their way from the farm to the smaller cities and towns that provided centers of trade and commerce between the state's interior and the lakes. The western portion of the Lower Peninsula's climate, moderated by the lakes, was conducive to fruit production.

Elsewhere in Michigan, rock and mineral extraction boomed in many Great Lakes communities, drawing on demand and eastern investment. Copper and iron ore have been mined extensively in Michigan's Upper Peninsula since the 1840s. The development of a canal in 1855 brought the shipment of valuable mineral ore to its full potential. The canal made it possible to bypass the rapids of the St. Mary's River at Sault Ste. Marie and connect Lake Superior with the lower lakes. Copper mining in the Keweenaw Peninsula turned the United States from an importer of copper to a major supplier to the world market. Both copper and iron were vital to industrialization in the 19th century. Changes in ship construction and ore docks were developed to facilitate loading and shipping huge amounts of heavy commodities.

Schooners, steamers, and other ships all sailed the Great Lakes, their construction and technology often mirroring national trends. Some ships were constructed in the shipyards of Michigan, others came to Great Lakes waters from farther afield. Ship types often developed on the Great Lakes in response to a particular type of trade or to suit lake navigation. Early lake steamboats featured two side paddlewheels, distinguishing them from their inland river counterparts propelled by a single stern paddlewheel. Schooners, known as canallers, were designed specifically to allow passage through the Welland Canal, which bypassed Niagara Falls and connected Lake Erie to Lake Ontario.

By the second half of the 19th century, the preferred method of transporting large quantities of lumber and other bulk cargoes with minimal expense was by using a steam barge to tow three to six schooners at a time. Many ships of all kinds and sizes plied the lakes, and many ships of all kinds and sizes also sank to the lake bottoms.

Countless other submerged cultural resources (everything from inundated prehistoric landscapes to modern aircraft, pilings, and shoreline structures to fishnet stakes, isolated artifacts, huge piles of dredge spoil, and historic trash) exist on the lake bottom. Because of the fresh, cold water, much of this archeological record is incredibly well-preserved.

By the late 1890s, northern Michigan was developing a new industry. All the necessary ingredients were locally available for manufacture of Portland cement, including high-grade limestone, marl, shale, and clay. This complemented the active extraction of metals and minerals and led to shipping vast quantities of materials to fuel the growth of cities. The lakes also provided a way to ship finished goods from growing manufacturing sectors in Michigan cities.

Indigenous peoples weathered the storm of settlement to become a minority in their homelands. As resort communities, towns, and cities took root on the Great Lakes shoreline, many Anishnaabek communities coexisted with them.

At the turn of the 20th century, the lumber era had left the northern part of the state largely cut over. At the time, those lands had few agricultural prospects although other areas continued to flourish agriculturally. Michigan's natural beauty remained, and as Americans became more mobile and leisure time took on greater importance in American life, the lakes were seen for their recreational potential, giving rise to the resort industry. Steamships, along with trains and eventually automobiles, brought vacationers to the sandy shores and fresh breezes of Michigan beaches. Hotels and resorts dotted the shorelines, drawing visitors from Detroit, Chicago, and beyond.

Recreational vessels became an increasingly important part of the shoreline milieu, even as massive shipping vessels continued to transport goods. As automation of navigational operations has threatened to make lighthouses functionally obsolete, they have been recognized for their historic value and charm. Today, the maritime history, heritage resources, and landscapes of Michigan are closely tied to the tourism industry.

CHAPTER 2: BACKGROUND

This chapter presents background information to inform the analysis chapters of the study, as well as a description of preservation and interpretation programs in Michigan. The legislation directed the study team to review federal, state, and local maritime resource inventories and studies to evaluate the potential for interpretation and preservation of maritime heritage resources in Michigan. The legislation also directs that the study recommend management opportunities that would be effective for long-term protection and public enjoyment and address increasing public awareness of and access to resources.

Part One: A summary and analysis of the survey of Michigan's currently preserved and interpreted maritime resources.

Part Two: A description of current and previous programs in Michigan interpreting or promoting Michigan's maritime resources or coastal character.

PART ONE: EXISTING CONDITIONS SURVEY AND MARITIME RESOURCE INVENTORY SUMMARY

To compile information from existing inventories and to establish a baseline for preservation, interpretation, and public awareness of Michigan's maritime resources, the study team undertook an existing conditions survey. The existing conditions survey provides a thorough understanding of the current preservation and interpretation of Michigan's maritime heritage resources from the perspective of attentive outsiders. This perspective was beneficial for objectively researching and examining the collected data and in gaining an understanding of how maritime heritage is represented in Michigan and the ways in which that representation might be strengthened.

More information about the study and database can be found at parkplanning.nps.gov/michiganmaritime

This section presents the survey methodology, summarizes the data gathered, provides some preliminary analysis, and draws some conclusions about the currently preserved and interpreted maritime heritage of Michigan.

Methodology

The overall structure of the survey was to research maritime resources and construct a database with available information, then collect additional information in a field survey of selected resources. To undertake this large task, the surveyors began with the Upper Peninsula and then surveyed the Lower Peninsula.

Criteria for Resource Selection. One of the first and greatest challenges of this survey was establishing criteria to have a logical and trackable way to evaluate resources for inclusion in a way that meets the requirements and spirit of the study legislation. Questions often arose: What really constitutes maritime, or heritage? If this is a maritime resource, then what *isn't*?

The study team concluded that resources fit into two primary categories. Thus, the survey endeavored to include everything on the coast of Michigan that is either a heritage resource or a support resource.

1. Heritage Resource. A historic resource deriving its significance from contributions to Michigan's maritime heritage. Examples: lighthouses, ore docks, historic harbors and marinas, and museums focused on collecting and/or interpreting elements of maritime history.

2. **Support Resource.** A resource (either historic or nonhistoric) providing infrastructure for visitors to experience resources in category 1 (above), either by placing the resources in their broader historic context or by affording visitors the ability to directly interact with the sea or coastline. Examples: nonhistoric shore-side parks, beaches, and marinas; museums whose collections do not focus on maritime resources but provide context for understanding their significance (such as a local history museum with a variety of resources); as well as compelling historic sites and monuments that provide a similar context (such as Marquette Mission Park).

The survey did not include general tourist infrastructure (such as hotels and restaurants) serving visitors to Michigan coastal towns, unless they provide services specifically targeted toward visitors wanting to experience Michigan's maritime history. This means that hotels and restaurants (whether chains or locally owned, on the coast or inland) that are not historic by themselves were not included in this survey. (Note: historic hotels and restaurants that derive significance from their historic role serving Michigan coastal visitors would be considered as heritage resources.)

Heritage resources were surveyed if they met the following criteria:

- The resource appeared to be related to Michigan maritime heritage.

Why: The study legislation directed us to consider "significant maritime heritage resources" in Michigan.

- The resource was accessible in some way to a wide range of tourists/visitors (not exclusive).

Why: We intended to find out how well the story of Michigan maritime heritage was being told through its extant historic resources. Resources not intended for public interpretation or visitation are not within the scope of this survey, with the exception of lights (as they can and were historically intended to be viewed from the water, no matter their level of structural access).

- The resource would not have been there if not for the coastal location (Great Lakes).

Why: Resources that are coincidentally or tangentially on the coast for some reason other than that they are related to the sea are not maritime resources.

An example of a heritage resource is Fayette Historic Townsite. It was a company town for iron processing and shipping pig iron from the small harbor. Aspects of the site, such as the remains of the docks and even the orientation of the community itself, are related to Michigan maritime heritage. The resource is a state park and is advertised to a wide range of tourists. The town itself, but specifically the maritime resources therein, would not exist were it not for the coastal location. Although there are many aspects of Fayette that are unrelated to maritime heritage and would be common to company towns of that era, the site meets the criteria as a heritage resource.

Ludington Park in Escanaba is an excellent example of a support resource. It is directly on the waterfront of Lake Michigan, adjacent to the Sand Point Lighthouse, Delta County Historical Museum, and other potential resources, but in itself does not qualify as a resource related to maritime history. The park does provide a thorough and accessible collection of interpretive signage that tells the history of Escanaba and its relationship to the water via shipping and commerce. Its waterfront location and signage supports the observation and understanding of maritime resources, but it is not a maritime resource itself.

In most cases, these determinations had to be made on the ground and with discussions among team members. While the study team gathered as much information as possible off-site (see "Survey Methodology" below), many times there was no substitute for on-site evaluation of whether the resource met the survey criteria.

The study team also limited their survey to what an average but enthusiastic person researching maritime heritage-related attractions would find, in keeping with our goal to evaluate what is preserved and interpreted for the public and the ease or difficulty with which information about maritime resources could be found.

When visiting sites, the team did not share their purpose or use any “insider” information or interviews to find sites or obtain information about them.

Lighthouses. Because the study legislation makes special mention of lighthouses in its title, because lighthouse ownership is in transition in some instances each year through the National Historic Lighthouse Act of 2000, and because lighthouses are such iconic symbols of maritime history, the team endeavored to include every lighthouse in Michigan as part of the survey, whether they were publically accessible and interpreted or not. The list was compiled using State of Michigan and National Park Service Inventory of Historic Light Station data and other Internet sources for lighthouse enthusiasts. Contemporary lighthouses were classified in the support category.

Survey Methodology

The team’s first step was to gather an extensive site list using the Status of Michigan’s Historic Lighthouses chart, the Sweetwater Trail map, MDOT’s Heritage Routes program, the State of Michigan’s Historic Sites Online site, Pure Michigan, and Hunt’s Guide to the Upper Peninsula, as well as other travel or resource-related websites. This yielded a variety of sites in the heritage and support categories and additional sites merely on the water but not clearly historic and which required further investigation. Sites could be open to the public and interpreted, or be privately owned, or have restricted access but interpreted by a sign or merely be publically visible. Archeological sites were not surveyed unless they were identified and interpreted in some way. The result of this research was the list of resources considered in phase one of the study.

The next step was to visit as many of these resources as possible to gather on-the-ground data. Visits to each site included filling out the survey form (see below) and collecting the following: global positions system (GPS) coordinates, photos, and any brochures or handouts for the site or other sites (a component in evaluating public awareness). In addition to forms for sites identified in advance, other sites were surveyed as they were identified along the way.

The team was not able to visit each identified site. When pressed for time, sites that were clearly support resources, such as boat launches or marinas, were not visited. In the interest of time, more remote or difficult to access resources, such as the De Tour Reef Light or Fourteen Mile Point Light, were not surveyed on the ground. Many existing NPS resources were not surveyed because they were already sufficiently preserved and interpreted. Some NPS sites were visited as a basis for comparison.

The team attempted to survey a mix of resource types and ownerships when possible. Geographic distribution was also a consideration, but the patterns of history and industry seemed to dictate where resources were located. For example, Chippewa County, with many miles of coastline and Sault Ste. Marie, was home to dozens of resources. In neighboring Luce County, research turned up only two.

With the understanding that not all the nuances of sites, cultural landscapes, and towns themselves could be recorded on survey forms, observations were also informally recorded in journals.

The Survey Form

The survey form was created over the course of several weeks, with both “yes/no” questions and areas for notes to classify and describe the attributes of each site to be evaluated. Fields for resource name and address/location were completed ahead of time. Questions of resource type, condition, integrity, and visitor experience (signage visibility, access, interpretation) were included, as well as whether the site was part of an existing program or heritage route or other program (see below.) The final copy of the resource type outline can be found on the back of the form. The form was refined and updated between the Upper Peninsula and Lower Peninsula trips—although these changes were not substantial.

Resource Types

A draft list of potential resource types was developed with the Michigan Maritime Heritage Special Resource Study Team at a meeting at Sleeping Bear Dunes National Lakeshore in May 2010.

This expansive list was useful in looking for types of sites to include in the survey. The final list of types and subtypes is smaller, grouping like resources together for easier qualitative and quantitative comparison (see table 1).

Programs

The team was very interested in gathering field information about existing programs for visitor access and awareness such as the State of Michigan Department of Transportation Heritage Routes. Tours that directed users to maritime resources were included in the survey. Some driving tours, like the Lake Superior Circle Tour, mention a few historic sites incidentally as “attractions,” while the Lake Michigan Circle Tour is almost entirely focused on lighthouses. Intercommunity routes in the Upper Peninsula were: Great Waters, US-41 Copper Country Trail, M-123 Tahquamenon Scenic Heritage Route, M-35 U.P. Hidden Coast Highway, Western Upper Peninsula Heritage Trail, Sweetwater Trail, and the Circle Tours. Lower Peninsula routes checked were the West Michigan Pike, M-119 Tunnel of Trees, US-23 Sunrise Highway, M-22 Leelanau Heritage Route, M-37 Old Mission Scenic Heritage Route, the Sweetwater Trail, and the Circle Tours. Community-specific tours like the Mackinaw Historical Pathway were also included. Some routes were discovered along the way whose existence was previously unknown such as the Western Upper Peninsula Heritage Trail signage in Baraga.

The Database

A Microsoft Access database was created to house the information gathered, to streamline the quantitative analysis, and store qualitative data. Many of the database fields for information gathered came from the survey form, but space was included for additional information such as websites and places to attach images.

Qualitative notes about signage and interpretation, condition, and integrity were used to inform the overall portrait of the strengths and weaknesses of maritime heritage interpretation and preservation.

At this stage, the database is considered complete for the purposes of this study, although others may want to add to it over time. Notably, it does not include an exhaustive list of all marinas in the state. Providing such a large list of marinas, many of which may have no apparent historic component, was beyond the scope of this project. Any marina that is known to be historically significant would have been captured in the study team’s evaluation of national significance (see appendix D).

Phase 1: The Upper Peninsula, July 11–17, 2010.

Phase 1 of the survey in the Upper Peninsula was divided between two groups. The stretch of US Highway 41 (US 41) from Marquette to Rapid River served as the dividing line between the West and East survey areas. Both teams surveyed Marquette together on the first day to make sure they were in agreement on how to approach completion of the survey form, recording 10 resources.

- Team West surveyed resources west of Marquette, including (but not limited to): Baraga, Keweenaw Waterway, Eagle Harbor, Copper Harbor, Gay, Ontonagon, Menominee, and Escanaba. The team collected data on 65 resources.
- Team East surveyed the resources east of Marquette, including (but not limited to): Munising, Grand Marais, Whitefish Point, Sault Ste. Marie, De Tour Village, St. Ignace, Manistique, and Fayette. The team collected data on 48 resources.

Phase 2: The Lower Peninsula, August 22–30, 2010. The Lower Peninsula was divided at Petoskey between the east and west sides of the state. In total, both teams collected data on 148 resources.

- Team West surveyed resources on the west coast of Michigan from Petoskey south, including (but not limited to): Traverse City, Ludington, Grand Haven, Muskegon, Saugatuck – Douglas, and St. Joseph.
- Team East surveyed resources east of Petoskey, including (but not limited to): Mackinaw City, Cheboygan, Roger’s City, Alpena, Bay City, the “Thumb,” Port Huron, Detroit, and “Downriver.”

Michigan Maritime: Phase One Survey

Resource Name and Location Survey Date: <input type="text"/> Team_Members: <input type="text"/> GIS Latitude: <input type="text"/> GIS Longitude: <input type="text"/> County: <input type="text"/> MI <input type="text"/> Other Name: <input type="text"/>		Record Number: <input type="text"/> Surveyed?: <input type="checkbox"/>
RESOURCE INFORMATION		
Owner Ownership Type: <input type="text"/> MI <input type="text"/> Condition: poor 1 2 3 4 5 excellent Condition Notes: <input type="text"/> Integrity: poor 1 2 3 4 5 excellent Integrity Notes: <input type="text"/> NRHP: <input type="checkbox"/> State Reg. <input type="checkbox"/> Mich Hist. Marker <input type="checkbox"/> Displayed?: <input type="text"/> Resource/Org Website: <input type="text"/> Informational Website: <input type="text"/>	Operator Operator Type: <input type="text"/> MI <input type="text"/> Resource Type Resource Category: <input type="text"/> <i>Category A – Heritage, Category B – Support</i> Primary Secondary Tertiary Quaternary Other Type: <input type="text"/> Subtype: <input type="text"/> Cultural Landscape? <input type="checkbox"/> On an Island? <input type="checkbox"/> Water Access? <input type="checkbox"/> Programs: <input type="text"/> Other: <input type="text"/> Advertised? If so, where? <input type="text"/>	VISITOR EXPERIENCE INFORMATION <input type="checkbox"/> Open to Public? Days: <input type="text"/> Hours: <input type="text"/> Seasonal: <input type="checkbox"/> Start Date: <input type="text"/> End Date: <input type="text"/> Signage: <input type="text"/> <input type="checkbox"/> Brochures/Takeaway Materials <input type="checkbox"/> Interpretive Signage <input type="checkbox"/> Self Guided Tours Other Tour Types: <input type="text"/> Signage/Materials/Self Guided Quality Assessment: <input type="text"/> <input type="checkbox"/> Guided Tours? <input type="checkbox"/> Stationary Docents? Seasonal Interp? <input type="checkbox"/> Start: <input type="text"/> End: <input type="text"/> Days: <input type="text"/> Cost: <input type="text"/> Interpretation Quality Assessment: <input type="text"/> Activities for Kids? <input type="checkbox"/> Does Anything Direct You to Other Sites? <input type="checkbox"/>

Save Add New

Interior Accessible? ☐ InteriorDays:
 InteriorSeasonal? ☐ Start Date: End Date:
 InteriorHours:
 Physical Access:
 Interp. Access:
 Additional Notes:

Data entry screen for the database developed for this survey.

DATA GATHERED: BY THE NUMBERS

Through research and surveys in the Upper and Lower Peninsulas, a total of 539 resources were identified related to Michigan maritime heritage. These resources were labeled according to the heritage and support classifications, with 270 resources falling into the heritage category and 269 listed as support. Two hundred sixty-one resources were surveyed in person, with the remainder unvisited because of time constraints, uncertain location, or identification after the field surveys were conducted. Online research was used to obtain information on all sites.

The resources broke down into primary resource types as follows (from most to least): Industry—230; Lights—131; Cultural—85; Watercraft—50; Navigational Aids—24; Harbor—19. Each type contains several subtype categories to distinguish them from other resources in the same category; for example, museum is categorized differently from places of gathering or walking trails under the “Cultural” heading, and local parks are distinguished from state parks under the “Industry” heading.

The resource types and categories are not designed to precisely represent the full spectrum of maritime resources present along the coast of Michigan; to do so would require dozens of specific types and subtypes that would make meaningful analysis a difficult proposition. Rather, they are a classification system used to examine patterns in the occurrence, usage, and visitation of resources to provide analysis of the extent to which maritime heritage is represented and experienced throughout the state.

A resource may be categorized by more than one resource type and subtype, but no more than four (based on the limits set in our database). Resources fall into multiple resource categories for a variety of reasons. A lighthouse complex may contain a keeper’s dwelling and an oil house. When a resource serves a different function than its original purpose, such as a US Coast Guard boat that is now a museum, its original function is listed as the primary resource type, with the current function(s) as subsequent resource types.

While every resource listed has a primary resource type, there are 142 resources with a second type, 30 resources categorized in three types, and 10 resources that are listed in four types. A breakdown of resource types and subtypes is provided in table 1.

The lowest number of resources in any locality surveyed was one. Nine localities contained 10 or more resources surveyed, with the most resources (20) in Sault Ste. Marie. Other places with more than 10 resources surveyed were Marquette (17), Mackinaw City (17), St. Ignace (16), Detroit (15), Muskegon (12), and Ludington (12). Copper Harbor and Escanaba each had 10 resources surveyed. Not every town visited contained resources, either because of the inability to identify them prior to our field survey or the maritime heritage of the communities was not readily apparent upon visiting.

Ten counties contained 20 or more resources surveyed, with the most resources in Chippewa County (50). Keweenaw County ranked second (41), then Mackinac (28), Delta (27), Cheboygan (25), Wayne (25), Emmet (24), Alger (24), Marquette (22), and Leelanau (20) comprising the counties with the most resources. Two coastal counties, Gogebic and Tuscola, did not contain any resources surveyed. Since the coastal portion of Gogebic County is entirely composed of Porcupine Mountains Wilderness State Park, it was decided to forgo this portion of the coast since no maritime resources had been identified therein. Similarly, no resources were identified prior to visiting Tuscola County, and none were found in the reconnaissance visit to the area. This does not imply that either county lacks maritime heritage; it was not publically preserved and interpreted or difficult to find the present day as a visitor.

DATA ANALYSIS

Resource Types

The upper and lower peninsulas possess similar characteristics with regard to resources related to maritime heritage. Generally, resources were clustered around centers of population, with the exception of lighthouses, whose locations are proximal to the water for purposes of navigation, not necessarily related to the location of villages or cities.

The most abundant promotion of maritime heritage occurred where resources were clustered either within walking distance of one another (as seen in Alpena or Marquette), or were part of the same network of resources throughout a city (as found in Port Huron). Often, these resources were able to be experienced free of charge, whether they were an attraction open to the public or a resource related to infrastructure that may be readily observable whose maritime heritage is overlooked by the public as well as visitors.

General observations can be made about the various resource categories, as well as those resources, such as historic districts, that were difficult to qualify or categorize. Specific examples are used to highlight the trends observed in the field.

Industry. The primary resource type of industry encompasses the widest variety of resources, from parks to industrial sites, to mining and lumbering docks, and sites associated with various recreational purposes. Although the categorization of lumbering, mining, shipping, or fishing resources as industry may be an obvious association, the purpose of including local, state, and national parks, as well as hotels and private attractions, under the subheading of recreation was to tie these sites to the tourism industry.

Recreational resources occurred in the greatest number of any industry subtype, with local parks, state parks, and marinas accounting for the bulk of the sites surveyed. While virtually all of the 34 local parks were visited in person, many of the 46 marinas and 45 state parks were not, unless they were in proximity to other resources intended to be surveyed. As these sites were owned or managed by the Michigan Department of Natural Resources and Environment (MDNRE), their relation to maritime heritage was often discernable from the MDNRE website.

In the course of the Upper Peninsula survey, it was determined that the majority of marinas served as a current point of water access for owners of watercraft, but if they had a historic function or relation to maritime heritage, it was unclear from visiting any of them.

One marina contained signage indicating its construction through New Deal-era work relief even though this does not directly relate to maritime heritage. With few exceptions, the majority of parks and marinas fell into the Support category.

Resources related to historic commercial or recreational fishing industries were found in the form of active fisheries as well as fishing villages on both peninsulas. Communities with a historic commercial function, whether it was fishing, lumbering, or mining, were often difficult to identify as such unless that relationship was advertised, promoted or interpreted in some way. Certain communities associated with fishing, such as Bay Port, are acknowledged as historic via the state and national registers and yet when visited, there was no indication of this designation or historic function.

Similarly, maps and displays were seen in various communities indicating the importance of lumbering in the history of towns such as Menominee, yet today there is virtually no indication of this at the town's publicly accessible waterfront. Mining has a prominent place in the history of the Upper Peninsula and is well-represented through sites affiliated with the Keweenaw unit of the national park system. The maritime heritage of places with active quarrying or shipping industries, such as Rogers City or Escanaba, was easier to identify due to the extant nature of those activities. Unfortunately, the maritime heritage of towns where historically important industries are no longer active is much more difficult to discern.

Additional resources falling under the industry heading ranged from sites categorized as governance for their historic function as a military facility. Bridges and other infrastructure associated with transportation were among the most striking examples of resources available to view free of charge throughout the state (though their relation to maritime heritage is often owed primarily to their proximity to water, therefore warranting the Support classification)

Quantities of Primary Resource Type And Subtype Tables

Table 1 - Industry

Primary Resource Type/Subtype	Heritage	Support	TOTAL
Fishing – Commercial	13	0	13
Fishing – Recreational	0	1	1
Mining – Company Towns	2	7	9
Mining – Docks	5	1	6
Mining – Other	0	4	4
Transportation – Bridges	3	5	8
Transportation – Other	4	3	7
Recreation – State/ National Parks	6	39	45
Recreation – Local Parks/ Conservancies	1	32	33
Recreation – Private Attractions	0	5	5
Recreation – Resorts/Hotels	14	2	16
Recreation – Marinas	0	52	52
Recreation – Other	2	6	8
Shipping	2	0	2
Lumbering – Communities	1	2	3
Lumbering – Docks	0	1	1
Governance/ Military Public Infrastructure	4	4	8
Other	1	8	9
TOTAL	—	—	230

Table 2 - Navigational Aids

Primary Resource Type/Subtype	Heritage	Support	TOTAL
Fog Signal	1	1	2
Buoys/Daymarks	0	0	0
Locks/Canals	3	0	3
USCG/USLSS Station	13	2	15
USCG Boathouse	0	1	1
USCG Quarters	1	0	1
USCG Dock	0	0	0
USCG Other Structures	2	0	2
TOTAL	—	—	24

Table 3 - Watercraft

Primary Resource Type/Subtype	Heritage	Support	TOTAL
Boatbuilding	1	1	2
Cruise/Tour	3	4	7
Freight	2	0	2
Private	3	0	3
Ferry	6	7	13
Fishing	2	0	2
Military/Rescue	7	2	9
Shipwrecks	9	0	9
Other	3	0	3
TOTAL			50

Table 4 - Cultural

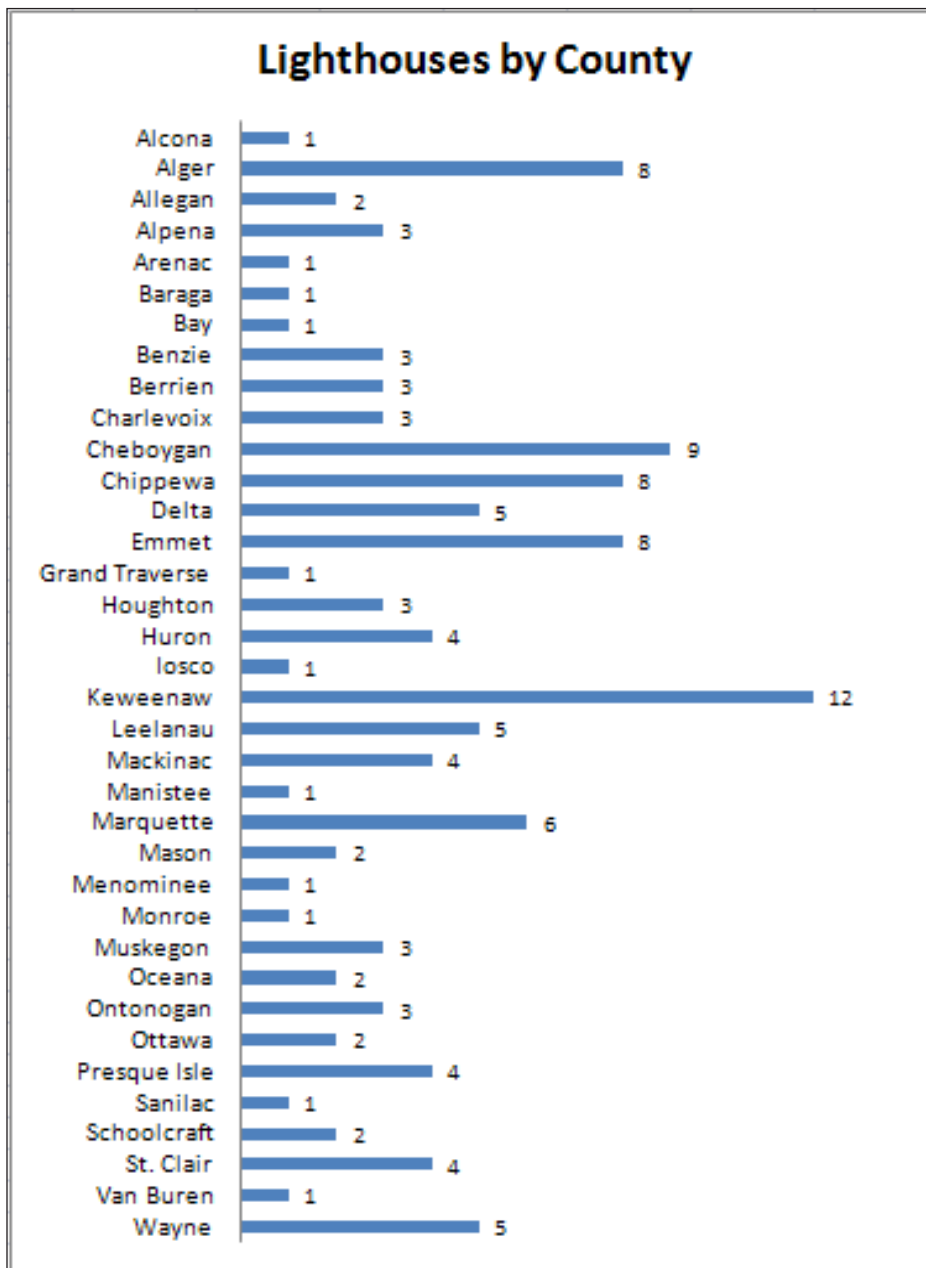
Primary Resource Type/Subtype	Heritage	Support	TOTAL
Museum	17	50	67
Gathering	2	3	5
Music and Arts	0	0	0
Storytelling	0	0	0
Ephemera	0	0	0
Walking Trail/ Boardwalk	2	11	13
TOTAL	—	—	85

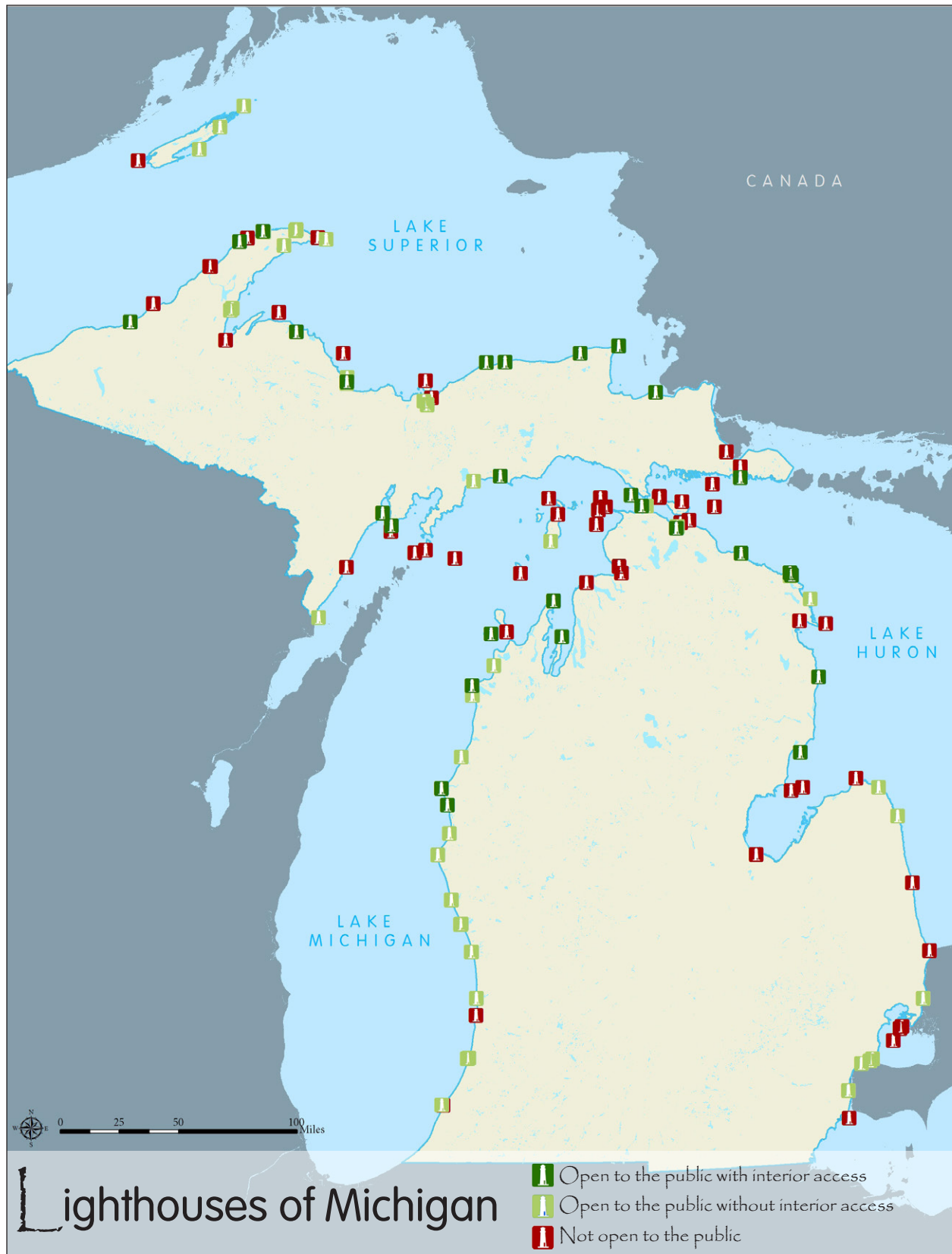
Table 4 - Lights

Primary Resource Type/Subtype	Heritage	Support	TOTAL
Lighthouse or Lighthouse Complex	117	7	124
Keepers Quarters	5	1	6
Oil House	1	0	1
TOTAL	—	—	131

Table 4 - Harbors

Primary Resource Type/Subtype	Heritage	Support	TOTAL
Natural	5	0	5
Manmade	7	7	14
TOTAL	—	—	19

**Figure 1.**
Lighthouses by County



Lighthouses. As lighthouses are among the most visible, and prominent maritime heritage resources, they also appear to be the most visited. Most are able to be experienced from the outside, although some are on private property or on breakwaters without pedestrian access and are entirely inaccessible save for distant viewing. Additionally, several are on islands, cribs, or shoals and only able to be viewed at a distance or by watercraft. Although not all lighthouses could be visited, all were included in the data because of their special interest, as well as their being mentioned specifically in the title of the legislation that ordered this survey. Lighthouses were distributed throughout the state, with the highest number found in Keweenaw, Cheboygan, Alger, Chippewa, and Emmet Counties (see figure 1).

While ownership of lighthouses is still predominantly federal, management of lighthouses ranges from state, local, and county government and from nonprofit friends groups to private residents (“Lighthouse Ownership” and “Lighthouse Operatorship” below). Several lighthouses that have been decommissioned are in transition from federal ownership to county or local governments or nonprofit organizations. Sometimes ownership agreements are shared between these entities. Lighthouses also varied in their accessibility to the public, and number and type of buildings present on-site. All lighthouse information is as of the time of survey (2010).

Lighthouse Information as of 2010

Cultural. The cultural resource category comprises sites with a more social function or those related to intangible heritage. Museums, which were among the most numerous type of resources visited or included in the survey, fall into this category and account for 67 of the 83 resources under the cultural heading. Museums were classified as heritage resources if their primary purpose was the preservation and interpretation of maritime heritage. Museums were classified as support if they were not maritime focused, but provided context such as a historical society museum increasing understanding of that community of which maritime heritage was a part.

Museums were among the most diverse resources visited on either peninsula because they covered a wide variety of focus areas, from the history of individual villages, cities, or counties to the evolution of certain industries, to cultural museums focused on American Indian tribes, or prominent residents of a particular area (via house museums).

Many museums exhibited varied collections of artifacts and ephemera and though some museums ended up not containing anything related to maritime heritage, there were exemplary museums visited on both peninsulas displaying or interpreting a town or other entity’s connection to the water. Many emphasized the many shipwrecks that have occurred on the Great Lakes, which often had a direct connection to adjacent communities (particularly for more contemporary shipwrecks such as the *Edmund Fitzgerald*).

There were 17 museums that were classified as heritage. (See section 2, “Methodology.”) There were also 11 sites for which museum was a secondary category, with the primary indicating the maritime-related structure containing it, such as the Museum Ship Valley Camp in Sault Ste. Marie. In general, light stations with displays were not classified as museums unless, like the Great Lakes Shipwreck Museum at Whitefish Point, they went significantly beyond the interpretation of the light station.

One of the challenges of evaluating museums was that many were not open when visited because of limited hours, which made it difficult to assess their interpretation of maritime history. Efforts were made to visit as many places with limited hours of operation, but it was not possible to visit every one.

Walking trails and boardwalks emphasizing maritime heritage were a particularly notable resource in several communities on the upper and lower peninsulas. These were often the most detailed method of interpretation of a town’s maritime history and are a good example of a resource relating maritime heritage easily accessible to interested residents, tourists, and passersby. They also potentially encourage the reader to visit other resources in the area or at least enhancing their understanding of local and regional history.

Watercraft. Watercraft is a diverse resource classification, including everything from commercial vessels and car ferries to military ships, both active and decommissioned. Yet, these resources often have the most direct association to the water, and therefore, to maritime heritage. However, many of the active watercraft that were visited or observed were either not open or had limited hours for accessing the water.

Considerable space is devoted to the stories of shipwrecks in museums throughout Michigan, yet there were few aboveground opportunities to encounter shipwreck remains (state underwater preserves are open to divers, although their locations were not found to be acknowledged on land). An interactive exhibit featuring a replica of a shipwreck at the Great Lakes Maritime Center in Alpena helps convey the significance of shipwrecks to Michigan maritime heritage (however, as a replica, it does not fall into the watercraft resource type). Still, noteworthy examples of observable shipwrecks or ruins are present in the Saginaw River at Bay City, on the beach below the Forty Mile Point Lighthouse and on the beach at Ludington State Park.

Boatbuilding, while certainly a component of Michigan's maritime history, is not well-represented through existing historic resources.

Navigational Aids. The category of navigational aids applied to resources such as locks and piers, as well as historic and contemporary US Coast Guard facilities. Miscellaneous buildings related to another resource type (such as Detroit Lighthouse Depot or Grand Traverse Fog Signal Building) were also listed here. Generally, the category encompassed former lifesaving stations and Coast Guard complexes, structures of various types, with larger infrastructure specific to navigation such as locks included. Their connection to the lakes was considered significant, as was their function as a type of infrastructure that could and often does have potential tourism value, as exemplified by interpretive signage present at the locks, as well as explanatory displays in some museums.

Harbors. Harbors, both natural and human-made, were found throughout both peninsulas. It was often difficult to distinguish the natural harbors from those that were human-made, although certain harbors (e.g., Eagle Harbor) were obviously natural. Similarly, it was difficult to discern the historic function of harbors, particularly those where no contemporary settlements exist (such as Cat Harbor).

Harbors near historic maritime resources were categorized as heritage, though the majority of harbors visited were labeled support because of a lack of discernable heritage association.

Additional Data Collected

Data was collected regarding the historic status of maritime resources included in the survey. Of the 538 resources, 116 are known to be listed in the National Register of Historic Places, 56 are on the state register, 25 were seen to display Michigan historic markers, 44 were seen to display signage indicating state or national register listing, and 7 displayed signage indicating national historic landmark designation. Some sites exhibited a combination of these.

Of the resources surveyed, 384 are open to the public. One hundred eleven are only open seasonally, generally in the summer months between Memorial Day and Labor Day, with some open as early as April and as late as October. Admission fees were required at 121 resources, including those with suggested donations.

Hours of operation varied considerably from one site to another. Sites such as museums or lighthouses open to the public were typically open between 10:00 a.m. and 4:00 p.m., and some were open as late as 6:00 p.m. Several sites were only open on weekends or limited hours during the week, which made it difficult to visit every resource during their normal operating hours. On some occasions, we knew of the existence of resources such as museums, but could not ascertain their hours prior to visiting and arrived to discover them closed.

Interpretive data was an important type of data gathered. Signage was varied in its presence and content. Resources that were designed to be open to the public usually had identifying signage, although interpretive signage was not always present to explain the history or significance of many resources visited. Interpretive signage was noted at 150 of the 250 resources visited. Live interpretation was available in the form of guided tours at 37 sites and by stationary docents at 38 sites. Some resources had a combination of methods of interpretation.

Reference or direction to other sites, unless the resource was part of a museum network, did not occur frequently. The most commonly observed way that visitors were directed to other sites was through rack cards or other brochures for individual sites. Brochures were available at many sites, but were often for the resource being visited.

Resource-based activities designed for children were observed in 46 instances.

CASE STUDIES

Resources Type Case Studies

Several individual sites encountered in our 2010 survey were noteworthy for embodying the trends discussed in previous sections and merit qualitative analysis of what works well for certain examples of resources discussed. These findings could potentially be applied to similar resources for their improvement and an overall strengthening of the delivery of maritime heritage interpretation.

Lighthouses

Lighthouses are the most visible and abundant maritime resources in all of Michigan. While we were only able to visit 58 of the 124 lighthouses or lighthouse complexes, some of them were dedicated entirely to interpreting maritime heritage, each in a different fashion.

Eagle Harbor Light Station. This is an excellent example of a light station complex incorporating several mini-museums using buildings on the property, telling several stories on one site. Interpretation by docents relates the history of the site to the town and to the lake, with an excellent view of the harbor and town for visual reference. The maritime connection of the site is clear, and there are directions to other sites in the region. The site is part of Keweenaw National Historical Park's Keweenaw Heritage Sites program.

Forty Mile Point Light. Also serving as the location of the SS *Calcite* Pilot House and Forty Mile shipwreck Fay, the Forty Mile Point Light site is a good example of clustered resources that could potentially draw in a variety of tourists interested in lighthouses and shipwrecks. An interesting feature of the light location is a radio tour available on-site by dialing into a particular frequency on a car radio, which was not observed at any other locations. Forty Mile Point Light also offers a Guest Lighthouse Keepers program, in which all of the on-site docents were participants. The docents were friendly and engaging and exhibited considerable knowledge of the site. The shipwreck was easily accessible on the beach behind the lighthouse, with signs pointing the way.

Forty Mile Point Light





Museums

Museums are among the most diverse resources visited in terms of how they represent or interpret maritime history, as their collections run the gamut from the contributions of an individual to a particular community, to a broad overview of maritime heritage. Two museums where the interpretation of maritime history was diverse and detailed were as follows:

Port Huron Museums. Composed of the Carnegie Center Port Huron Museum, US Coast Guard Cutter *Bramble*, Huron Lightship, Edison Depot (not included in the survey), and with future plans to include the Fort Gratiot Lighthouse, this museum system spans the city of Port Huron and offers discounted admission to all sites when a pass to all sites is purchased. Although the ships' history is not directly related to the maritime heritage of Port Huron, both offer thorough tours. The Carnegie Center is not specifically focused on maritime history, but does contain several detailed displays on general maritime heritage. Some of the collection is dedicated to Port Huron's maritime past. The Fort Gratiot Lighthouse is currently owned by the county and interpreted by the Port Huron museums. At the time of our visit, the grounds of the lighthouse were behind a fence, but it still attracted interest from several people taking photographs.

Port Huron Museum



Great Lakes Maritime Heritage Center / Thunder Bay National Marine Sanctuary Headquarters. This Alpena museum, managed by the National Oceanic and Atmospheric Administration (NOAA) in partnership with the State of Michigan, is an outstanding example of a museum that addresses the multifaceted nature of maritime history, appealing to all age groups, and without an admission charge. Exhibits of authentic artifacts are incorporated within recreations of shipwrecks that interpret shipping history and underwater archeology. The museum includes activities designed to engage and educate children. Coupled with the adjacent Maritime Heritage walk in Alpena (see "Boardwalks and Riverwalks" below), the museum and walk serve as an exemplary way to learn about submerged maritime resources that would be inaccessible without special training and equipment.

Many more museums were local or regional and not primarily focused on maritime heritage, and thus, met our criteria for the support category. An example of such a museum with clear and engaging interpretation is:

Display at Great Lakes Lore Maritime Museum Rogers City August 2010





Fishtown

Saugatuck Douglas Historical Museum. This compact museum has several buildings, one major exhibit room adjacent to the gift shop, a smaller permanent exhibit space, and a children's project area. The exhibits use a variety of audio and visual resources and quality exhibit design to educate (and entertain) visitors on subjects such as the history of the Oxbow School of Art and area maritime history. The museum exterior draws visitors in with whimsical "yard art" and signage orienting the visitor to the history of the area and is in Douglas near the "chain ferry" and thus easily accessible from Saugatuck.

Historic Districts

A number of historic districts near the water were identified through the Michigan State Housing Development Authority Historic Sites Online database and included in the survey because of descriptions implying that they had a maritime connection or because of their direct proximity to the water. Unless there was signage specifically indicating their general vicinity, these historic districts were difficult or, in some instances, not possible to find. When certain districts were visited, their historic status was unclear; in others, the maritime heritage was only apparent upon close scrutiny. Three visited examples of historic districts related to fishing reveal some are not identifiable as such, while one in particular is making strong efforts to promote its heritage.



Fishtown

Big Traverse Bay Historic District. This waterfront historic district in a sparsely populated part of Houghton County is identified as a "small Finnish fishing community," that today appears to be composed of private residences with no clear active industry and no indication that it is a historic district. Bay Port Fish Company / Commercial Fishing Historic District is noted in Historic Sites Online as being composed of seven buildings; however, only three buildings appeared to remain of this historic district, all of which serve the Bay Port Fish Company, an active commercial fishing operation. Aside from a mural on the road leading to the fishing company building, there is no indication of the rich history of Bay Port or its fishing industry.

The Leland Historic District (Fishtown) is a working waterfront community of shops, charter boats, and active fishing operations in shingled shanties and is well interpreted by a Michigan historical marker and readily available brochures. The active Fishtown Preservation Society also holds many events in and in support of this small and vibrant neighborhood.

Boardwalks and Riverwalks

Historic boardwalks and riverwalks were among the most thoroughly detailed and engaging of resources encountered during the survey. Their presence and location was not always ascertained before venturing into the field; conversely, one walk intended to be surveyed was difficult to find.

Mackinaw City Historical Pathway. This is an outstanding example of a walking tour throughout an entire village, incorporating a variety of sites (existing and destroyed), infrastructure, historic sites, and public parks, with highly visible signage throughout, and a downloadable brochure. An additional component is the opportunity to use a cell phone to obtain information at certain stops along the pathway. Content is related to or focused on maritime history and the relation of the village to the water over time.

Great Lakes Maritime Heritage Trail (Alpena). This walking tour was also an excellent example of a historic walking tour, although it occurs along the Alpena River and not a lake. The trail signage is detailed and regularly spaced to entice visitors to stop and read, as well as continue along the path. The trail is divided by the Alpena Bascule Bridge, with signage on its western portion provided by the National Oceanic and Atmospheric Administration, and the eastern portion signage provided by local government and nonprofit organizations. This may present a challenge to experiencing the entire length of the trail without signage to indicate its continuation, which we did not observe (and as a result, we did not initially know about the eastern portion of the trail).

The Manistee Riverwalk. This boardwalk draws visitors to the water's edge, with a series of signs explaining the area's maritime history, which blends easily with the surrounding tourist businesses and docked watercraft. Visitors are informed of a range of heritage topics from historic bridges to the furniture industry that once thrived alongside the river. The atmosphere was lively and successful at blending the past with the present.

Maritime History Walk (Bay City). The Bay City Maritime History Walk was identified in advance of visiting Bay City, but unfortunately, its definite location was uncertain. Scattered, unlabeled signage did not appear to directly relate to maritime history, except for a sign at the "Sunken Schooners" (the approximate site of the Davidson Ship Yard, whose location was difficult to confirm prior to visiting the Bay County Historical Museum). The sign was fairly detailed, but did not appear to relate to any other signs or trail along the river.

Infrastructure and Industry

Industry and infrastructure (such as bridges) and industrial sites are often the most visually prominent resources in Michigan, yet are not always interpreted or explored for their historic value. Potential for interpretive programs as well as tourism opportunities related to these resources certainly warrants further discussion.

Michigan Limestone and Chemical Company Quarry (Roger's City). The Michigan Limestone and Chemical Company Quarry is partially responsible for the 20th century growth of Rogers City, which is recognized in the Presque Isle County Historical Museum. An opportunity to experience the active quarrying (now owned by Carmeuse Natural Chemicals) is a viewing platform some distance from the site, which offers no interpretive signage. As a site of considerable shipping heritage of such local importance, publicly viewable from an overlook, possibilities exist for further promotion of "The World's Largest Limestone Quarry" beyond minimal signage.



Marquette Ore Dock

The Dry Dock Engine Works – Detroit Dry Dock Company (Detroit) is an intact but deteriorated complex, part of the maritime history of Detroit, which lacks signage or incorporation into the adjacent and popular Detroit Riverwalk. Faded painted signs on the brick walls are the only indication of the building's former purpose. Commercial signs advertise plans for loft redevelopment, which have evidently stalled. For both sites, signage could visibly communicate the history and evolution of the building and surrounding waterfront and significance to the city of Detroit. (Since the site visit in 2010, the Detroit Dry Dock Company has been undergoing renovation to become the Michigan Outdoor Adventure Center, managed by the State of Michigan DNR along with numerous other partners. The facility that will house exhibits, displays, and hands-on simulators introducing visitors to features in state parks, recreation areas, beaches, trails, and harbors.)

Marquette Ore Dock. The Marquette Ore Dock is an example of highly prominent, extant maritime mining and shipping heritage infrastructure, without any interpretive signage or indication of what it is or its relation to the history of the town. Ore docks are a threatened resource in the Great Lakes, and calling attention to their significance to the shipping and mining industries, maritime heritage, and growth of surrounding communities could be an avenue for tourism opportunities. The Marquette Ore Dock is at the Marquette Lower Harbor and adjacent to Mattson Harbor Park. The park and harbor are a good place to experience the ore dock, lower breakwater light, and are near the Marquette Maritime Museum and Marquette Harbor Light. This clustering of maritime resources could be capitalized on, considering that they are all within walking distance of downtown Marquette, which is the most populous city in the Upper Peninsula and already a tourist destination.

Fayette Historic Townsite (Garden Peninsula). A state historic site, the Fayette Historic Townsite is an example of a remarkably intact cultural landscape, with excellent interpretive signage both inside and outside the remaining buildings of this late 19th century iron manufacturing town.

On a protected cove on the Garden Peninsula, the links between production at the site and means of shipping are clear and interpreted. Fayette is unusual as a nearly complete community, suspended in time; many other industrial heritage sites are parts of still-operating industrial concerns or living communities.

Resort History

Although all coastal areas of Michigan have some history of the tourism industry, the western coast of the Lower Peninsula has a particularly strong history and architectural legacy of people traveling to the coast for respite, a practice that continues today. There are excellent examples of resort resources, but there seems to be no easy way for visitors to experience resort interiors, or in some cases, experience them at all, without staying the night. Most historic resorts, camps, motels, and hotels are currently operating and focusing on commercial concerns and may not have the capacity to host heritage tourists not staying at their accommodations. However, many sites prominently display national register or Michigan historic site plaques and some have brochures explaining the site's historic significance.

Although the resorts themselves are not currently fully effective venues for understanding the history of coastal resort/vacation culture, there are a number of local museums that provide interpretive exhibits.

The Benzie Area Historical Museum offers an extensive exhibit relating to resort culture and other museums such as the Heritage Museum and Cultural Center in St. Joseph and the Saugatuck-Douglas Historical Museum offer rotating exhibits on topics such as summer camp culture and luxury passenger steamers. Some “generic” tourist brochures, such as Grand Haven’s 2010/11 visitor’s guide, suggests sites like the Khardomah Lodge as a destination for understanding of the late-19th and early-20th century resort era. A more extensive heritage tourism program would benefit places such as the Gordon Beach Inn in Union Pier, Lakeside Inn in Lakeside, Camp Tosebo and the Portage Point Inn in Onkama, and many other locations that recognize the importance of this culture and have preserved resources of the period.

Visitor Experience Case Studies

Heritage Resources Alongside Natural and Recreational Resources. Specific themes observed in the Western Lower Peninsula are illustrative of the ways in which heritage can be effectively integrated with aspects of nature and culture in Michigan.

The following are two examples of destinations that relate to visitors with varied interests. The inter-relatedness of the resources seems to engender a sense of cohesion with the visitor that could ultimately help highlight maritime heritage tourism.

Ludington State Park. The hike to Big Sable Lighthouse in Ludington State Park is a leisurely 2-mile stroll through sand dunes dotted with interpretive signage and lake views. The signage integrates natural phenomena with historical interpretation. Along the way, slight detours take the visitor to a shipwreck site and a kiosk, which marks the site of one of the earliest lifesaving stations on Lake Michigan. The lighthouse is staffed by volunteers who enthusiastically offered information. The historic beach house, which is near the entrance to the park, is part of an earlier era in recreation and displays interpretative signage to those who pass through to the beach. Recreational opportunities at Ludington State Park are camping, hiking, snowshoeing, and beachcombing, and natural resources attractions include the dune ecosystem. All these resources are blended together in an environment that interprets the cultural and natural overlap and relates to visitors on many levels. The park offers a summer Saturday morning “Walking History Tour” which highlights a variety of resources including dam and mill ruins, piers, and the site of the lifesaving station.

Discovery Center – Great Lakes. Just outside Traverse City, the Discovery Center is an example of how separate agencies and organizations can co-locate in a campus-like environment and attract a broader audience for all groups. There are a variety of groups at the Discovery Center, including the Maritime Heritage Alliance, the Great Lakes Children’s Museum, and the Watershed Center of Grand Traverse Bay.

The missions of these organizations vary, with some emphasizing natural, cultural, or recreational resources, but the common Great Lakes focus is a draw for visitors. This site is further strengthened by its location adjacent to Elmwood Township Park, which offers swimming and picnicking opportunities, and Elmwood Township Marina.

The Maritime Heritage Alliance focuses on restoration of historic wooden boats and offers opportunities for groups to sail on two of their projects—the schooner *Madeleine* and the armed schooner *Welcome*. Their restoration shop sponsors a “youth mentoring” program and, at present, is working on the restoration of a tender for the Grand Traverse Lighthouse Museum. The Discovery Center-Great Lakes website acknowledges the benefits of the partnership between organizations and addresses the potential for “collaborative recreational, educational, and community uses” of these resources. The integration of groups and resources has the potential to attract and educate a greater variety of visitors than the resources presumably would standing alone.

INTEGRATING MARITIME HERITAGE INTERPRETATION WITH OTHER TOURIST EXPERIENCES

There is a potential for a broader exposure of visitors to maritime heritage resources through maritime “complexes” where history is part of the visitor experience. A “complex” in this sense is a collection of resources relating to the lakes, though not all are historic or directly related to interpreting maritime heritage. The benefit of these complexes is outreach to the more casual tourists who may not be visiting destinations based primarily on the presence of historic sites or experiences. Visitors will be naturally exposed to heritage resources through integrations into other tourist experiences. Several examples of these complexes exist on the west coast of Michigan and are case studies for successful immersion of heritage resource interpretation and other visitor experiences in village/city settings.

Muskegon. Within a few blocks, the city of Muskegon highlights its maritime heritage through a maritime history walk, which draws recreational walkers and runners from the local Margaret Elliot Drake Park and ultimately leads to a cluster of maritime structures that include the National Oceanic and Atmospheric Administration building and an active US Coast Guard station and ends at the South Pierhead Light. Visitors are exposed to the bustle of tourists intermingled with young researchers preparing for a sea bound trip. Nearby is the Great Lakes Naval Museum and Memorial, which features the Coast Guard cutter *McLane* and the USS *Silversides* on display.

Grand Haven. The Grand Haven Tri-Cities Historical Museum in the historic Grand Trunk Train Depot building and the Akeley Building can be the first stop in a collection of maritime-related activities where history blends compatibly alongside modern-day water-related activities in Grand Haven. Wayfinding is simplified by an abundance of maps and other signage. Contemporary visitor attractions, such as the “Musical Fountain,” are featured prominently during the annual Coast Guard Festival, where Grand Haven (the “official Coast Guard City”) celebrates and interprets Coast Guard history in the area. The boardwalk, which follows the Grand River and continues to Lake Michigan along the south pier to the lighthouse, includes signage describing the light’s history.

Holland. An example of where this immersion does not occur as readily is the Holland Harbor Lighthouse. Although one can easily view the Holland lighthouse from across the channel from Holland State Park (after paying a daily admission fee), direct access to the lighthouse site is more complicated. The lighthouse is surrounded by privately owned property and public parking is sparse. There is a guard shack that tourist vehicles can pass by, although it is not clearly marked that the public *can* access this area. If a vehicle does pass through the gate, there are a limited number of parking spaces for lighthouse visitors, each limited to a one-hour period. The trek through the remaining private space is not well marked and the entire experience requires more effort. The private property ownership is an obstacle to a contiguous and accessible maritime experience.

Programs

As discussed above in “Methodology,” to inform the current state of visitor access and awareness, part of our survey included searching for existing programs to circulate visitors between different maritime heritage resources, either exclusively or in conjunction with other attractions. We looked for physical evidence on-site of signage or other indications of being included in a program, availability of maps, or brochures at sites. We looked for both intercommunity tours such as those described in Part 3 and intracommunity routes like the Mackinaw Historical Pathway and M-25 Bay City Heritage Route. Intracommunity tours covering a smaller area tended to be better marked on the ground, but information about them was not as available to potential visitors online or on brochure racks. Intercommunity tours, such as the Circle Tours, the Sweetwater Trail, and Great Waters, varied in their on-site markings and the availability of maps. Those programs will be described in Part 3.

CONCLUSION

Since this survey was conducted in 2010, Michigan’s individual maritime heritage resources and the programs created to make them known and available to visitors have undergone some changes. The decommissioning of lighthouses by the US Coast Guard has led to ownership changes. New developments such as the expansion of water trails and renovation of the Detroit Dry Dock Company building into a soon-to-open adventure center, extend the possibilities of connecting visitors to the coasts. One national historic landmark, the SS *Columbia*, one of the two “Boblo Boats” that ferried visitors to a Detroit-area amusement park, is no longer in the state of Michigan. Despite these individual changes, many of the same challenges for publically accessible and interpreted maritime heritage resources in the state remain.

Because of this survey’s focus on the state of preservation and interpretation of publically accessible maritime heritage resources, resources or opportunities for understanding the state’s maritime heritage that are not publically accessible or interpreted were missed.

For example, the locations of historical or present-day indigenous communities were not listed or advertised as publically accessible and related to maritime heritage. A long and rich segment of the maritime heritage of the state and the Great Lakes is thus underrepresented but for the efforts of museum exhibits in historical societies, at historic sites, and at the Museum of Ojibwa Culture. Very little is identified on the actual sites of indigenous maritime activities, and the significance of the locations of present-day indigenous communities are not advertised to interested visitors.

The gap in indigenous heritage resource identification and interpretation is part of a larger opportunity in maritime heritage interpretation in Michigan: more cultural connections between the land and the people should be made clear to visitors. Michigan has many accessible waterfront segments such as parks and marinas where there were likely once activities related to Michigan’s maritime heritage. Though the landscape of those areas may have changed significantly since the time of their maritime use, they might provide the opportunity to foster greater connection between visitors, their heritage, and the Great Lakes of today. Additionally, many privately owned but publically visible resources, such as tugs and historic camps, are unmarked and thus not able to be found or understood by visitors. While doing so would understandably present challenges for private owners, the benefits of identification as part of a shared maritime heritage may outweigh the dangers of unwanted attention.

Overall, the state of Michigan has a broad variety of maritime heritage resources available to visitors, both those directly related to the maritime past and resources that help visitors understand and experience that heritage. While disparate resource types with varied preservation needs, ownership, management, interpretation, and advertising present different individual challenges, there are many rich visitor experiences available throughout the state of Michigan related to maritime heritage and past and ongoing relationships to the Great Lakes.

PART TWO: MICHIGAN'S MARITIME HERITAGE TOURISM

As a state with more than 3,000 miles of coastline, Michigan's history is intrinsically tied to the water. The progression of its population distribution, various industries, recreation, and governance all contribute to the rich maritime heritage of the state. A great deal of that history is available to visitors today in the historic resources, museums, and tourism programs dedicated to promotion of the Great Lakes and other navigable waterways of the state.

The purpose of this administrative history is to examine the evolution of maritime heritage tourism programs, their varied goals and focus, the participants and partners responsible for each, costs and funding, longevity and sustainability, and effectiveness at achieving their missions. Not every program examined had the same approach to maritime heritage tourism, and some were not directly focused on history as much as on economic development. However, all programs discussed are unified by the presence and promotion of maritime heritage resources in their respective target areas.

The maritime heritage tourism programs examined in this section span a period of 100 years, though the majority came into existence in the late 1990s and early 2000s. As the national historic preservation movement is relatively young, only recently does it seem that a thorough examination of the maritime heritage of Michigan has taken place for the purposes of tourism.

Early Examples of Tourism in Michigan

At the beginning of the 20th century, the economy of several regions of Michigan began to falter as lumber companies had begun to withdraw from areas like West Michigan, leaving no dominant industry. With the increase in development of coastal hotels and resorts on the west side of the state, it became essential to provide access to dune and lakefront land previously inaccessible to the public. Although bicycle touring was popular, the surge in automobile transportation around 1908 radically changed development of this region. The state highway department and the state park commission joined together to construct a system

of roads and state parks providing public access to Lake Michigan and, prior to the widespread availability of motels and hotels, camping facilities for automobile tourists. An important element of these efforts was the reforestation and beautification of West Michigan roadsides to further appeal to tourists.²

As there was no centralized organization to spread news of these improvements, it was inevitable that a group would be formed to advocate for such a cause. The Michigan Tourist and Resort Association (MTRA), purported to be the first regional association formed to promote the tourist and resort industry in Michigan, was established in Grand Rapids in 1917 to promote West Michigan and its various amenities.³ As will be noted in the subsequent section on the West Michigan Pike, improvement of the roadways in the state of Michigan allowed increased tourism along its coasts. The fledgling tourism industry was often given a boost through printed media designed to guide automobiles and their passengers to new coastal destinations. Publications, such as *Scarborough's Official Tour Book* of 1916, provided maps along coastal trunk lines of the Great Lakes states of Michigan, Wisconsin, Indiana, and Illinois, while organizations such as the Automobile Club of Michigan also published tour books directing motorists to points of interest in different parts of the state.

By the 1950s, full-color "Lure Books" were printed, replete with photographs showing the joys of the coast.⁴ The promotion of tourism was not limited to print; a 1949 short film documentary on tourism in Northern Michigan focuses heavily on the water, but again in its recreational amenities, rather than any aspect of maritime heritage, though there are depictions of car ferries, icebreakers, and other seafaring vessels that have since become important to contemporary maritime heritage interpretation.⁵

2. Amy Arnold, *Southwest Michigan Roadmap: The West Michigan Pike* (Lansing, MI: State Historic Preservation Office, 2010), 1.

3. *Ibid*, 260.

4. *Scarborough's Official Tour Book: Indiana, Ohio, Michigan, Illinois and Wisconsin Trunk Lines* (Indianapolis: Scarborough Motor Guide Company, 1917); Upper Peninsula Development Bureau, *The Lure Book of Michigan's Upper Peninsula 1946* (Marquette, MI: UP Development Bureau, 1946).

5. "Roaming Through Michigan," Youtube. <http://www.youtube.com/watch?v=QMR7vel78f8> (accessed July 30, 2011).

The 1959 National Park Service “Great Lakes Shoreline Recreation Area Survey” sought to examine opportunities to be built on the shores of Michigan and other Great Lakes states, primarily identifying possible areas for future national park lands. The survey noted immense potential in the coasts of Michigan, stating that

With Michigan’s command of the largest portion of the Great Lakes shoreline, it is natural that most of the undeveloped shore opportunities also occur here. Consequently, this situation is responsible for the tremendous scope of the problem of preserving an unspoiled shoreline for public use. The challenge of the problem must be met by all citizens, for in the final analysis it is by their action and support that the public’s interest in the conservation of its shoreline can serve as a model for preserving a great natural heritage.⁶

Although the survey almost exclusively focused on the natural aspects of the shoreline and an emphasis on their conservation through designation as national parks, the conclusion above is still relevant over 50 years later as it applies to the need to preserve, protect, and promote the coastal resources of Michigan, specifically those threatened by neglect, deterioration, and uncertain revenues in a troubled economy.

Current Tourism Programs in Michigan

Contemporary tourism programming in Michigan has experienced ebbs and flows in funding, while tourism spending has increased steadily over the past decade. Surveys have found that tourists and travelers spent an estimated \$17.2 billion in Michigan in 2010, an increase of 14% from the \$15.1 billion spent in 2009.⁷

This is also an increase from approximately \$11.5 billion in travel spending in 1999, indicating that tourism spending rose in spite of the economic downturn of the past years, and if the trend continues, may well continue to increase.⁸

Promotion efforts of statewide organizations have often focused on attracting visitors from out of state, as research indicated that every dollar spent on out-of-state advertising returns \$3.29 in state and local tax dollars.⁹ Travel Michigan is one of the major entities responsible for state tourism. They are legally required to spend 80% of their budget outside the state of Michigan, and several Travel Michigan national advertisements have focused on the state’s maritime heritage, including television and radio commercials on lighthouses and other maritime cultural resources, providing broader visibility to a limited number of maritime amenities.¹⁰

Pure Michigan, an initiative of Travel Michigan, has been a highly successful avenue for statewide tourism of all kinds, including maritime heritage tourism. Created in response to inconsistent tourism programming of decades past, the Pure Michigan campaign began as a regional effort in 2006, expanding to a national audience in 2009. Focusing on imagery of Michigan’s many assets and resources through television, print, and online advertisements, Pure Michigan has stimulated approximately 7.2 million trips to Michigan by out-of-state visitors, who spent \$2 billion at Michigan businesses and have generated over \$138 million in new tax revenue for Michigan, eclipsing the cost of advertising by three times.

6. US Department of the Interior, National Park Service, “Remaining Opportunities in Michigan,” *Great Lakes Shoreline Recreation Area Survey* (National Park Service, 1959), http://www.nps.gov/history/history/online_books/rec_area_survey/great-lakes/mi.htm (accessed July 30, 2011).

7. “Survey: Tourist, travelers spent more than \$17 billion in Michigan,” Michigan Radio, <http://www.michiganradio.org/post/survey-tourists-travelers-spent-more-17-billion-mi> (accessed July 30, 2011).

8. Daniel Stynes, “Michigan Statewide Tourism Spending and Economic Impact Estimates 1998–2000,” January 2002, http://35.8.125.11/mgm2_new/econ/miteim/MichiganSatExec.pdf (accessed July 30, 2011).

9. “Recession Forces States to Rethink Tourism Funding,” *Business Report*, June 28, 2011, <http://www.businessreport.com/news/2011/jun/28/recession-forces-states-rethink-gnit1/> (accessed July 30, 2011).

10. National Trust for Historic Preservation, “Travel Michigan Reaches Out Using TV and Technology,” *Preservation Nation*, <http://www.preservationnation.org/issues/heritage-tourism/survival-toolkit/travel-michigan-reaches-out-tv-technology.html> (accessed July 30, 2011).

In 2010, the second year of Pure Michigan promotion, out-of-state leisure visitor spending increased 21% from the previous year to \$6.4 billion. Concurrently, Michigan tourism-related employment rose by 10,000 jobs.¹¹

Pure Michigan also helps fund local ad campaigns, and is active in social networking, with over 300,000 fans on Facebook, indicating the strength of an Internet presence, and promotion of public awareness of Michigan's cultural assets.¹² Michigan Governor Rick Snyder stated early in his administration that he sought a higher allocation for Pure Michigan, Michigan House Bill 4160, passed in late June 2011, which increased the year's allocation for Pure Michigan from \$15.4 million to \$25.4 million, still shy of the \$33.2 million high mark previously spent on Pure Michigan and other tourism promotions.¹³ Funding in 2012 and 2013 remained around the \$25 million level. Pure Michigan does not have a single focus in terms of what it promotes, but it does feature maritime heritage on its website, specifically featuring 20 "Michigan Maritime Heritage Tours," discussed in a later section.

Though the efforts of Travel Michigan, its Pure Michigan campaign, and other statewide entities such as the Michigan Lodging and Tourism Association have been considerable, there are numerous programs whose focus is on specific regions of the state, or in which Michigan is included in a multistate effort at promoting maritime heritage. Programs also exist that deal with a specific kind of resource, whether it is a road, port, or a water trail, and those that take a more holistic approach to maritime heritage tourism. These programs have met with varying degrees of success.

One program, the West Michigan Pike, has the unique position of being inactive for over 80 years before its well-publicized resurrection and implementation as a tool to assist in coastal tourism, with the roadway itself now promoted as a historic attraction.

A HISTORY OF MICHIGAN MARITIME HERITAGE TOURISM AND INTERPRETATION PROGRAMS

The earliest program examined herein is directly tied to the dawn of organized promotion of the amenities of Michigan for the purpose of tourism. Though those with financial means and mobility had long sought refuge from the cramped cities along the shores of Michigan's lakes, there had not yet been a focused effort to draw individuals or families to the state for respite. The earliest proponents of attracting tourists to Michigan sought to improve the conditions of Michigan's roadways to allow travelers from the center of the state to reach the coasts, as well as those from other states to visit and enjoy the beaches and scenery.

West Michigan Pike

In the late 19th century, attention began to be drawn to the generally poor condition of roads nationwide because of the rising popularity of the bicycle. A national association of bicycle enthusiasts known as the League of American Wheelmen became the leading proponents for road improvements because of the often wretched condition of the roads on which they sought to ride.¹⁴ Farmers, including those in Michigan, were also advocating for improved roads, but for different reasons. They favored a radial system of roads, extending outward from town and city centers into surrounding farmlands, to enable quicker transport of their goods to the markets. Bicycle riders and automobile tourists formed groups to hold tours throughout the state, "both to publicize the generally miserable condition of the existing roads and to promote the desirability of constructing cross-state highways, or 'pikes' as they were called."¹⁵ Some of these same groups later evolved into organizations that promoted the benefits of general tourism in their region.

14. Willis F. Dunbar, *A History of the Wolverine State* (Grand Rapids, MI: William B. Eerdmans Publishing Co., 1995), 492.

15. Ibid, 493.

11. George Douley, "Proof: Tourism Promotion Campaigns Increase Visits," Longwoods International, July 6, 2011, <http://www.longwoods-intl.com/2011/07/proof-tourism-promotion-campaigns-increase-visits/> (accessed July 30, 2011).

12. Kathryn Lynch-Morin, "Michigan Tourism Spending Expected to Increase Four Percent in 2011," *M-Live*, April 4, 2011, http://www.mlive.com/business/mid-michigan/index.ssf/2011/04/michigan_tourism_spending_expe.html (accessed July 30, 2011); "Pure Michigan," Facebook. <http://www.facebook.com/Pure-Michigan.org> (accessed July 30, 2011).

13. Ken Braun, "Pure Spending – GOP Finds More for Tourism Subsidies," *Mackinac Center for Public Policy*, June 28, 2011, <http://www.mackinac.org/15328> (accessed July 30, 2011).

The West Michigan Pike Association was originally formed as the West Michigan Lake Shore Highway Association, with a focus on achieving the construction of a road to draw automobiles and tourists from Chicago and northern Indiana to the shores and beaches of Lake Michigan, using the slogan “Lake Shore All the Way.” The West Michigan Pike, whose creation was over a decade in the making, helped bring ethnic diversity and working-class resorts to Western Michigan, while opening up previously inaccessible sand dunes and lake views, and initiating the development of eight state parks prior to 1930.”¹⁶

The West Michigan Pike, built between 1911 and 1922, was the first continuously paved road constructed in West Michigan. The West Michigan “Pikers,” as they were called, held annual summer automobile rallies between 1913 and 1922, and drove along the proposed roadway to call attention to how it was developing. The rallies also served as fundraising and public relations events, with subscriptions sold, and funding used for necessary road improvements. The efforts of the West Michigan Pike boosters aided the numerous counties along the route in focusing their road building efforts on a continuous road system through the western region.¹⁷

As was the case with automobile tourism throughout the state, the West Michigan Pike also benefited from a printed tour book of maps, pictures, and information about towns and sites of note along the route. The title page of the 1915 directory of maps and routes of the West Michigan Pike encouraged travelers to take the “Lake Shore All the Way Through Michigan’s Summerland, From the Lincoln Highway to the Straits of Mackinac,” adding that the Pike was the northernmost route of the Dixie Highway, “from the Gulf to the Straits.”¹⁸

These associations may have helped paint a picture of national connectivity between the West Michigan Pike and prominent roadways, adding to the cache of the Pike as a tool for adding to the tourist draw to Michigan.

The final rally for the West Michigan Pike Association occurred in 1922, and consisted of a “victory tour” (called the Tour De Luxe) signifying the successful completion of a continuous, hard surface road between New Buffalo and Mackinaw City.¹⁹ The West Michigan Pike was then incorporated into the Federal Highway System in 1926, as US 31.²⁰ Dangerous amounts of traffic and congestion along the former Pike led to the reviving of the West Michigan Pike Association in 1929, which saw this development as detrimental to tourism. Tourist traffic had increased each year from 1918 to 1926, and then begun to decline each year after, leading the Association to propose a 40-foot-wide superhighway along Lake Michigan to accommodate the traffic. However, reassurances from the state highway commissioner that a plan for an improved scenic shoreline highway was already underway led the group to permanently disband.²¹ As the collections of roads that comprised the former West Michigan Pike was realigned and improved over the following decades, the new route was designated the Blue Star Memorial Highway in 1952, and another portion the Red Arrow Highway in 1953.²² The West Michigan Pike faded into memory for over 50 years before its revival in 2008 by an organization known as Michigan Beachtowns.

Michigan Beachtowns formed in 2001 as a consortium of convention and visitors bureaus to promote nine southwest Michigan coastal communities as a connected, continuous tourist destination to which end they have spent several million dollars promoting this area of West Michigan.²³

16. Lee Lupo, “Return of the Pike,” *The Muskegon Chronicle*, May 5, 2008, http://blog.mlive.com/chronicle/2008/05/return_of_the_pike.html (accessed June 25, 2011).

17. *Ibid.*, 256.

18. West Michigan Pike Association, *West Michigan Pike: Northern Link of the Dixie Highway*, West Michigan Pike Association, 1915, 1.

19. Arnold, *The West Michigan Pike*, 257.

20. *Ibid.*, 258.

21. *Ibid.*, 259.

22. *Ibid.*, 261.

23. Felicia Fairchild, “Route 66 Now Shorthand for Heritage Highway,” *Route 66 University*, March 13, 2008, <http://www.route66university.com/study/inthenews/450.php> (accessed June 25, 2011).



Cover of the 1915 West Michigan Pike Directory

Their involvement in the revival of the West Michigan Pike is only a few years old, but they have raised its profile considerably, providing a blueprint for the potential success of reexamining tourism programs of the past, particularly those along the coast, which may have connections to maritime heritage.

The Michigan Beachtowns website contains a section on the West Michigan Pike, with a short promotional video, as well as links to the 1915 West Michigan Pike Tourist Directory and a section on the photographic assignment by *National Geographic* photographer Vincent Musi. The renewed interest and promotion of the West Michigan Pike by Michigan Beachtowns is also moving toward achieving designation of US 31 as a Michigan Heritage Route.²⁴

Efforts at attaining this certification began in 2008, as collaboration between the Michigan Historical Center and Michigan Beachtowns, with survey work at identifying points of interest funded by a \$160,000 Preserve America grant and a \$50,000 matching grant from the Michigan Council of the Arts and Cultural Affairs.²⁵

24. "West Michigan Pike," Michigan Beachtowns, http://www.beachtowns.org/west_michigan_pike.cfm (accessed June 25, 2011).
25. Lupo, "Return of the Pike," 2008.

Though Michigan Beachtowns has worked with a variety of organizations and governmental groups to achieve resolutions of support for the Heritage Route, as well as develop a corridor map identifying assets along the route that should be promoted and improved through public-private partnerships or grant resources, they have yet to receive approval from the Michigan Department of Transportation, a process that can take three to five years.²⁶ In the meantime, Michigan Beachtowns is looking ahead, and planning to focus on further promotion of the West Michigan Pike in 2012.²⁷ Additionally, a historical marker commemorating the West Michigan Pike was dedicated at New Buffalo on April 30, 2011, the first of five planned for the route.²⁸

26. Fairchild, "Route 66 Now Shorthand for Heritage Highway," 2008.

27. Amy Arnold, interview by author, phone interview, July 20, 2011.

28. Dianna Stampfer, "West Michigan Pike Dedication April 30 in New Buffalo," Promote Michigan blog, April 16, 2010, <http://promotemichigannews.blogspot.com/2010/04/west-michigan-pike-dedication-ceremony.html> (accessed June 25, 2011).

Sweetwater Trail

Sweetwater Trail was developed in 1992 as an effort by then-Executive Director Jennifer Radigan of the Michigan Historic Preservation Network (MHPN) to start answering questions about what maritime resources were related to cultural heritage. The Sweetwater Trail was ahead of its time in these inquiries, in that no other programs were yet focused on maritime heritage in any way. As the Michigan Historic Preservation Network has many areas of interest and operation, the Sweetwater Trail never became a high priority and was therefore essentially the effort of a single person.

Radigan distributed a question-and-answer survey to local residents, beginning in the eastern Upper Peninsula and Lake Huron Shore to identify resources that could be visited in this area, excluding archeological resources that should not be disturbed by the public. From this, she visited all of the sites and chose those that would appear on a trail map, with accompanying information on their history.²⁹

The first Sweetwater Trail map of coastal routes in the eastern Upper Peninsula and northeastern Lower Peninsula was published in the fall of 1998, touted as “the first in a series of seven maps that will ultimately trace more than 3,000 miles of the state’s lakeshore.” Future maps were planned for central and western Upper Peninsula, the Lake Michigan and Traverse region, the Lake Michigan shore, the Lake Huron and Saginaw Bay area, and Lake Erie and St. Clair area, although they never came to fruition. The map was available for \$3 by mail from the Michigan Historic Preservation Network, and can still be found in select locations in its target area, such as convention and visitors bureaus. Sweetwater Trail signage is also visible at a limited number of sites profiled on the original map such as the Michigan Limestone and Chemical Company Quarry near Rogers City, Michigan.³⁰

The Sweetwater Trail map for the Eastern Peninsula and Huron Shore is a 12-panel, two-sided foldout map, with one side depicting the target area and the opposing side showing the state of Michigan with dotted lines separating and labeling the future trail map additions. The Eastern Peninsula and Huron Shore map lists a total of 146 sites and resources, 56 on the Huron Shore route, and 90 on the Eastern Peninsula route. This leg of the Sweetwater Trail passes through six counties on the Huron Shore route and two on the Eastern Peninsula route. Resources are identified by type, with a corresponding icon displayed next to a short description for many of the sites. There are 16 different resource categories, from lighthouses, ferries, and marinas, to villages, museums, and historic buildings, to Civilian Conservation Corps (CCC) and Works Progress Administration (WPA) sites.³¹ Sixty-one of the resources on the Sweetwater Trail met the criteria established by phase one of this study, and were included in the field survey.

A 2000 version of the Sweetwater Trail map focused only on lighthouses, still using the Sweetwater Trail logo, iconography, and mission statement, and including a paragraph on each of 111 lighthouses in the Upper and Lower Peninsulas, but addressing no other resources.³² A 2008 map, published by the Michigan Lighthouse Fund, bears a striking similarity in layout, text, and use of the same icon for lighthouses, but there is no mention of the Sweetwater Trail or use of its logo.³³ A few Michigan county tourism websites list local attractions and mention those sites that are part of the Sweetwater Trail, but without any elaboration.³⁴

Little information is readily available on the Sweetwater Trail beyond a few mentions in publications, websites, and the limited numbers of trail maps printed in the late 1990s.

29. Jennifer Radigan, interview by author, phone interview, July 19, 2011.

30. “News From Projects,” *Michigan Humanities Council*, Fall 1998 Newsletter, <http://www.michiganhumanities.org/news/newsletters/fall98/fall98.html> (accessed June 25, 2011).

31. Michigan Historic Preservation Network, “The Sweetwater Trail: Eastern Peninsula and Huron Shore Map,” Michigan Historic Preservation Network, 1998.

32. Michigan Historic Preservation Network. “Michigan Lighthouses on the Sweetwater Trail.” Michigan Historic Preservation Network, 2000.

33. Michigan Lighthouse Fund. “Lighthouses of Michigan.” Michigan Lighthouse Fund, 2008.

34. “Visit Alpena County.” Visit Alpena County. <http://www.visitalpenacounty.com/html/attractions.html> (accessed June 25, 2011).

A 2002 report for the Michigan Historic Preservation Network by a Colorado consulting firm listed the Sweetwater Trail among a series of programs that “integrate economic development, historic preservation, and tourism activities.”³⁵ The same report also excerpted the printed text of the trail maps in discussing heritage tourism:

The Sweetwater Trail® is designed to facilitate the connection between local historic resources and Michigan coastal recreation. The Michigan Historic Preservation Network developed the Sweetwater Trail® in 1991 as a tourism initiative to enhance visitors’ experiences of the Michigan shoreline and the Great Lakes. The Sweetwater Trail® highlights a wide variety of maritime resources located along the coasts of both the Upper and Lower Peninsulas that include lighthouses, fishing villages, port cities, underwater preserves, restored ships, and buildings and sites associated with the state’s Native American heritage. The Sweetwater Trail® is marked by a series of highway signs that help to direct travelers along the Trail. A colorful brochure outlines in detail two routes of the trail, the upper Eastern Peninsula (sic) and the Huron Shore, and also includes information on numerous sites ranging over eight counties. Several additional maps will be developed in upcoming years. With increased education and unique collaborative opportunities, the Sweetwater Trail® could help Michigan’s maritime tourism reach its full potential.³⁶

Following the publication of the first map, Radigan began to research the Lake Michigan coast, but as the Michigan Historic Preservation Network got involved in lobbying for state tax credits for neighborhood revitalization, the Sweetwater Trail fell by the wayside and was never picked up by the Michigan Historic Preservation Network again. Although the Sweetwater Trail map itself could not be copyrighted, the Michigan Historic Preservation Network has kept up renewal of the registered service mark associated with the trail.

35. Michigan Historic Preservation Network. *Investing in Michigan’s Future: The Economic Benefits of Historic Preservation*. Michigan Historic Preservation Network, 2002, 12.

36. *Ibid.*, 18.

A few small signs designed and placed by Michigan Department of Transportation are still viewable at some trail sites. The Huron Shore portion of the Sweetwater Trail runs along US 23, which is also a heritage route, although there does not seem to be any cross-promotion between the two programs.³⁷

Great Lakes Circle Tours

The Great Lakes Circle Tours were first established in the late 1980s as an initiative of the Great Lakes Commission, a compact of eight US states along the Great Lakes, as well as the Canadian provinces of Ontario and Quebec. Their goal was to identify the best way to stay close to the Great Lakes while traveling by automobile. State departments of transportation determined the Circle Tours would be on trunk lines closest to the coast, though they may not be the closest roads to the water. After the routes were identified, signage was placed along each Circle Tour, using a standardized design, placed at strategic locations along the way, such as major intersections.

The origin of a program encompassing all of the Great Lakes was the Great Lakes Commission annual meeting in November 1988, where they approved a Great Lakes Circle Tour project. The idea came from the commission’s Tourism and Outdoor Recreation Task Force, a group of state and provincial representatives who were keenly aware of the competitive nature of US-Canada tourism, and sought to unite all concerned jurisdictions to showcase the Great Lakes with both collaborative and localized promotion. All eight Great Lakes states tourism and travel offices endorsed the proposal, and the commission formed a Great Lakes Circle Tour Task Force charged with developing appropriate policies for the Circle Tour project.

A loosely organized “circle route” around Lake Superior was promoted by local tourist organizations as early as the 1960s, and the Lake Superior and Lake Michigan Circle Tours were established in the mid-1980s. Beginning with this foundation, the Task Force focused on Circle Tour designation for Lakes Huron and Erie, as well as signage throughout the Great Lakes road system.

37. Jennifer Radigan, interview by author, phone interview, July 19, 2011.

The New York Seaway Trail was also established by this time and the task force recommended its inclusion in the Circle Tour system. It was then agreed that local jurisdictions would have primary promotion responsibilities to be aided by the states and provinces where practical, such as designating routes on official highway maps and referencing the Circle Tours on websites.³⁸

Officially, there are four Circle Tours encircling each of the Great Lakes, except Lake Ontario. The Lake Huron Circle Tour, established in the early 1990s, is the only tour touching only two jurisdictions, Michigan and Ontario. It was officially designated after the debut of the Lake Michigan and Lake Superior Circle Tours. It joins the Lake Michigan Circle Tour as one of the most expansive, traversing Michigan's Upper and Lower Peninsulas, as well as crossing the Mackinac Bridge. The Lake Michigan Circle Tour is the only tour completely in the United States and also has the most mileage in Michigan of any Circle Tour. The Lake Erie Circle Tour is the most recently designated of the Great Lakes Circle Tours, coming into existence in 1992 and 1993 and comprises the fewest miles in Michigan of all of the Circle Tours.

The original Lake Michigan Circle Tour route was an initiative by the West Michigan Tourism Association (WMTA) staff, led by Jack Morgan of the Michigan Department of Transportation, who introduced the concept of a Lake Michigan Circle Tour in 1987.³⁹ The West Michigan Tourism Association is one of the strongest promoters of the Lake Michigan Circle Tour, specifically in the area of lighthouses. Since its inception in 1988, the West Michigan Tourism Association has printed a Circle Tour guide, which in 1998 was renamed the *Lake Michigan Circle Tour and Lighthouse Guide*. In 2001, a more comprehensive online guide was created, with the printed version becoming a map in 2008.⁴⁰

38. "Great Lakes Circle Tour," About the Great Lakes, <http://www.abouthegreatlakes.com/tours.htm> (accessed June 25, 2011).

39. "Circle Tour History" West Michigan Tourism Association (<http://www.wmta.org/circle-tour-history-680/>, accessed April 23, 2013). "Great Lakes Circle Tours," Michigan Highways, <http://www.michiganhighways.org/other/glct.html> (accessed June 25, 2011) contends that both the Lake Superior and Michigan Circle Tours were established in 1986.

40. West Michigan Tourist Association, "The Official Lake Michigan Circle Tour," West Michigan Tourist Association, <http://www.wmta.org/the-official-lake-michigan-circle-tour-11/> (accessed June 25, 2011).

All of the Circle Tours have tourism groups dedicated to their promotion, some of which are web-based only, while others produce publications and actively promote their Great Lakes Circle Tour route year-round. The Great Lakes Commission provides minimal web guidance, although some information is available on their website. They are interested in advancing their promotion to the realm of geographic information system (GIS) and GPS, and more interactive tourism programming. The Circle Tours are not currently concerned with any element of tourism beyond automobile circumnavigation of the Great Lakes. However, as maritime heritage, and especially the lighthouse movement, have emerged as prominent tourist themes since the establishment of the Circle Tours, the commission hopes to include them in future promotional efforts.⁴¹ Sixty-three resources along the Great Lakes Circle Tours met the criteria established by phase one of this study and were included in the field survey.

Unfortunately, the commission does not have any funding, and their current purview with regard to the Circle Tours is to maintain their website and field any questions. Their governance is split among more than two dozen commissioners: three for each state, plus four to five alternates, appointed by the governor, legislature, or appointed pro forma.⁴²

Pure Michigan Byways

The Michigan Department of Transportation (MDOT) Pure Michigan Byways program was established in 1993 under Public Act 69 as the Heritage Routes program and is designed to unite local residents, government officials, landowners, and interested groups in a common cause to preserve the state's unique scenic, historic, and recreational roadways. The name was changed to Pure Michigan Byways in 2014. The intent of the program is to "ensure that the rich heritage of local highways and roadsides continues to play an important role in improving Michigan's economy and quality of life."⁴³

41. Dave Knight, interview by author, phone interview, July 14, 2011.

42. Ibid.

43. Michigan Department of Transportation, "Heritage Route Program," http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_11209---,00.html (accessed June 25, 2011).

The application process for route designation consists of a sponsoring stewardship organization verifying that the road that they seek to designate is part of the state trunk line system, with either an M, US, or I in front of the highway number. In addition to obtaining strong support from the local government units of the area where the route is located, the applicant must prepare a pre-application form, noting one or more of the following intrinsic qualities of the route: scenic, historic, recreational, cultural, archaeological, or natural.

The proposed route must also have a corridor management plan to show how the steward intends to maintain the route once it is designated. If the initial review of eligibility by the Michigan Department of Transportation determines the route is a good candidate for a heritage route, a full application packet must be submitted and evaluated, from which the Michigan Department of Transportation will decide if the candidate meets the criteria to become a Pure Michigan Byway.

Candidates may apply whenever they are ready, and the length of the designation process varies based on the sponsoring organization. Once the candidate route is designated, it is included on the heritage route map. The Michigan Department of Transportation will produce Pure Michigan Byway signs if they are also doing a project in the area. If the stewardship organization for a particular route desires them sooner, however, they must bear the cost. The Michigan Department of Transportation has plans to create statewide sign standardization because there are currently several types of heritage route signs employed across the state.⁴⁴

As an additional method of promotion, heritage routes may apply for American Byway funds and designation through the Federal Highway Administration. Currently, three routes (the Copper Country Trail National Byway on the Keweenaw Peninsula; River Road National Byway in the Au Sable River Valley;

and the Automotive Heritage Trail along M-1, or Woodward Avenue, in Detroit) have achieved American Byway status, with others able to apply anytime they are ready. Pure Michigan Byways may also use state planning and research funds toward the costs of programming if the Michigan Department of Transportation approves of their strategic plan.

As Pure Michigan Byways are designated by law, they are mandated to exist in perpetuity as long as they are maintained according to their corridor management plan and stewardship agreement.⁴⁵ Pure Michigan Byways offer an outstanding opportunity for the promotion of maritime heritage resources, particularly on those routes along the coast. Of the 16 current byways, 7 are along or near the coast, 4 are historic routes, 6 are scenic routes, and 6 are recreational routes. Fifty-five of the resources surveyed for phase one of this study were along the various Pure Michigan Byways.

Michigan Great Waters

Michigan Great Waters is a decade-old program started by Northern Initiatives, a five-county collaboration headquartered in Marquette, in the Upper Peninsula. It is responsible for finding funds to draft and implement plans in financially distressed and underserved areas within the five easternmost counties of the Upper Peninsula. Northern Initiatives began as an academic department of Northern Michigan University to assist in stemming the flow of migration out of the region by residents. Over time, they became a private, nonprofit community development corporation providing small, rural businesses in Michigan (and northeast Wisconsin) with access to capital, information, and markets.⁴⁶

The broader goals of Michigan Great Waters consist primarily of community and economic development, helping rural communities in eastern Upper Peninsula leverage their assets; broaden visitor base and attract new visitors, particularly during the months before and after tourist season; and possibly engage tourists enough to consider relocation to the area.

44. Will be updated in later editing – House Bill 5072 has been passed in the legislature but is not yet law. The bill would mandate signage and change “Michigan Heritage Routes” to “Pure Michigan Byways” (<http://www.thealpennews.com/page/content.detail/id/529030/Route-US-23-closer-to-becoming-part-of-Pure-Michigan-campaign.html?nav=5004>).

45. Bill Land, interview by author, phone interview, July 20, 2011.

46. Northern Initiatives, “About Us,” Northern Initiatives, <http://www.northerninitiatives.com> (accessed July 26, 2011).

The early years of the Great Waters program were composed of organization and deciding on its course of action such as developing the trails and agreeing to points along the trail. In its current role, the focus of Great Waters has not been in promoting maritime heritage, but rather in calling attention to the maritime offerings of its communities through its existing trails.⁴⁷

The Great Waters features three themed trails: Lake Superior Trail follows “Rugged Shores and Falling Waters;” the Lake Huron Trail focuses on “Sheltered Bays and Ancient Paths;” and Lake Michigan Trails feature “Windswept Dunes and Hidden Paths.” A total of 33 sites are highlighted on the three trails, including sites within Pictured Rocks National Lakeshore, Soo Locks, Mackinac Island, and numerous lighthouses, campgrounds, and parks.⁴⁸ Ten of the resources surveyed as part of phase one of this report are among those featured on the Great Waters trails. The three trails were established concurrently and announced along with the launching of the Great Waters brand around 2002. There is discussion by Great Waters of expanding the trails, specifically expansion of the Lake Superior Trail to Keweenaw Peninsula and the Lake Huron Trail to Sault Ste. Marie.

The effectiveness of Great Waters has been most observable in the smallest communities. Paradise, along the northeastern shore of the Upper Peninsula, has seen the greatest increase in tax receipts from tourism of any community served by the program. This may be due to the success of other area attractions. The area served by Great Waters varies considerably, from smaller communities such as Paradise to the largest cities such as Sault Ste. Marie and St. Ignace.

The program is currently in a state of transition, attempting to become less grant-dependent. Funding has been solely composed of grants and what communities could provide, as well as the funds that convention and visitors’ bureaus have put into radio campaigns. Costs have varied depending on the communities and resources being addressed.

47. Christine Rector, interview by author, phone interview. July 26, 2011.

48. The Great Waters, <http://www.thegreatwaters.com/> (accessed June 25, 2011).

One of the strongest assets of Great Waters is connectivity to other programs and organizations. They currently possess strong relationships with Travel Michigan, the Upper Peninsula Travel and Recreation Association, the National Park Service, US Forest Service, the Eastern Upper Peninsula Regional Planning and Development Commission, and several others in the promotion of events and resources and achieving other goals. There are many successes that can be tied to the Great Waters program, although Christine Rector, Northern Initiatives director of regional strategies, notes that success and sustainability are different things. The program seeks to achieve a sustainable model for the communities it serves to continue to gain funding and improve their tourist draw through successful programming related to existing Great Waters trails. The program is intended to be long term, as long as it remains financially viable or there is an organization such as Northern Initiatives to administer grants and other promotional activities for Great Waters.⁴⁹

Michigan Port Collaborative

One of the more recent programs with interests that intersect with maritime heritage tourism is the Michigan Port Collaborative (also referred to as the Michigan Port Cities Collaborative). The Michigan Port Collaborative is currently composed of more than 40 cities, towns, and villages on both peninsulas. Its representatives include, among others, locally elected municipal officials, convention and visitors’ bureau officials, tourism advocates, private sector leaders within maritime commerce, marina and harbor operators, museum representatives, lighthouses and underwater preserve leaders, economic development and tribal officials, and consultants and educators representing Michigan’s Great Lakes communities.⁵⁰

49. Christine Rector, interview, July 26, 2011.

50. “Michigan Port Collaborative Powwows With State Officials,” MiBiz.com, December 14, 2010, <http://www.mibiz.com/news/economic-development/16976-michigan-port-collaborative-powwows-with-state-officials.html> (accessed June 25, 2011).

Criteria for inclusion in the Michigan Port Collaborative core communities are:

- Participating communities must be on the coast or have direct access to the water.
- Provide waterfront access to the public.
- Accommodate deep draft vessels or tall ships.
- Have or had commercial port activity.

The Port Collaborative identifies many “Michigan Maritime Assets” it seeks to promote through its work, including more than 80 harbors, 15 museums featuring extensive maritime collections, more than 120 lighthouses, 12 underwater preserves, Thunder Bay National Marine Sanctuary, maritime art galleries and community festivals celebrating maritime legacy, harbor walks, fish hatcheries, and other maritime heritage amenities.⁵¹ The stated goals of the Michigan Port Collaborative are:

- Make Michigan a world leader in water-focused learning and education.
- Use cutting-edge technology to promote port cities programs and assets.
- Preserve the integrity of the Pure Michigan brand by collaborating to establish green tourism in port cities.
- Summarize and disseminate information related to Great Lakes water resources issues to ensure protection, restoration, and wise use of water resources.
- Establish a long-term development process to develop new maritime products.
- Organize existing products for target marketing.
- Develop transportation systems between and within port cities.
- Establish a statewide wayfinding system for port cities.⁵²

51. Sally Barber, “Port Cities Collaborative,” *Great Lakes Seaway Review*, Vol. 37, No. 4, April–June 2009.

52. Felicia Fairchild, “Port Collaborative Protects and Connects Michigan’s Ports,” Michigan Municipal League, <http://www.mml.org/resources/publications/mmlr/issue/july-august-2011/front-door.html> (accessed August 24, 2011).

The first meeting of the Michigan Port Cities Collaborative was convened in 2007 by former Governor Jennifer Granholm as a gathering of several state departments working on similar programs to share best practices to better serve all port cities. The primary concerns of that meeting also included how best to promote cultural amenities in port cities and issues of gaining funding and making and changing policy. The first port cities meeting was very successful because the stakeholders present found they had very similar problems—networking began that has proved essential to the success of the program. Bi-annual meetings have occurred since then in the spring and fall, with the expansion of the program to include new stakeholders.

In March 2011, the Michigan Port Cities Collaborative became a 501(c)(3) nonprofit organization, with a board of directors whose leadership is split between the upper and lower peninsulas of the state. The board comprises a wide variety of individuals from heads of convention and visitors’ bureaus to county commissioners, as well as port authorities who serve as “ambassadors” between communities to share ideas and practices that work within their community and may be beneficial to other port cities. A few years later, the Michigan Port Collaborative listed their policy priorities as:

- Expand freight transport on the Great Lakes and exempt new cargoes from the Federal Harbor Maintenance Tax.
- Require the Federal Harbor Maintenance Trust Fund to be fully and solely used for its intended purpose.
- Improve access to Michigan ports for Canadian boaters and foreign cruise ship passengers.
- Promote passenger cruises between Michigan ports and other US Great Lakes ports.
- Maximize and leverage funding for Great Lakes restoration and protection.
- Position Michigan ports to partner in alternative energy development in Michigan and the region.

- Advance education and training for port-related jobs.
- Preserve and share Michigan's rich natural and maritime heritage.

Although some state departments provide funding to port cities, it is not money for anything specific to ports as far as job creation or changing policies. For this reason, the Michigan Port Cities Collaborative advocates policy for port cities, while networking best practices and identifying what makes each of them unique. The Michigan Port Cities Collaborative also aims to link assets of each community to show that ports offer more than just tourism. As far as maritime heritage tourism is concerned, the Michigan Port Cities Collaborative has partnered with the Michigan Lighthouse Alliance to promote each other's resources and seeks to engage in other maritime heritage tourism efforts.

John Kerr, director of economic development for the Detroit-Wayne County Port Authority, believes the Michigan Port Collaborative has been successful in encouraging communities from across the state to work with one another and forge new alliances where none previously existed. In addition, the Port Authority of Cheboygan plans to convene for the first time as a result of the Port Cities Collaborative. Also, partnerships with larger entities such as US Department of Customs and the Michigan Department of Transportation may prove beneficial to the collaborative in the long run.

Currently, the Michigan Port Collaborative is self-sustaining through attendance fees generated by attendance at the bi-annual meetings. A strategy is being developed to engage the private sector and foundations for additional funding to help with future Michigan Port Collaborative efforts. The longevity of the Michigan Port Collaborative depends on the Detroit-Wayne County Port Authority as the dominant port authority in the state and lead agency of the collaborative.⁵³

53. John Kerr, interview by Grant Johnson, phone interview, July 14, 2011.

Keweenaw County Historic Signage

Keweenaw County, at the tip of the Western Upper Peninsula, is the location of an interesting regional tourism program that dates back to the Great Depression. The "rustic sign program" of the Keweenaw County Road Commission is visible on state and county roads of the Keweenaw Peninsula, as well as along US 41. While some of the signs deal with resources related to maritime heritage, many are strictly for directional and wayfinding purposes. A 2002 Keweenaw County land use plan notes the rustic signage as providing "local flair to otherwise common signage" in a section identifying visible contributions to the landscape.⁵⁴

A board of county road commissioners governs the Keweenaw County Road Commission with a chairman, vice-chair, and third member without title, each serving a six-year term. The Keweenaw County Road Commission maintains 350 miles of road in Keweenaw County, 126 of which are on US 41 and Michigan State Route 26. The road commission oversees and maintains 11 roadside parks, including beaches, table sites, and Brockway Mountain Drive, as well as 9 MDOT roadside parks.⁵⁵

Keweenaw County funds the rustic sign program, with additional funding provided as a result of a recent partnership with the Keweenaw National Historical Park and Keweenaw Historic Sites as part of an initiative to create similar signage throughout the four counties of the Keweenaw Peninsula. The road commission is in the process of developing a policy for signage to steer visitors away from private businesses that may have had signage in the past and dissuade people from hanging similar signs to draw attention to other sites. Additionally, some older signs will be "grandfathered in" under the new policy.

54. Western Upper Peninsula Planning and Development Region, *Keweenaw County: 'Blueprint for Tomorrow' Land Use Plan*, Western Upper Peninsula Planning and Development Region, December 2002.

55. Keweenaw County, "Keweenaw County Road Commission," Keweenaw County, <http://www.keweenawcountyonline.org/commissions-roads.php> (accessed June 25, 2011).

Members of the Keweenaw County Road Commission view the program as successful in that it generates discussion and questions and has endured despite other counties dropping similar signage programs. Regarding longevity, the signage program has existed for several decades and has a department within the Keweenaw County Road Commission dedicated to sign production, implying it is intended to be long term.⁵⁶

Under the new partnership introduced in June 2011, Keweenaw National Historical Park is the first park to have new signage. The park was established in 1992 and is a partnership park consisting of two primary units (Calumet and Quincy), as well as 19 cooperating Keweenaw Heritage Sites that are on state and privately owned land throughout the Keweenaw Peninsula. Only three of these sites, Delaware Copper Mine, Fort Wilkins Historic State Park, and Keweenaw County Historical Museum, are in Keweenaw County.⁵⁷

Like the rustic signage program in Keweenaw County, the new signs throughout the Keweenaw Peninsula are meant to guide motorists to sites that are part of the Keweenaw Heritage Sites program. Attempts have been made to fit the new park signage into the Keweenaw County Road Commission “rustic” sign model, with an adjusted sign panel featuring an outline of the NPS arrowhead and the Keweenaw National Historical Park miner logo indicating the resource is a Keweenaw Heritage Site, so that the motorist can make the connection between signs and programs. There will be a total of approximately 100 signs once they are installed, with some sites requiring up to eight signs.

The historical park conceived the new signage program with many partners, including the Keweenaw County Road Commission, Michigan Department of Transportation, the four counties in which the signs are located, and the National Park Service. The signage has been identified to be a high priority for the park.

Though signs are present throughout four counties, with many sites along the coast of Lake Superior, only some of the signs deal with maritime heritage. Nonetheless, the Keweenaw National Historical Park and partner sites will maintain the system as long as they are there.⁵⁸

Michigan Heritage Water Trail

The Michigan Heritage Water Trail program dates to the late 1990s and deals specifically with the over 11,000 miles of navigable rivers used commercially and recreationally in the state. Though the program exists and has provided for the establishment of several water trails, it is unfunded and inactive and without crossover to any other water trail programs in the state.

The genesis of the program can be traced to Dean Sandell of the Michigan Department of Natural Resources, who began espousing the virtue of water trails in 1998. Sandell was an enthusiast of water trails, and knowing there was no such program in the state, he worked with the 4-H Youth Conservation Leadership program to draft legislation to create a water trail. Although the initial proposal focused on water trails for their recreational value, David Lemberg of Western Michigan University helped repackage the idea as focusing on history, culture, and the environment as teaching tools, which was a more compelling political argument for the creation of water trails.⁵⁹

The Michigan Heritage Water Trail program was legally established as part of Michigan Public Act 454 of 2002, Section 72113. The act called for the Great Lakes Center for Maritime Studies at Western Michigan University, in conjunction with the Department of History, Arts and Libraries (now defunct), and Michigan Youth 4-H Conservation Council to develop a statewide recognition plan known as the “Michigan Heritage Water Trail Program.” The program would be mandated to:

- Establish a method for designating significant water corridors in the state as Michigan heritage water trails.

56. Greg Patrick, interview by author, phone interview, July 14, 2011.

57. Western Upper Peninsula Planning and Development Region, *Keweenaw County Recreation Plan 2011–2015*, Western Upper Peninsula Planning and Development Region, January 2011.

58. Steve Delong, interview by author, phone interview, July 14, 2011.

59. David Lemberg, interview by author, phone interview, July 15–16, 2011.

- Provide recognition for the historical, cultural, recreational, and natural resource significance of Michigan heritage water trails.
- Establish methods for local units of government to participate in programs that complement the designation of Michigan heritage water trails.
- Assure that private property rights along Michigan heritage water trails are not disturbed, disrupted, or restricted by the state or local units of government.⁶⁰

This partnership was charged with the development of a blueprint for local and regional water trail development through a series of pilot studies for the research, planning, implementation, monitoring, and marketing of heritage water trails. With proper funding, the center would create and maintain a website for water trail location and history, develop a workbook for local groups to develop their own heritage water trails, and act as a resource for local heritage water trail planning efforts.⁶¹

The River Country Heritage Water Trail in St. Joseph County was the first water trail to open (August 2004). The plan for the river country trail, which covers all navigable rivers in the county, grew out of a master's thesis project by a Western Michigan University graduate student. Future water trail plans were to be created by local communities using the university's assistance and a self-funding planning model.⁶²

Existing water trails follow a similar protocol for their function. The Grand River Heritage Water Trail in Ottawa County, for example, "provides basic information on places to access the river; educational explanations of natural features to be observed; descriptions of county parks and open spaces where stops can be made;

and interesting historical points of interest to help explain the colorful and rich local history tied to the Grand River."⁶³

There are currently eight Michigan Heritage Water Trails across the state. These trails create interpretive signage and guides incorporating riparian and maritime history into an interactive educational experience. Signs are placed at water access points and bridge crossings and are usually sponsored by a local company or organization. This adds an element of economic development to the trails because it may potentially draw more interest to these organizations, thereby potentially generating interest from others in sponsoring heritage water trails. Those who are interested in creating new water trails may do so by contacting Lemberg, although some unofficial water trails have proceeded without consulting him. For those who do, historians may be consulted to verify the accuracy of interpretive material for trail signage.⁶⁴

Lake Michigan Water Trail

Another water trail initiative in Michigan focuses on coastal tourism related to human-powered sea crafts and is not specifically related to maritime heritage. The Lake Michigan Water Trail Association (LMWTA), formed in 2010, focuses its efforts primarily on facilities, sites, services, businesses, and stakeholders related to kayaking. The LMWTA website identifies its mission to "promote the development and safe use of a continuous water trail for human-powered watercraft around the entire lake through partnerships, volunteer advocacy, public events, and trail stewardship." Its staff consists of one representative each from Illinois, Indiana, Michigan, and Wisconsin, with a National Park Service Rivers and Trails Conservation Assistance (RTCA) representative serving as technical advisor.⁶⁵

60. Michigan Legislature, "Section 324.72113 Michigan Heritage Water Trail Program," Michigan Legislature, [http://www.legislature.mi.gov/\(S\(polhu045at0piq454iraqm55\)\)/mileg.aspx?page=getobject&objectname=mcl-324-72113](http://www.legislature.mi.gov/(S(polhu045at0piq454iraqm55))/mileg.aspx?page=getobject&objectname=mcl-324-72113) (accessed June 25, 2011).

61. Michigan Heritage Water Trails, "The Michigan Heritage Water Trail Program and Partners," http://www.wmich.edu/glcms/watertrails/info_program.htm (accessed June 25, 2011).

62. Western Michigan University, "First Stage of Statewide Trail Opens," Western Michigan University, <http://www.wmich.edu/wmu/news/2004/08/017.html> (accessed June 25, 2011).

63. "Grand River Heritage Water Trail," 365 Things to Do In West Michigan, <http://365thingswestmichigan.com/2011/04/15/105-grand-river-heritage-water-trail/> (accessed June 25, 2011).

64. David Lemberg, interview, July 15–16, 2011.

65. Lake Michigan Water Trail Association, <http://www.lmwt.org> (accessed June 25, 2011).

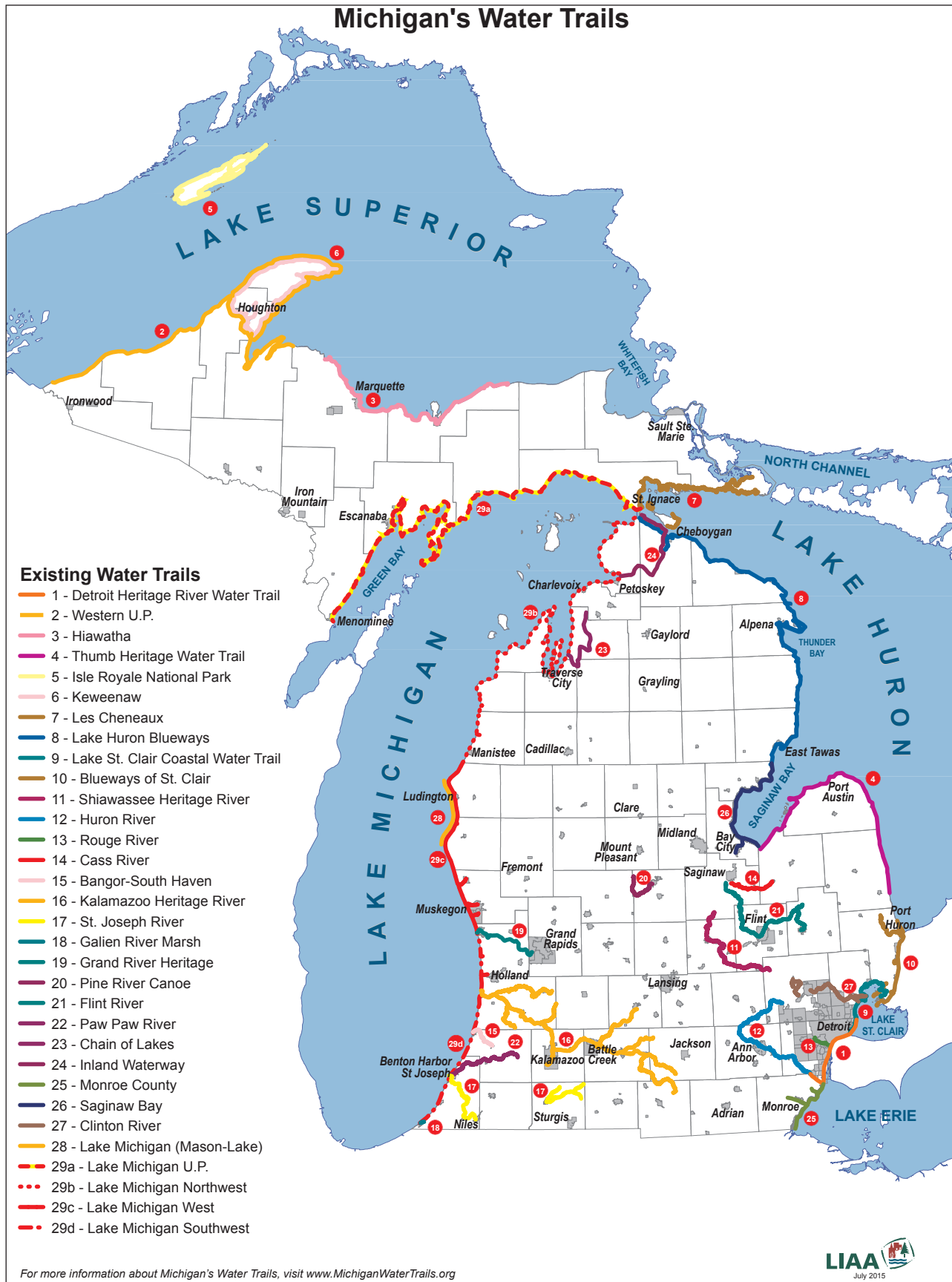
The effort for the Lake Michigan Water Trail (LMWT) began a decade ago as a Chicago area trail started by the Northeast Illinois Paddling Association. With past efforts toward a coastal water trail in Wisconsin and more recent activity toward the same end in Indiana, the movement to create a National Recreational Trail proceeded with the support of Michigan and the National Park Service. Several state departments and agencies, such as Coastal Zone Management, Department of Environmental Quality, Department of Natural Resources, and Pure Michigan have interest in the Lake Michigan Water Trail, although the major partners are the National Park Service and the Lake Michigan Water Trail Association. Other partners vary from state to state, but typically involve similar agencies to those listed above, as well as paddling clubs.

On June 2, 2011, the Lake Michigan Water Trail was designated a national recreational water trail in a ceremony on Chicago's Lake Michigan waterfront. Although the first phase of the trail only stretched 75 miles from Chicago to New Buffalo, Michigan, the trail now extends 1,200 miles around the coast of Lake Michigan within the state of Michigan, which comprises two-thirds of the trail's potential total.⁶⁶ No major funding is allocated for the trail at the time of writing; rather, it is a primarily volunteer effort using existing infrastructure.⁶⁷

66. Jim Hagerty, "Lake Michigan Water Trail Added to National Trails System," *The Rock River Times*, <http://rockrivertimes.com/2011/06/08/lake-michigan-water-trail-added-to-national-trails-system/> (accessed June 25, 2011).

67. David Lemberg, interview, July 15–16, 2011.

Opposite Page: Map showing Michigan Water Trails, including Heritage Water Trails and the Lake Michigan Water Trail. Land Information Access Association, July 2015



OTHER PROGRAMS RELATED TO MARITIME HERITAGE TOURISM

The nine programs related to maritime heritage tourism discussed here are not the entirety of heritage tourism programs in the state of Michigan. Several other initiatives have elements related to maritime heritage, but cannot specifically be considered tourism programs directly addressing this subject, and therefore, were not investigated. This section is also not intended to be a comprehensive history of maritime tourism, as such an exploration would need to examine the history of maritime-focused museums, festivals and celebrations in coastal communities with a maritime theme, underwater preserves, and numerous other resources and efforts. However, there are a few noteworthy examples of promotion related to maritime heritage, potentially deserving future examination.

Throughout the state of Michigan, large aluminum state historical markers are found along roadways and at sites of interest or historic importance. While it is unknown exactly how many there are, or how many of these deal directly or tangentially with maritime heritage, they are a simple, effective, and highly visible method of delivering information whose importance should be noted and whose presence should be promoted in tandem with tourism programs in the areas in which they are located.

The Pure Michigan website contains sections on maritime tours, as well as heritage tours. The idea for some of these tours grew out of meetings in the 1990s by the Department of History, Arts and Libraries, as part of a drive to create maritime heritage trails and tours.⁶⁸ These tours are an outgrowth of that effort, but some are also part of existing programs. Of the six Pure Michigan Maritime Tours, one is a Great Waters trail; and of the 14 Pure Michigan Heritage Tours, two are Great Waters trails, three are Michigan DOT Heritage Routes, and four are also in the maritime tour section. Pure Michigan has a defined interest in maritime heritage tourism, largely in disseminating information and marketing. Considering their funding and capacity, Pure Michigan may collaborate in future heritage tourism and programming as an outlet for information.

68. Lynn, Bill. Interview by author. Phone interview. July 20, 2011.

POTENTIAL FOR CONNECTIVITY BETWEEN EXISTING PROGRAMS

Because of the proximity and overlapping areas of interest of some existing programs, many opportunities exist for collaboration, cross-promotion, and connectivity between their various efforts, as well as the possibility for the resurrection of dormant programs. As it was a route designed for automobile tourism almost a century ago, the West Michigan Pike has not historically dealt with maritime heritage. In its new incarnation, the potential exists for synergies with other programs such as the Lake Michigan Circle Tour or Port Cities Collaborative in the promotion of maritime heritage resources in the communities served by Michigan Beachtowns and the West Michigan Pike. Collaboration with the Michigan State Historic Preservation Office is encouraging for the connection of future promotion to the celebration of historic resources still extant along the West Michigan Pike.

The Sweetwater Trail is an outstanding example of a grassroots effort to gain recognition for maritime resources along the coast of Michigan. Though the program has been inactive for some time, the template created by the Sweetwater Trail Map could be continued for the remaining areas that were never fully surveyed, potentially drawing attention to resources and areas served by other active programs such as the US 23 Heritage Route and other heritage routes in future areas to be mapped.

Because of the coastal location of the Circle Tours in Michigan, opportunities exist for joint promotion among the Great Lakes Commission, whose promotion of maritime heritage resources is nonexistent, with programs such as Michigan Department of Transportation Heritage Routes or the Port Cities Collaborative to achieve further exposure for the Circle Tours using new avenues for tourism. The likelihood of such partnerships is unknown because the governing parties of such organizations often have considerable work responsibilities outside their involvement in tourism promotion and cannot always dedicate time to such endeavors. It is, however, an opportunity worth exploring.



Great Lakes Maritime Heritage Trail Alpena

Pure Michigan Byways also offer an outstanding opportunity for the promotion of maritime heritage resources, particularly on those routes along the coast. Some of these routes are along or near the regions of other maritime heritage tourism programs such as the Great Waters, Sweetwater Trail, and Keweenaw County Historic Signage, allowing great opportunities for cross-promotion between programs and sharing of information, best practices, and tourism. Although the Keweenaw Heritage Sites program is limited to the four counties of the Keweenaw Peninsula, it has the potential to provide a template for other programs interested in drawing tourists to resources within their communities with the use of signage.

The Michigan Heritage Water Trail program is one of many throughout the state that gained momentum around the time of its creation, only to later become inactive because of the lack of funding or staffing. With the considerable interest in existing water trails, the Michigan Heritage Water Trails program has the capacity to grow into a viable and active initiative toward the promotion of maritime heritage related to navigable rivers, an area not dealt with by any other program. And as it is the youngest maritime program examined here, the Lake Michigan Water Trail has the ability to become heritage-focused or to integrate into existing programs whose geographic area of interest intersects with the goals of the Lake Michigan Water Trail.

These various maritime heritage tourism programs are all well-positioned to promote and enhance the awareness of these resources to residents and tourists alike. The greatest shared challenge to the success of these programs is funding, as sources almost universally identified this as a key element to their survival, expansion, or revitalization.

CONCLUSION

This study finds that opportunities exist for collaboration, cross-promotion, and connectivity between the various active maritime heritage preservation, interpretation, and promotion efforts. Existing and dormant programs are all well-positioned to promote and enhance the awareness of these maritime resources to residents and tourists alike. Coordination among programs to share best practices and resources should be explored and encouraged statewide.

CHAPTER 3: MANAGEMENT OPPORTUNITIES

INTRODUCTION

Up to this point, this document introduced readers to the context for this study by (1) briefly describing Michigan's maritime history and the resources that remain to tell the stories of that history, and (2) outlining what has been done to preserve and interpret it to date. The purpose of this study is to determine the suitable and feasible options for the long-term protection of significant maritime heritage resources in the State of Michigan and the manner in which the public can best learn about and experience the resources. This chapter will describe the options the study team considered to preserve and interpret these resources, describe the role that the National Park Service does and can play in managing Michigan's maritime heritage resources, and describe other management opportunities.

The study legislation has the following five stated requirements:

1. "establish the potential for interpretation and preservation of maritime heritage resources" in Michigan
2. identify management opportunities for "long-term resource protection and public enjoyment"
3. "address...increasing public awareness of and access" to resources
4. "identify sources of financial and technical assistance," and
5. identify opportunities for parks and historic sites to coordinate efforts

The study team used a consensus workshop process to refine requirements one, three, four, and five into a shared vision that could be used to craft options (to meet goal two). The consensus workshop started with individually brainstorming answers to a focus question that distilled the study legislation to a single, underlying question:

"What should be done to better preserve and interpret Michigan maritime heritage resources?"

After developing an extensive list of individual answers to this question, the team then worked together to cluster their responses into seven categories. Together, they decided that management opportunities that intend to better preserve and interpret Michigan Maritime resources should

- provide sustainable funding sources,
- coordinate administration,
- promote Michigan maritime resources,
- provide program design (e.g., educational and interpretive programs),
- provide technical support and assistance,
- build partnerships, and
- provide protection mechanisms.

Once these seven goals for management opportunities had been developed, the team then researched existing types of programs administered by the federal government, states, local government, and nonprofit organizations that were designed to meet similar goals.

The purpose of this research exercise was to determine whether there was a program that Michigan maritime resources could fit neatly into. As noted in chapter 2, there are a number of existing programs in the state of Michigan designed to preserve and interpret historic resources, but none of these existing programs serve all of the goals above. Therefore, the team identified programs outside the state that have a broader focus for in-depth research into their structure and its applicability to Michigan maritime resources.

The study team contacted managers of 15 comparable programs to inquire if the structure of that program could be adopted to meet preservation and interpretation goals for Michigan maritime heritage resources. Most of the programs contacted involve the National Park Service in some way, either as manager or administrator or in a leadership-sharing role. The team also interviewed one program that does not involve the National Park Service, a scenic byway on the state and federal level. The following programs were contacted:

1. The Chesapeake Bay Gateways Network
2. The Ice Age National Scenic Trail
3. The New Jersey Coastal Heritage Trail Route
4. The New England National Scenic Trail
5. Ebey's Landing National Historic Reserve
6. Keweenaw National Historical Park
7. New Orleans Jazz National Historical Park
8. Lowell National Historical Park
9. Salem Maritime National Historic Site
10. Essex National Heritage Area
11. Mississippi National River and Recreation Area
12. Blackstone National Heritage Area
13. Silos and Smokestacks National Heritage Area
14. The Captain John Smith Chesapeake National Historic Trail
15. Lake Erie Coastal Ohio Scenic Byway

In addition to asking objective questions about these programs' structures (such as when they were established; how much land they preserve; how many employees, partners, and volunteers are involved, etc.), the study team also asked for the managers' candid assessment of the programs' sustainability since this was a goal enumerated for Michigan maritime resources. The team scored the answer to this sustainability question from low to high. A "highly sustainable" program was one with a legal structure and funding stream designed for permanency.

"Moderately sustainable" programs are those which, in the opinion of the program manager, do not require a need for structural change to increase sustainability, but rather more support for the structure that exists. A program rating "low" in sustainability experiences tentative, year-to-year funding and support, with no legal obligation behind it. Low sustainability programs are those which, in the opinion of the program manager, need a structural change to increase sustainability.

The team then brought their research on comparable programs to a broader audience of professionals working to preserve Michigan's maritime history to gather their feedback in meetings held across the state. These facilitated meetings were held in August 2011 in three locations—Detroit, St. Ignace, and Muskegon. After a presentation on how these comparable programs function, the discussion at those meetings focused on the following three questions:

1. If Michigan maritime heritage resources were organized under the structure of this program (e.g., as a network, as a trail, as a historic reserve, etc.) how do you think each of these programs would advance or detract the preservation or interpretation of these resources?
2. What role might your organization play in each of the options?
3. Can you predict any strong positive or negative response from the public to Michigan maritime heritage resources being organized under the structure of any of these programs?

The consensus from these meetings was that four of the studied programs could accomplish some of the seven goals developed for preserving and interpreting Michigan maritime heritage resources—a unit of the National Park System, a national heritage area, a coordinated program (similar to the Chesapeake Bay Program), or a National Historic Trail. Two of the programs—National Scenic Byway and National Scenic Trail—did not seem to meet many of the seven goals or would address them indirectly.

Two of the four programs that would seem to meet more of the goals—a unit of the National Park System, a national heritage area (NHA), and a national historic trail (NHT)—have specific criteria that would have to be met. Evaluating Michigan maritime heritage resources as a single group using these criteria led the study team to conclude none were a good fit as a way to preserve and interpret all of these resources statewide. Therefore, NHA and NHT programs are described below as opportunities that managers of a subset of resources or communities may pursue. Consideration of a unit of the National Park System can be found in appendix D. The last of the four programs that would seem to meet the majority of goals—a coordinated program (similar to the Chesapeake Bay Gateways Network) is described below as a statewide coordinating body.

Before describing the new opportunities that may be pursued, a review of existing opportunities to meet some or all of the goals identified in this study process is provided below. Existing opportunities may be better leveraged for resource protection, interpretation, and coordination.

EXISTING OPPORTUNITIES

The legislation directing the National Park Service to undertake the Michigan Maritime Heritage Special Resource Study requires that the study “recommend management alternatives that would be most effective for long-term resource protection and providing for public enjoyment of maritime heritage resources” and “identify opportunities for the National Park Service and the State to coordinate the activities of appropriate units of national, State, and local parks and historic sites in furthering the preservation and interpretation of maritime heritage resources.”⁶⁹

The team’s survey in summer 2010 to assess the current preservation and interpretation of Michigan’s maritime heritage found that there are 270 maritime heritage resources that can be experienced by the public in Michigan (this number includes maritime heritage-focused museums and several remote light stations). The survey also recorded 269 resources that support the experience of Michigan’s maritime heritage such as marinas for water access or museums not exclusively focused on maritime activities. These diverse resources were managed by a variety of entities and provided varying levels of interpretive quality. Preservation of resources was also in varying stages, though the vast majority of those resources that were in some way accessible to the public appeared to be stable and under responsible stewardship.

Current programs to attract visitors and direct them to maritime heritage resources, such as state heritage and scenic routes, consortiums of historic sites, and tourism promotion initiatives would continue. Judging by trends in the past, momentum and funding for some would expire and they would cease, though new initiatives, such as the Port Cities Collaborative and Lake Michigan Water Trail, would continue to emerge. Chapter 2 describes the survey of Michigan’s currently preserved and interpreted maritime resources and provides a description of current and previous programs in Michigan interpreting or promoting Michigan’s maritime resources or coastal character.

Coordination among maritime heritage resources would continue through existing nonprofit groups like the Michigan Historic Preservation Network and resource type or region-specific organizations like the Michigan Lighthouse Conservancy and the Maritime Heritage Alliance (Traverse City).

Current programs and policies of existing federal, state, county, and nonprofit conservation organizations would remain in place, and current conditions and trends would continue. More information about financial and technical assistance available through the National Park Service and other sources can be found in chapter 4.

69. See appendix A for the full text of the legislation.

Existing Federal Management and Program Support

This section describes the outlook for maritime heritage resources with existing management and support from existing programs—the future if no new action is taken as a result of this study. Maritime heritage resources in Michigan are currently owned and managed by federal, state, and local governments, nonprofit organizations, and private entities. In many cases, they are preserved and interpreted in some way for the public. Future visitors to Michigan’s coast would have opportunities to experience maritime resources much as they do now.

The National Park Service would continue its existing commitments to maritime resources in many ways:

- Maritime heritage resources inside existing national park units (Isle Royale, Keweenaw, Pictured Rocks, and Sleeping Bear Dunes) would continue to be managed directly by the National Park Service for preservation and public enjoyment.
- The National Park Service would continue to manage existing grant and financial assistance programs that benefit Michigan maritime heritage resources such as Land and Water Conservation Fund grants, the Certified Local Governments program, and the Maritime Heritage Program. The Maritime Heritage Program works to advance awareness and understanding of the role of maritime affairs in the history of the United States. The program also helps interpret and preserve maritime heritage by maintaining inventories of historic US maritime properties, providing preservation assistance through publications and consultation, educating the public about maritime heritage through the NPS website, sponsoring maritime heritage conferences and workshops, and funding maritime heritage projects when grant assistance is available. Grant assistance, suspended for several years, returned as of 2014 and is certain for the ensuing three years.
- The National Park Service would continue to administer programs providing technical assistance. Technical assistance programs most applicable for Michigan’s maritime heritage resources are assistance to national historic landmarks; the Rivers, Trails and Conservation Assistance program; and assistance through the Submerged Resources Center. Assistance for national historic landmark owners and stewards includes guidance on historic preservation treatment, updating documentation, and undertaking or assisting others in the preparation of new NHL nominations. The National Park Service monitors the treatment and actions on national historic landmarks and regularly requests updated information from owners and stewards. In instances in which federal funding or programming may affect a national historic landmark, the National Park Service participates in the sections 106 and 110 processes (National Historic Preservation Act), to consult on whether or not the action may impact a national historic landmark, whether or not that impact is adverse, and whether or not the action can be avoided or mitigated. Depending on NPS funding, some national historic landmarks may receive condition assessments or more detailed inspections to assist in preservation goals. The Rivers, Trails and Conservation Assistance program provides technical assistance to support community-led natural resource conservation and outdoor recreation projects across the nation. The national network of conservation and recreation planning professionals partners with community groups, nonprofits, tribes, and state and local governments to design trails and parks, conserve and improve access to rivers, protect special places, and create recreation opportunities.

- The National Park Service would continue to administer programs that provide project assistance such as those programs that provide historic preservation and heritage education assistance. Those programs include heritage documentation programs like the Historic American Buildings Survey (HABS) and heritage education programs like Heritage Travel Itineraries, Teaching with Historic Places, and the Submerged Resources Center. The Heritage Travel Itineraries highlight thousands of sites, most of which are listed in the National Register of Historic Places. Itineraries bring historic sites to the attention of anyone interested in learning more about American history, architecture, archeology, engineering, and culture and encouraging people to visit and enjoy these important and inspiring places. Teaching with Historic Places also uses National Register of Historic Places spotlighting different communities, geographic regions, and themes across the country; the travel itineraries expose tourists to a great variety of places. The Submerged Resources Center provides direct project support to NPS partners and staff responsible for the stewardship of submerged resources, primarily cultural resources, to enhance and facilitate public appreciation, access, understanding, and preservation of these resources.
- The National Park Service also provides technical assistance for parties applying for federal surplus lighthouses and lights made available through the National Historic Lighthouse Preservation Act and approves applications that meet the requirements of the law. The National Park Service subsequently monitors the treatment and use of such properties in perpetuity, providing technical assistance as required.
- The same type of assistance and oversight is provided for any other federal historic surplus properties, maritime resources included, that may become available for nonfederal, government ownership, through the Historic Surplus Property and the Federal Lands to Parks Programs.⁷⁰

Other federal agencies would continue their commitments to maritime heritage resources under their management and the existing interpretive programs to interpret them for the public. Most notably, the U.S. Forest Service protects a number of maritime heritage resources within the four national forests in Michigan: Ottawa, Hiawatha, Huron, and Manistee. The National Oceanic and Atmospheric Administration, in partnership with the State of Michigan, would continue to administer the Thunder Bay National Marine Sanctuary, a 4,300 square mile sanctuary that protects hundreds of shipwrecks. The National Oceanic and Atmospheric Administration and the State of Michigan would also continue to administer the Great Lakes Maritime Heritage Center in Alpena, whose 10,000 square feet of interactive exhibits draws more than 80,000 visitors annually. For more information about the Great Lakes Maritime Heritage Center, see chapter 2.

70. Additionally, for any maritime resources that may be demolished or adversely affected by a federal program, or by an action involve federal permitting or granting, the National Park Service may be involved in providing guidelines for a specific type of mitigation documentation to be submitted to the Library of Congress. In cases of such documentation, NPS approval is required prior to submittal.

NEW OPPORTUNITIES

In addition to the possibility of further leverage existing opportunities, there are new opportunities to help meet the goals for preserving, interpreting, and coordinating Michigan's maritime heritage resources. This section fulfills the study's requirement to present management options for "long-term resource protection and public enjoyment" and to "identify opportunities for the National Park Service and the State to coordinate the activities of appropriate units of national, State, and local parks and historic sites in furthering the preservation and interpretation of maritime heritage resources."⁷¹

Statewide Coordinating Body

This opportunity would be the convening of a coordinating body with a statewide scope that is multi-jurisdictional and multi-agency. The role of the body would be to better coordinate among existing programs and opportunities to provide the structure for a comprehensive preservation and interpretation program for Michigan's maritime heritage resources. The seven goals developed in this study could provide a launching point for the goals of such a body.

As described in chapter 2, above, and further in chapter 4, there are existing programs for technical assistance and promotion through existing National Park Service, state, and preservation nonprofit programs. There is no proactive delivery system for this support, however, but rather it requires those needing help to find this support. The existing suite of opportunities is wide-ranging, but is too frequently reactive rather than proactive. A major benefit of a statewide coordinating body would be to be an active, rather than passive entity that could build partnerships between sites, provide coordinated program design (e.g., educational and interpretive programs), and connect managing entities and advocacy groups with technical support and funding opportunities. Development of a consistent graphic identity and website could help with promotion of maritime heritage resources. To be effective and proactive, this coordinating body would likely need dedicated personnel.

The most appropriate convening entity for a maritime heritage preservation and interpretation program exclusive to Michigan would be the State of Michigan, a statewide nonprofit organization, or an organization or coalition that would form for the purpose of meeting all or most of the seven goals outlined earlier in this chapter. If a coalition of groups were formed, the National Park Service could be a participant, but would not be expected to lead the group. Whether the National Park Service is involved as a participant or not, the statewide coordinating body would be encouraged to seek NPS assistance at the project level, working with existing parks, the RTCA program, the NHL program, and others as applicable.

NPS Designations

The following NPS designations could be sought for a portion of Michigan's maritime heritage resources. The following designations have varying abilities to meet the goal of "long-term resource protection and public enjoyment" set forth in the study legislation. The appropriateness of these designations for a subset of Michigan's maritime heritage resources would need to be evaluated as separate feasibility studies.

National Heritage Area. National heritage areas connect communities together across municipal jurisdictions based on a shared heritage, history, and sense of place. Unlike national parks, National Heritage Areas are large, lived-in landscapes. Consequently, National Heritage Areas entities collaborate with communities to determine how to make heritage relevant to local interests and needs. The coastal communities of Michigan are varied and represent many historical themes. Designated by law, National Heritage Areas rely on technical assistance and some funding through the National Park Service, but they are led by a coordinating entity. The National Park Service's role in administration of the national heritage area is limited. Though an NHA designation would be unlikely to adequately meet all of the goals for a Michigan maritime heritage program, it may be an avenue under the right circumstances for greater coordination and technical assistance. At such time as a coordinating entity for a segment of Michigan's coastline comes forward with interest, a national heritage area may be pursued for that particular area.

71. See appendix B for the full text of the legislation.

The creation of several heritage areas along Michigan's coastline could be pursued, rather than a single heritage area encompassing the state's vast interface with the Great Lakes. The coastline of Michigan is simply too large in size and scope to be considered one cohesive community, which could hinder the ability for a single national heritage area to tell a comprehensive story. Case studies of national heritage areas revealed concerns about consistent funding.

More information about National Heritage Areas can be found at www.nps.gov/subjects/heritageareas

National Historic Trails. National historic trails have as their purpose the identification and protection of historic routes, associated historic remnants, and artifacts for public use and enjoyment. The criteria for national historic trails are presented in the National Trails System Act. National historic trails must be both nationally and historically significant and they must offer interpretive or recreational opportunities to the public. National historic trails generally consist of remnant sites and trail segments and are not necessarily continuous, but connect segments and sites along the trail with a shared history.

While no single historically-traveled route could connect the many and disparate resources in Michigan, the NHT model seemed like a fit for the goals of the legislation if historically significant routes could be identified. The study team explored the first criterion for a national scenic trail, national significance, with the help of historians. Two potential trails were identified: *Jiimaan to Mi-shi-ne-macki-nong: Odawa Trade Routes* and *Lake Huron Beacon of Hope Trail: Michigan's Lighthouses, Life Savers & Shipwrecks*. The historical background and proposal for each trail can be found in appendix E.

Lake Huron Beacon of Hope Trail: Michigan's Lighthouses, Life Savers & Shipwrecks—This route follows the Michigan coast of Lake Huron from the southernmost point to the Straits of Mackinac. Unlike the relatively straight shorelines of Lake Ontario, Lake Erie, and Lake Michigan, the numerous bays, barrier shoals, and islands of Lake Huron presented both physical hazards and navigational challenges.

There are two periods of significance for the proposed Lake Huron Beacon of Hope Trail: from the middle of the 1820s to just before the start of the American Civil War and the decade beginning in 1871. Lighthouses, lifesaving stations, and nearby shipwrecks present unique opportunities for the public to view three distinct, yet related, components of Michigan's maritime heritage. Nearly all of the sites selected for inclusion in this trail's proposal feature those three components and already provide interpretive and recreational opportunities to the public. Most of the sites have already been listed in the National Register of Historic Places, and most are associated with preservation societies or stewardship groups interested in the site's continued preservation.

This proposal was not carried forward for further NHT analysis because the National Park Service felt that the Lake Huron routes were not well-documented enough at this time to establish a historical trail alignment. Additionally, national historic trails need partner organizations to function well, and the study team did not identify any organizations who could fulfill such a role.

Jiimaan to Mi-shi-ne-macki-nong: Odawa Trade Routes—This route follows as closely as possible the original routes of travel used by Anishnaabek mariners, and later, European American explorers. The trail follows established maritime trade routes that extended far beyond the confines of what is today the state of Michigan. The period of importance of these trails in the course of national events dates from the Middle Woodland Period to end of the French occupation of Michigan in 1761, though they are important to indigenous communities to this day. The components of the maritime heritage trail are the routes themselves, along with primary Anishnaabek trading centers along Michigan's coastlines. The historical and cultural relevance these trails have had for the Odawas span centuries and influenced wars, alliances, marriages, treaties, and tribal locations. The Odawas remain a part of Michigan and reside in their present location because of their role as traders before and during the historic period. Please see appendix E for an in-depth history and description of these trails.

This proposal was not fully explored in this study because of the size and complexity of considering this trail to its logical extent: the actual trail system is much bigger than just Michigan waters and stretches into several states and Canada, beyond the scope of this study. Additionally, national historic trails need partner organizations to function well, and the study team did not identify any organizations who could fulfill such a role. There is the potential for such a trail to be feasible if a cooperating entity is formed or identified. An international historic trail connecting Canadian First Nations, United States, and American Indian Great Lakes Heritage would require deep involvement of potential partners to be viable.

More information about National Historic Trails and National Scenic Trails can be found at www.nps.gov/nts

National Scenic Trails. National scenic trails (NST) are physically constructed recreational trails along routes of particular natural beauty, primarily nonmotorized routes of outstanding recreation opportunity. Such trails are established by an Act of Congress and must be continuously 100 miles or longer (though there could be noncontinuous sections in addition). The trail itself and construction of trail sections would be a priority under this model. In examining this as a potential option, there were questions about whether this would sufficiently address the preservation and interpretation of Michigan's maritime resources. The way to focus most closely on heritage resources as a national scenic trail would be a water trail that went from port to port, but the study team determined that such a trail could better interpret the historical story using the national historic trail model (see above). A national scenic trail did not appear to have the potential to meet the desired outcomes outlined in the study legislation, but could be appropriate in some circumstances.

More information about National Historic Trails and National Scenic Trails can be found at www.nps.gov/nts

Other Federal Designations

America's Byways. The America's Byways Program is part of the US Department of Transportation, Federal Highway Administration, and encompasses two designations: National Scenic Byways and All-American Roads. The program is a collaborative effort established to help recognize, preserve, and enhance selected roads throughout the United States, largely through grants to organizations that manage and promote the byways. National Scenic Byways must contain one of the six intrinsic qualities. All-American Roads must possess multiple intrinsic qualities that are nationally significant and contain one-of-a-kind features that do not exist elsewhere. Intrinsic quality means archaeological, cultural, historic, natural, recreational, or scenic features that are considered representative, unique, irreplaceable, or distinctly characteristic of an area.

There are three America's Byways in Michigan, but none specifically highlight maritime resources. The State of Michigan operates the Pure Michigan Scenic Byways program (see chapter 2). The study team determined that a number of individual roads could be evaluated and designated under the program, though they found that the features an America's Byway would put in place (e.g., wayside signage along coastal roadways at points of interest, maps along designated routes, promotion of sites of interest) are already in place thanks to the work of state, regional, and local entities. However, an America's Byway designation would bring national visibility for a designated route. The America's Byways program is not a consistent source of funding and another organization would need to come forward or be created to receive any funding to implement programs.

More information about America's Byways can be found at <https://www.fhwa.dot.gov/byways/>

CONCLUSION

This study finds that that existing programs of preserving and interpreting Michigan maritime resources are effective, but that more coordination could be beneficial and that new opportunities may be available for some resources. Managing entities and other groups are encouraged to continue to seek NPS assistance through existing programs by working with existing parks, RTCA program, NHL program, and others (see chapter 4 for a discussion of potential sources of financial and technical assistance through NPS and other entities). As an agency, the National Park Service is committed to supporting opportunities at the local and state level to provide for preservation and public enjoyment.

Currently, programs are in place to preserve, interpret, promote, and coordinate between Michigan's maritime heritage resources, but opportunities exist to better leverage existing options or access new opportunities. No single option would meet all the requirements of the study legislation or meet all of the seven goals developed by the study team for a program that would best meet those requirements. As mentioned above, should partnerships form and interests commit to a statewide coordinating body or a national or international historic trail, these may be viable ways to preserve and interpret Michigan's maritime heritage.

CHAPTER 4: POTENTIAL SOURCES OF FINANCIAL AND TECHNICAL ASSISTANCE AND STUDY CONCLUSIONS

POTENTIAL SOURCES OF FINANCIAL AND TECHNICAL ASSISTANCE

The legislation directing the National Park Service to undertake the Michigan Maritime Heritage Special Resource Study requires that the study “identify sources of financial and technical assistance available to communities for the preservation and interpretation of maritime heritage resources.”⁷² This section is dedicated to fulfilling that requirement by describing existing programs and fund sources, from the National Park Service and others, which may assist in the preservation, interpretation, and coordination. Because of the diversity of maritime heritage resources included in this study and their varied ownership, some sources of funds are technical assistance and may be available to certain resources that are not available to others. Please carefully read the requirements of individual programs for financial or technical assistance. This section presents a short overview of what is available.

The National Park Service manages a number of grant and technical assistance programs to help its nonfederal partners conserve, protect, and interpret the nation’s historical, cultural, and recreational resources.

The NPS Maritime Heritage Program works to advance awareness and understanding of the role of maritime affairs in the history of the United States. Through leadership, assistance, and expertise in maritime history, preservation, and archeology, the program helps to interpret and preserve maritime heritage by maintaining inventories of historic US maritime properties, providing preservation assistance through publications and consultation, educating the public about maritime heritage through the website, sponsoring maritime heritage conferences and workshops, and funding maritime heritage projects when grant assistance is available.

The grants program is funded through a percentage of the proceeds from the sale or scrapping of obsolete vessels of the National Defense Reserve Fleet. All grants awarded must be matched on a one-to-one basis with nonfederal assets.

The Rivers, Trails, and Conservation Assistance program provides technical assistance to support community-led natural resource conservation and outdoor recreation projects across the nation. The national network of conservation and recreation planning professionals partner with community groups, nonprofits, tribes, and state and local governments to design trails and parks, conserve and improve access to rivers, protect special places, and create recreation opportunities.

The Discover Our Shared Heritage—Heritage Travel Itineraries program through the National Park Service develops travel itineraries that are based on properties listed in the National Register of Historic Places. The itineraries spotlight different communities, geographic regions, and themes across the country.

Save America’s Treasures and Preserve America are federal grant programs that may be available for individual maritime heritage resources and maritime communities. Save America’s Treasures supports the preservation of nationally significant historic properties and collections and is administered by the National Park Service in partnership with the Institute of Museum and Library Services, the National Endowment for the Arts, and the National Endowment for the Humanities. The grant is funded through the Historic Preservation Fund using revenue from Outer Continental Shelf oil releases and requires dollar-for-dollar private matching funds. In December 2017, applications were opened for \$5 million in matching grants. Preserve America is a grant program designed to support a variety of activities related to heritage tourism and innovative approaches to the use of historic properties as educational and economic assets.

72. See appendix B for full text of the study legislation.

Eligible recipients for these matching grants include State Historic Preservation Officers, Tribal Historic Preservation Officers, designated Preserve America Communities, and Certified Local Governments that are applying for Preserve America Community designation.

Outside the National Park Service, the National Endowment for the Arts and National Endowment for the Humanities are both grant-making organizations that have databases for funding streams. Grant funding may be available for specific types of projects such as making interpretive materials and experiences accessible. Eligibility varies with the requirements of each grant.

Some technical support is available from the Michigan State Historic Preservation Office and from the Michigan Historic Preservation Network, a statewide nonprofit organization dedicated to recognizing and preserving Michigan's rich cultural and architectural heritage. Technical and maintenance support from city and/or county government agencies may be available; for example, landscape maintenance, security, and fire protection services could be substantially enhanced by partnerships between owners or managers of resources and local government agencies. Donations or grants from state and local government, corporate, and/or tribal entities for one-time capital improvement or restoration projects may also be available.

A source of funding for maritime heritage related projects also includes the Coastal Management Program in the Michigan Office of the Great Lakes. In September 2017, the Coastal Management Program announced awards of more than \$500,000 in federal grant funds for a variety of initiatives on Michigan's Great Lakes coastline. Michigan's Coastal Management Program is funded in part through the National Oceanic and Atmospheric Administration. The amount available through the Coastal Management Program varies year to year. In 2018, the office made \$350,000 in grant monies available for planning and implementing water trail projects along Michigan's more than 3,000 miles of Great Lakes coastline.

Among the 11 programs the Office of the Great Lakes will support are: Coastal Planners Initiative, Coastal Clean Beaches Initiative (Adopt-a-Beach Program), Coastal Clean Marina Initiative, Great Lakes Underwater Historic Resources – Shipwrecks, and Great Lakes Fisheries Heritage Website Development. All grants will maximize resources by leveraging a local 1-1 match. In addition to grant funding, the Coastal Program provides grantees with technical support and data.

As described in chapter 2, there are many programs that promote Michigan's maritime heritage tourism opportunities. These programs offer opportunities for connection between related or geographically proximate sites and can boost outreach and awareness. As programs evolve, they may offer technical or financial assistance in addition to increased visibility to tourists]

NPS Community Assistance Programs
[https://www.nps.gov/getinvolved/
 community-assistance.htm](https://www.nps.gov/getinvolved/community-assistance.htm)

STUDY CONCLUSIONS

The purpose of this study is to determine the suitable and feasible options for the long-term protection of significant maritime heritage resources in the State of Michigan and the manner in which the public can best learn about and experience the resources. The study defined maritime heritage resources, surveyed and analyzed existing resources and programs that protect or make known to the public these resources, and evaluated existing and new opportunities to meet the study requirements.

The National Park Service finds that Michigan has a wealth of maritime heritage resources, many of which are available for the public to experience, as well as many access points and opportunities for visitors to experience the inland sea. These resources have different ownership and management patterns, are in various conditions and have had various levels of success. The broad variation in resources and the management of resources for public access is likely to continue. The sheer number and geographic distribution of maritime resources in the state does not lend itself to a single option that would provide long-term protection and public awareness for those resources that do not already have protection and promotion. A diverse suite of local and regional efforts have been effective in the past at achieving preservation, interpretation, and public awareness goals. The National Park Service finds that the collected efforts are well suited to the present and future challenges of preserving, interpreting, and promoting Michigan's maritime heritage resources.

The potential exists for grass-roots-led efforts to further leverage existing NPS management and program support and to pursue the management options described in chapter 3. There is the potential for such a trail to be feasible if a cooperating entity is formed or identified. An international historic trail connecting Canadian, First Nations, United States, and American Indian Great Lakes heritage would require deep involvement of potential partners. Appendix E provides historic context for potential national trail ideas initially explored in the study process.

CHAPTER 5: CONSULTATION AND COORDINATION

The study legislation directed the National Park Service to undertake the study “in consultation with the State, the State Historic Preservation Officer, and other appropriate State and local public agencies and private organizations” as well as NPS public participation and tribal involvement policy in National Park Service *Management Policies 2006*.⁷³

The process for this unique study is outlined in the chapter 1 section “How the Study Process was Designed” that covers the survey process, subsequent steps to gather information and investigate potential management options, and lays out the structure of this document. The process involved state agency personnel and input from the earliest phases. As the study progressed, the number of state, local public agencies, tribes, and private organizations consulted broadened. This section of the study provides more detail and specific participants and organizations involved in the study process.

The study team assembled for this study includes planners from the NPS Midwest Regional Office as well as representatives of National Parks in Michigan and the state history programs. The NPS internal team members were the primary study authors, except for the preliminary national historic trail proposals created through a cooperative agreement with the Organization of American Historians. The study team was the main working group that set the direction for the study and gave feedback on the written drafts. The workshop group, a subset of the study team, met at the consensus workshop at which the seven goals for programs to assist in Michigan’s maritime heritage resource preservation, interpretation, and coordination was held in Lake Leelanau, Michigan, in October 2010.

The workshop group also met in February 2011 in Lansing, Michigan, for a program evaluation workshop to examine existing NPS and other management models and opportunities that might meet the goals developed.

By August 2011, the study team had developed a few preliminary management alternative concepts that could fulfill the study legislation’s mandate to “recommend management alternatives that would be most effective for long-term resource protection and providing for public enjoyment of maritime heritage resources.” The study team sought feedback from a larger audience of stakeholders—this process was called targeted external scoping. Meetings were held on August 1, 2011, in Detroit, August 2, 2011, in St. Ignace, and August 3, 2011, in Muskegon. The meetings were for a specific audience: state and regional government entities (including tribes in Michigan), larger government associations (like Councils of Governments), and nonprofits that deal with maritime heritage resources and their stories on a state or regional level. The process of targeted external scoping, its goals, and outcomes is described in detail in chapter 3.

Several members of the study team presented at the 2014 Michigan Historic Preservation Network Conference in Jackson Michigan. The presentation, entitled “Michigan’s Maritime Heritage and the National Park Service: Is there an expanded role for federal assistance in stewardship of Michigan’s heritage resources?” sought additional input from conference attendees about assistance needs for maritime heritage resources in Michigan.

The study process was slowed significantly by the untimely passing of the NPS project manager, Ruth Heikkinen, who had roots in the state of Michigan and was passionate about its heritage.

73. National Park Service *Management Policies 2006* Section 2.1.3 Public Participation, regarding local and state involvement, and 2.3.1.5, regarding tribal involvement; also 1.1.1.1. These elements of policy guidance are in place to help ensure that the appropriate local, state and tribal involvement are satisfied.

NPS INTERNAL TEAM

Dee Finnegan, Intern (former), Planning and Compliance, Midwest Region, National Park Service

Natalie Franz, Planner, Planning and Compliance, Midwest Region, National Park Service

Ruth Heikkinen, Project Manager, Chief of Planning and Compliance (former), Midwest Region, National Park Service

Grant Johnson, Intern (former), Planning and Compliance, Midwest Region, National Park Service

STUDY TEAM

Tom Baker, Park Ranger/Management Assistant (former), Keweenaw National Historical Park

Tokey Boswell, Chief of Planning and Compliance, Midwest Region, National Park Service

Gregg Bruff, Chief of Heritage Education and Cultural Resources (retired), Pictured Rocks National Lakeshore

Sandra S. Clark, Director, Michigan History Center, State of Michigan

Summer Sky Cohen, Tribal Historic Preservation Officer (former), Keweenaw Bay Indian Community

Brian D. Conway, State Historic Preservation Officer, Michigan State Housing Development Authority, State of Michigan

Ray Fahlsing, Stewardship Program Manager, Department of Natural Resources, State of Michigan

Dee Finnegan, Intern (former), Planning and Compliance, Midwest Region, National Park Service

Natalie Franz, Planner, Planning and Compliance, Midwest Region, National Park Service

Ruth Heikkinen, Project Manager, Chief of Planning and Compliance (former), Midwest Region, National Park Service

Eric Hemenway, Little Traverse Bay Band of Odawa

Grant Johnson, Intern (former), Planning and Compliance, Midwest Region, National Park Service

Giiwegiizhigookway Martin, Tribal Historic Preservation Officer, Ketegitigaaning Ojibwe Nation

Lisa Myers, Chief of Interpretation and Visitor Service (former), Sleeping Bear Dunes National Lakeshore

Barbara Nelson-Jameson, Michigan Program Director (retired), Rivers, Trails, and Conservation Assistance, Midwest Region, National Park Service

Laura J. Quackenbush, Museum Technician, Sleeping Bear Dunes National Lakeshore

Dena Sanford, Architectural Historian, Midwest Region, National Park Service

Matt Smar, Coastal Community Development Coordinator, Coastal Management Program, Department of Environmental Quality, State of Michigan

WORKSHOP GROUP

Sandra S. Clark, Director, Michigan History Center, State of Michigan

Brian D. Conway, State Historic Preservation Officer, Michigan State Housing Development Authority, State of Michigan

Ray Fahlsing, Stewardship Program Manager, Department of Natural Resources, State of Michigan

Dee Finnegan, Intern (former), Planning and Compliance, Midwest Region, National Park Service

Natalie Franz, Planner, Planning and Compliance, Midwest Region, National Park Service

Ruth Heikkinen, Project Manager, Chief of Planning and Compliance (former), Midwest Region, National Park Service

Grant Johnson, Intern (former), Planning and Compliance, Midwest Region, National Park Service

Lisa Myers, Chief of Interpretation and Visitor Service, Sleeping Bear Dunes National Lakeshore

Barbara Nelson-Jameson, Michigan Program Director (former), Rivers, Trails, and Conservation Assistance, Midwest Region, National Park Service

Laura J. Quackenbush, Museum Technician, Sleeping Bear Dunes National Lakeshore

CONTRIBUTORS THROUGH COOPERATIVE AGREEMENT WITH THE ORGANIZATION OF AMERICAN HISTORIANS

Denise Cline, GIS Specialist/Community Planner/US 23 Heritage Route Program Coordinator, Northeast Michigan Council of Governments

Eric Hemenway, Little Traverse Bay Band of Odawa

Wayne Lusardi, Archaeologist, State of Michigan Department of Natural Resources at Thunder Bay National Marine Sanctuary

Victoria M. Littlefield, Director, Public Sector Relations, DRI Consulting

TRIBAL CONSULTATION

NEEDS TO BE COMPLETED

TARGETED EXTERNAL SCOPING: ORGANIZATIONS INVITED TO PARTICIPATE:

Association for Great Lakes Maritime History

Bay Mills Indian Community

Burt Lake Band of Ottawa & Chippewa Indians

Central Upper Peninsula Planning and Development Regional Commission (CUPPAD)

Chippewa Ottawa Resource Authority

Community Economic Development Association of Michigan

Detroit River International Wildlife Refuge - U.S. Fish and Wildlife Service

East Michigan Council of Governments (EMCOG)

Eastern Upper Peninsula Regional Planning and Development

Grand River Band of Ottawa Indians

Grand Traverse Band of Ottawa and Chippewa Indians

Great Lakes Lighthouse Keepers Association

Great Lakes Maritime Academy

Hannahville Indian Community

Hiawatha National Forest

Huron-Manistee National Forest

Inter-Tribal Council of Michigan, Inc.

Isle Royale National Park

Ketegitigaaning Ojibwe Nation

Keweenaw Bay Indian Community

Keweenaw National Historical Park

Keweenaw National Historical Park Advisory Commission

Lac Vieux Desert Band of Lake Superior Chippewa Indians

Little River Band of Ottawa Indians

Little Traverse Bay Bands of Odawa Indians

Little Traverse Bay Bands of Odawa Indians

Maritime Heritage Alliance

Match-E-Be-Nash-She (Gun Lake Tribe)

Michigan Association of Convention and Visitors Bureaus

Michigan Association of Counties

Michigan Association of Planning

Michigan Boating Industries Association

Michigan Coastal Management Program - Office of the Great Lakes

Michigan Heritage Water Trails

Michigan Historic Preservation Network

Michigan Historical Center

Michigan Lighthouse Alliance

Michigan Lighthouse Conservancy

Michigan Lighthouse Fund

Michigan Municipal League

Michigan Museums Association
Michigan Port Collaborative
Michigan Sea Grant
Michigan Townships Association
Michigan Trails and Greenway Alliance
Michigan Underwater Preserve Council, Inc.
National Park Service
National Parks Conservation Association
National Trust for Historic Preservation: Midwest Region
NOAA National Marine Sanctuary Program
North Country National Scenic Trail
Northeast Michigan Council of Governments (NEMCOG)
Northern Initiatives
Northwest Michigan Council of Governments
Nottawaseppi Band of Huron Potawatomi
Pictured Rocks National Lakeshore
Pokagon Band of Potawatomi Indians
River Raisin National Battlefield Park
Saginaw Chippewa Indian Tribe
Sault Ste. Marie Tribe of Chippewa Indians
Sleeping Bear Dunes National Lakeshore
Southeast Michigan Council of Governments (SEMCOG)
Southwest Michigan Planning Commission (SWMPC)
State of Michigan Department of Natural Resources
State of Michigan Department of Transportation
State of Michigan Office of the State Archaeologist
State of Michigan State Housing Development Authority (MSHDA)
The Historical Society of Michigan
The Lighthouse Preservation Society

Thunder Bay National Marine Sanctuary and Underwater Preserve - NOAA
Travel Michigan
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
United Tribes of Michigan
US Lifesaving Service Heritage Association
US Lighthouse Society
West Michigan Regional Planning Commission
West Michigan Shoreline Regional Development Commission (WMSRDC)
West Michigan Tourist Association
Western Upper Peninsula Planning & Development Region (WUPPDR)

ADDITIONAL THANKS

Kevin Crisman, Nautical Archaeology Faculty Fellow, Texas A&M University
Steve Elkinton, Program Leader (retired), National Trails System Program, National Park Service
Cherri Esperson, Park Planning and Special Studies, National Park Service
Mike Evans, Ethnographer, Midwest Region, National Park Service
Patrick Gregerson, Chief of Park Planning and Special Studies, National Park Service
Theodore J. Karamanski, Professor of History, Loyola University Chicago
Bradley A. Rodgers, Director, Program in Maritime Studies, East Carolina University
Thomas Sheffer, Park Planning and Special Studies, National Park Service
Sandra Washington, Associate Regional Director for Cultural Resources, Planning, Compliance, Communications, and Legislation (retired), Midwest Region, National Park Service

LEGISLATION

Michigan Lighthouse and Maritime Heritage Act (P.L. 109-426)

120 STAT. 3264 PUBLIC LAW 109-436—DEC. 20, 2006

Public Law 109-436

109th Congress

An Act

To direct the Secretary of the Interior to conduct a study of maritime sites in the State of Michigan.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Michigan Lighthouse and Maritime Heritage Act”.

SEC. 2. DEFINITIONS.

In this Act:

(1) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(2) STATE.—The term “State” means the State of Michigan.

SEC. 3. STUDY.

(a) IN GENERAL.—The Secretary, in consultation with the State, the State Historic Preservation Officer, and other appropriate State and local public agencies and private organizations, shall conduct a special resource study of resources related to the maritime heritage of the State.

(b) PURPOSE.—The purpose of the study is to determine—

(1) suitable and feasible options for the long-

term protection of significant maritime heritage resources in the State; and

(2) the manner in which the public can best learn about and experience the resources.

(c) REQUIREMENTS.—In conducting the study under subsection (a), the Secretary shall—

(1) review Federal, State, and local maritime resource inventories and studies to establish the potential for interpretation and preservation of maritime heritage resources in the State;

(2) recommend management alternatives that would be most effective for long-term resource protection and providing for public enjoyment of maritime heritage resources;

(3) address how to assist regional, State, and local partners in increasing public awareness of and access to maritime heritage resources;

(4) identify sources of financial and technical assistance available to communities for the preservation and interpretation of maritime heritage resources; and

(5) identify opportunities for the National Park Service and the State to coordinate the activities of appropriate units of national, State, and local parks and historic sites in furthering the preservation and interpretation of maritime heritage resources.

(d) REPORT.—Not later than 3 years after the date on which funds are made available to carry out the study under subsection (a), the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Resources of the House of Representatives a report that describes—

(1) the results of the study; and

(2) any findings and recommendations of the Secretary.

SEC. 4. AUTHORIZATION OF
APPROPRIATIONS.

There are authorized to be appropriated such sums as are necessary to carry out this Act.

Approved December 20, 2006.

BIBLIOGRAPHY

Arnold, Amy

- 2011 Interview by author. Phone interview. July 20, 2011.

Arnold, Amy

- 2010 *Southwest Michigan Roadmap: The West Michigan Pike*. Lansing, MI: State Historic Preservation Office.

Barber, Sally

- 2009 "Port Cities Collaborative." *Great Lakes Seaway Review*, Vol. 37, No. 4, April–June 2009.

Braun, Ken

- 2011 "Pure Spending – GOP Finds More for Tourism Subsidies." Mackinac Center for Public Policy, June 28, 2011. <http://www.mackinac.org/15328> (accessed July 30, 2011).

Byron, M. Christine

- 2008 "Hugh J. Gray, 'Dean of Michigan's Tourist Activity'" *Grand River Valley History*, Volume 23, 2008.

DeLong, Steve

- 2011 Interview by author. Phone interview. July 14, 2011.

Douley, George

- 2011 "Proof: Tourism Promotion Campaigns Increase Visits." Longwoods International, July 6, 2011. <http://www.longwoods-intl.com/2011/07/proof-tourism-promotion-campaigns-increase-visits/> (accessed July 30, 2011).

Dunbar, Willis F.

- 1995 *A History of the Wolverine State*. Grand Rapids, MI: William B. Eerdmans Publishing Co.

Fairchild, Felicia

- 2011 "Port Collaborative Protects and Connects Michigan's Ports." Michigan Municipal League, July–August 2011, <http://www.mml.org/resources/publications/mmr/issue/july-august-2011/front-door.html> (accessed August 24, 2011).

Fairchild, Felicia

- 2008 "Route 66 Now Shorthand for Heritage Highway." Route 66 University, March 13, 2008. <http://www.route66university.com/study/inthenews/450.php> (accessed June 25, 2011).
- 2011 "Grand River Heritage Water Trail." *365 Things to Do In West Michigan*. <http://365thingswest-michigan.com/2011/04/15/105-grand-river-heritage-water-trail/> (accessed June 25, 2011).
- 2011 "Great Lakes Circle Tour." *About the Great Lakes*. <http://www.abouthegreatlakes.com/tours.htm> (accessed June 25, 2011).
- 2011 "Great Lakes Circle Tours." *Michigan Highways*. <http://www.michiganhighways.org/other/glct.html> (accessed June 25, 2011).
- 2011 *The Great Waters*. <http://www.thegreatwaters.com/> (accessed June 25, 2011).

Hagerty, Jim

- 2011 “Lake Michigan Water Trail Added to National Trails System.” *The Rock River Times*. <http://rockrivertimes.com/2011/06/08/lake-michigan-water-trail-added-to-national-trails-system/> (accessed June 25, 2011).

Kerr, John

- 2011 Interview by Grant Johnson. Phone interview. July 14, 2011.

Keweenaw County

- 2011 “Keweenaw County Road Commission.” *Keweenaw County*. <http://www.keweenawcountyonline.org/commissions-roads.php> (accessed June 25, 2011).

Knight, Dave

- 2011 Interview by author. Phone interview. July 14, 2011.
- 2011 Lake Michigan Water Trail Association. <http://www.lmwt.org> (accessed June 25, 2011).
- 2011 Land, Bill. Interview by author. Phone interview. July 20, 2011.

Lafaive, Michael D.

- 2010 “Alice in Subsidy Land.” Mackinac Center for Public Policy, February 18, 2010. <http://www.mackinac.org/12148> (accessed July 30, 2011).

Lemberg, David

- 2011 Interview by author. Phone interview. July 15-16, 2011.

Lupo, Lee

- 2008 “Return of the Pike.” *The Muskegon Chronicle*, May 5, 2008. http://blog.mlive.com/chronicle/2008/05/return_of_the_pike.html (accessed June 25, 2011).

Lynn, Bill

- 2011 Interview by author. Phone interview. July 20, 2011.

Lynch-Morin, Kathryn

- 2011 “Michigan Tourism Spending Expected to Increase Four Percent in 2011.” *M-Live*, April 4, 2011. http://www.mlive.com/business/mid-michigan/index.ssf/2011/04/michigan_tourism_spending_expe.html (accessed July 30, 2011).

Michigan Department of Transportation

- 2011 “Heritage Route Program.” http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_11209---,00.html (accessed June 25, 2011).

Michigan Heritage Water Trails

- 2011 “The Michigan Heritage Water Trail Program and Partners.” http://www.wmich.edu/glcms/water-trails/info_program.htm (accessed June 25, 2011).

Michigan Historic Preservation Network

- 2002 *Investing in Michigan’s Future: The Economic Benefits of Historic Preservation*. Michigan Historic Preservation Network.

Michigan Historic Preservation Network

- 2000 “Michigan Lighthouses on the Sweetwater Trail.” Michigan Historic Preservation Network.

Michigan Historic Preservation Network

- 1998 “The Sweetwater Trail: Eastern Peninsula and Huron Shore Map.” Michigan Historic Preservation Network.

Michigan Legislature

- 2011 “Section 324.72113 Michigan Heritage Water Trail Program.” Michigan Legislature. [http://www.legislature.mi.gov/\(S\(polhu045at-0piq454iraqm55\)\)/mileg.aspx?page=getobject&objectname=mcl-324-72113](http://www.legislature.mi.gov/(S(polhu045at-0piq454iraqm55))/mileg.aspx?page=getobject&objectname=mcl-324-72113) (accessed June 25, 2011).

Michigan Lighthouse Fund

- 2008 “Lighthouses of Michigan.” Michigan Lighthouse Fund.

Michigan Lodging and Tourism Association

- 2011 “About MLTA.” Michigan Lodging and Tourism Association. <http://milodging.org/node/1> (accessed July 30, 2011).
- 2010 “Michigan Port Collaborative Powwows With State Officials.” MiBiz.com, December 14, 2010. <http://www.mibiz.com/news/economic-development/16976-michigan-port-collaborative-powwows-with-state-officials.html> (accessed June 25, 2011).

Western Michigan University

- 2011 “First Stage of Statewide Trail Opens.” Western Michigan University. <http://www.wmich.edu/wmu/news/2004/08/017.html> (accessed June 25, 2011).

Michigan State Housing Development Authority

- 2011 “West Michigan Pike.” Michigan State Housing Development Authority. <http://www.michigan.gov/mshda/0,1607,7-141-54317-252072--,00.html> (accessed June 25, 2011).

- 2010 “Michigan Tourism Maintains #1 Ranking In Social Media.” PR Newswire, October 18, 2010. <http://www.prnewswire.com/news-releases/michigan-tourism-maintains--1-ranking-in-social-media-105177029.html> (accessed July 30, 2011).

National Trust for Historic Preservation

- 2011 “Travel Michigan Reaches Out Using TV and Technology.” Preservation Nation. <http://www.preservationnation.org/issues/heritage-tourism/survival-toolkit/travel-michigan-reaches-out-tv-technology.html> (accessed July 30, 2011).
- 2011 “News From Projects.” Michigan Humanities Council, Fall 1998 Newsletter. <http://www.michiganhumanities.org/news/newsletters/fall98/fall98.html> (accessed June 25, 2011).

Northern Initiatives

- 2011 “About Us.” Northern Initiatives, <http://www.northerninitiatives.com> (accessed July 26, 2011).

Patrick, Greg

- 2011 Interview by author. Phone interview. July 14, 2011.
- 2011 “Private-sector Partners Give \$3 million for Michigan Ads.” Michigan Radio, June 13, 2011. <http://www.michiganradio.org/post/private-sector-partners-give-3-million-michigan-tourism-ads> (accessed July 30, 2011).
- 2011 “Pure Michigan Facebook.” Facebook. <http://www.facebook.com/PureMichigan.org> (accessed July 30, 2011).

Radigan, Jennifer

- 2011 Interview by author. Phone interview. July 19, 2011.
- 2011 "Recession Forces States to Rethink Tourism Funding." Business Report, June 28, 2011. <http://www.businessreport.com/news/2011/jun/28/recession-forces-states-rethink-gnit1/> (accessed July 30, 2011).

Rector, Christine

- 2011 Interview by author. Phone interview. July 26, 2011.
- 2011 "Roaming Through Michigan." Youtube. <http://www.youtube.com/watch?v=QMR7veI78f8> (accessed July 30, 2011).
- 1917 Scarborough's Official Tour Book: Indiana, Ohio, Michigan, Illinois and Wisconsin Trunk Lines. Indianapolis: Scarborough Motor Guide Company.

Schmidt, Bob and Ginger

- 1998 Great Lakes Circle Tour: Reviving History Along Lake Michigan's Circle Tour Route. Amherst, WI: Amherst Press.

Stampfler, Dianna

- 2010 "West Michigan Pike Dedication April 30 in New Buffalo." Promote Michigan blog, April 16, 2010. <http://promotemichigannews.blogspot.com/2010/04/west-michigan-pike-dedication-ceremony.html> (accessed June 25, 2011).
- 2011 "Survey: Tourist, travelers spent more than \$17 billion in Michigan." Michigan Radio. <http://www.michiganradio.org/post/survey-tourists-travelers-spent-more-17-billion-mi> (accessed July 30, 2011).

Upper Peninsula Development Bureau

- 1946 The Lure Book of Michigan's Upper Peninsula 1946. Marquette, MI: UP Development Bureau.

US Department of the Interior, National Park Service (NPS)

- 1959 "Remaining Opportunities in Michigan." Great Lakes Shoreline Recreation Area Survey. National Park Service. 1959. http://www.nps.gov/history/history/online_books/rec_area_survey/great-lakes/mi.htm. (accessed July 30, 2011).
- 2011 "Visit Alpena County." Visit Alpena County. <http://www.visitalpena-county.com/html/attractions.html> (accessed June 25, 2011).
- 2011 "Visit Presque Isle County." Visit Presque Isle County. <http://www.visitpresqueislecounty.com/html/attractions.html> (accessed June 25, 2011).
- 2011 "West Michigan Pike." Michigan Beachtowns. http://www.beachtowns.org/west_michigan_pike.cfm (accessed June 25, 2011).

West Michigan Pike Association

- 1915 West Michigan Pike: Northern Link of the Dixie Highway. West Michigan Pike Association.

West Michigan Tourist Association

- 2011 "The Official Lake Michigan Circle Tour." West Michigan Tourist Association. <http://www.wmta.org/the-official-lake-michigan-circle-tour-11/> (accessed June 25, 2011).

Western Upper Peninsula Planning and Development Region

- 2002 Keweenaw County: 'Blueprint for Tomorrow' Land Use Plan. Western Upper Peninsula Planning and Development Region, December 2

APPENDIX A: U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, *MANAGEMENT POLICIES 2006*

1.3 CRITERIA FOR INCLUSION

Congress declared in the National Park System General Authorities Act of 1970 that areas comprising the national park system are cumulative expressions of a single national heritage. Potential additions to the national park system should therefore contribute in their own special way to a system that fully represents the broad spectrum of natural and cultural resources that characterize our nation. The National Park Service is responsible for conducting professional studies of potential additions to the national park system when specifically authorized by an act of Congress, and for making recommendations to the Secretary of the Interior, the President, and Congress. Several laws outline criteria for units of the national park system and for additions to the National Wild and Scenic Rivers System and the National Trails System.

To receive a favorable recommendation from the Service, a proposed addition to the national park system must (1) possess nationally significant natural or cultural resources, (2) be a suitable addition to the system, (3) be a feasible addition to the system, and (4) require direct NPS management instead of protection by other public agencies or the private sector. These criteria are designed to ensure that the national park system includes only the most outstanding examples of the nation's natural and cultural resources. These criteria also recognize that there are other management alternatives for preserving the nation's outstanding resources.

1.3.1 National Significance

NPS professionals, in consultation with subject-matter experts, scholars, and scientists, will determine whether a resource is nationally significant. An area will be considered nationally significant if it meets all of the following criteria:

It is an outstanding example of a particular type of resource.

- It possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation's heritage.
- It offers superlative opportunities for public enjoyment or for scientific study.
- It retains a high degree of integrity as a true, accurate, and relatively unspoiled example of a resource.

National significance for cultural resources will be evaluated by applying the National Historic Landmarks criteria contained in 36 CFR Part 65 (*Code of Federal Regulations*).

1.3.2 Suitability

An area is considered suitable for addition to the national park system if it represents a natural or cultural resource type that is not already adequately represented in the national park system, or is not comparably represented and protected for public enjoyment by other federal agencies; tribal, state, or local governments; or the private sector.

Adequacy of representation is determined on a case-by-case basis by comparing the potential addition to other comparably managed areas representing the same resource type, while considering differences or similarities in the character, quality, quantity, or combination of resource values. The comparative analysis also addresses rarity of the resources, interpretive and educational potential, and similar resources already protected in the national park system or in other public or private ownership. The comparison results in a determination of whether the proposed new area would expand, enhance, or duplicate resource protection or visitor use opportunities found in other comparably managed areas.

1.3.3 Feasibility

To be feasible as a new unit of the national park system, an area must be (1) of sufficient size and appropriate configuration to ensure sustainable resource protection and visitor enjoyment (taking into account current and potential impacts from sources beyond proposed park boundaries), and (2) capable of efficient administration by the Service at a reasonable cost.

In evaluating feasibility, the Service considers a variety of factors for a study area, such as the following:

- size
- boundary configurations
- current and potential uses of the study area and surrounding lands
- landownership patterns
- public enjoyment potential
- costs associated with acquisition, development, restoration, and operation
- access
- current and potential threats to the resources
- existing degradation of resources
- staffing requirements
- local planning and zoning
- the level of local and general public support (including landowners)
- the economic/socioeconomic impacts of designation as a unit of the national park system

The feasibility evaluation also considers the ability of the National Park Service to undertake new management responsibilities in light of current and projected availability of funding and personnel.

An overall evaluation of feasibility will be made after taking into account all of the above factors. However, evaluations may sometimes identify concerns or conditions, rather than simply reach

a yes or no conclusion. For example, some new areas may be feasible additions to the national park system only if landowners are willing to sell, or the boundary encompasses specific areas necessary for visitor access, or state or local governments will provide appropriate assurances that adjacent land uses will remain compatible with the study area's resources and values.

1.3.4 Direct NPS Management

There are many excellent examples of the successful management of important natural and cultural resources by other public agencies, private conservation organizations, and individuals. The National Park Service applauds these accomplishments and actively encourages the expansion of conservation activities by state, local, and private entities and by other federal agencies. Unless direct NPS management of a studied area is identified as the clearly superior alternative, the Service will recommend that one or more of these other entities assume a lead management role, and that the area not receive national park system status.

Studies will evaluate an appropriate range of management alternatives and will identify which alternative or combination of alternatives would, in the professional judgment of the Director, be most effective and efficient in protecting significant resources and providing opportunities for appropriate public enjoyment. Alternatives for NPS management will not be developed for study areas that fail to meet any one of the four criteria for inclusion listed in section 1.3.

In cases where a study area's resources meet criteria for national significance but do not meet other criteria for inclusion in the national park system, the Service may instead recommend an alternative status, such as "affiliated area." To be eligible for affiliated area status, the area's resources must (1) meet the same standards for significance and suitability that apply to units of the national park system; (2) require some special recognition or technical assistance beyond what is available through existing NPS programs; (3) be managed in accordance with the policies and standards that apply to units of the national park system; and (4) be assured of sustained resource protection, as documented in a formal agreement between the Service and

the nonfederal management entity. Designation as a “heritage area” is another option that may be recommended. Heritage areas have a nationally important, distinctive assemblage of resources that is best managed for conservation, recreation, education, and continued use through partnerships among public and private entities at the local or regional level. Either of these two alternatives (and others as well) would recognize an area’s importance to the nation without requiring or implying management by the National Park Service.

APPENDIX B: NATIONAL HISTORIC LANDMARK CRITERIA

36 CFR § 65.4 NATIONAL HISTORIC LANDMARK CRITERIA.

The criteria applied to evaluate properties for possible designation as National Historic Landmarks or possible determination of eligibility for National Historic Landmark designation are listed below. These criteria shall be used by NPS in the preparation, review and evaluation of National Historic Landmark studies. They shall be used by the Advisory Board in reviewing National Historic Landmark studies and preparing recommendations to the Secretary. Properties shall be designated National Historic Landmarks only if they are nationally significant. Although assessments of national significance should reflect both public perceptions and professional judgments, the evaluations of properties being considered for landmark designation are undertaken by professionals, including historians, architectural historians, archeologists and anthropologists familiar with the broad range of the nation's resources and historical themes. The criteria applied by these specialists to potential landmarks do not define significance nor set a rigid standard for quality. Rather, the criteria establish the qualitative framework in which a comparative professional analysis of national significance can occur. The final decision on whether a property possesses national significance is made by the Secretary on the basis of documentation including the comments and recommendations of the public who participate in the designation process.

(a) Specific Criteria of National Significance: The quality of national significance is ascribed to districts, sites, buildings, structures and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling and association, and:

- (1) That are associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained; or
- (2) That are associated importantly with the lives of persons nationally significant in the history of the United States; or
- (3) That represent some great idea or ideal of the American people; or
- (4) That embody the distinguishing characteristics of an architectural type specimen exceptionally valuable for a study of a period, style or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction; or
- (5) That are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or
- (6) That have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts and ideas to a major degree.

(b) Ordinarily, cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings and properties that have achieved significance within the past 50 years are not eligible for designation. Such properties, however, will qualify if they fall within the following categories:

(1) A religious property deriving its primary national significance from architectural or artistic distinction or historical importance; or

(2) A building or structure removed from its original location but which is nationally significant primarily for its architectural merit, or for association with persons or events of transcendent importance in the nation's history and the association consequential; or

(3) A site of a building or structure no longer standing but the person or event associated with it is of transcendent importance in the nation's history and the association consequential; or

(4) A birthplace, grave or burial if it is of a historical figure of transcendent national significance and no other appropriate site, building or structure directly associated with the productive life of that person exists; or

(5) A cemetery that derives its primary national significance from graves of persons of transcendent importance, or from an exceptionally distinctive design or from an exceptionally significant event; or

(6) A reconstructed building or ensemble of buildings of extraordinary national significance when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other buildings or structures with the same association have survived; or

(7) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own national historical significance; or

(8) A property achieving national significance within the past 50 years if it is of extraordinary national importance.

APPENDIX C: CONSIDERATION OF MICHIGAN MARITIME HERITAGE RESOURCES AS A UNIT OF THE NATIONAL PARK SERVICE SYSTEM (SPECIAL RESOURCE STUDY CRITERIA)

After the NPS internal team identified and gathered information on Michigan maritime heritage resources in the 2010 survey, the team conducted a preliminary analysis to see if those resources would meet criteria for inclusion in the national park system. The study legislation asks that the study identify management opportunities for “long-term resource protection and public enjoyment,” which could include a National Park Service designation. The preliminary analysis is described in this appendix.

The National Park Service receives many requests to evaluate properties for inclusion in the national park system. The process the National Park Service uses for these evaluations is called the Special Resource Study or SRS process, which requires four findings.

To receive a favorable recommendation from the National Park Service, a proposed addition to the national park system must:

1. Possess nationally significant natural or cultural resources. For cultural resources, this is determined using the national historic landmark criteria. For this study, properties must be related to maritime heritage in Michigan (see reference to enabling legislation and definition in chapter one) and be either (a) existing national historic landmarks, or (b) resources that have potential to qualify as national historic landmarks because they are either already listed at a national level of significance in the National Register of Historic Places or determined by the State Historic Preservation Office to be eligible for listing in the national register at a national level of significance. Some resources that meet this criterion, such as the North Manitou Lifesaving Station in Sleeping Bear Dunes National Lakeshore, are already protected within units of the national park system. While these resources meet this criterion, they are not listed here because they do not need to be considered for new addition to the system.
2. Be a suitable addition to the system. A property is considered suitable if it represents a resource type that is not currently represented in the national park system or is not comparably represented and protected for public enjoyment by another agency or entity. Adequacy of representation is determined on a case-by-case basis by comparing the type, quality, quantity, combination of resources present, and opportunities for public enjoyment.
3. Be a feasible addition to the system. To be considered feasible, an area must be of sufficient size and appropriate configuration to ensure long-term protection of the resources and to accommodate public use. The area must have potential for efficient administration at a reasonable cost. Other important feasibility factors include landownership, acquisition costs, current and potential use, access, level of local and general public support, and staff or development requirements.
4. Require direct NPS management instead of protection by other public agencies or the private sector. Even if a resource meets the criteria of significance, suitability, and feasibility, it will not always be recommended that a resource be added to the national park system. There are many excellent examples of important natural and cultural resources managed by other federal agencies, other levels of government, and private entities. Evaluation of management options must show that direct NPS management is clearly the superior alternative.

These criteria are designed to ensure that the national park system includes only the most outstanding examples of the nation’s natural and cultural resources. These criteria also recognize that there are other management options for preserving the nation’s outstanding resources (*NPS Management Policies 2006*, see appendix B).

CRITERION 1: SIGNIFICANCE ASSESSMENT

The Michigan Maritime Heritage Special Resource Study is unusual among studies of its kind in that it does not seek to examine any one resource, but rather an entire genre of resources across a very large geographic area. Chapter 2 of this study described how the study team inventoried and identified maritime heritage and support resources across Michigan. Of the resources identified, at most a small fraction—13 out of 270—would be likely to meet the criteria for national significance in a typical special resource study. These 13 resources are either designated as national historic landmarks or have the potential to qualify as national historic landmarks. Resources were determined to have the potential for NHL status because they are either already listed at a national level of significance in the National Register of Historic Places or were determined by the SHPO to be eligible for listing at a national level of significance. These 13 resources are listed below. Unless otherwise noted, the sources for resource descriptions were the Michigan SHPO website and the NPS NHL website.

Existing National Historic Landmarks

Huron Lightship No. 103. A lightship designed and built for Great Lakes Service in 1920. Lightship No. 103, also known by the last official designation of Huron, is one of a small number of preserved historic American lightships. Essential partners with lighthouses as aids to navigation along the coast of the United States, lightships date to 1820 when the first vessel to serve as an aid to navigation was commissioned. No. 103 was designed and built in 1920 specifically for Great Lakes service, originally as “Relief” for Lake Michigan stations, also served stations on Lake Superior and Lake Huron before retirement, and was the last lightship on the Great Lakes, and only surviving lightship of its type.

SS City of Milwaukee. The sole surviving example of a pre-1940 “classic” period car ferry. On November 24, 1892, a bold experiment began at South Frankfort, Michigan, to transport loaded freight cars across the open water of these Great Lakes. The effort required a specialized craft, able to load 24 train cars and to service on the often stormy and ice-packed lakes.

The experiment, a success, began a unique American maritime enterprise: the Great Lakes (Train) Car Ferry fleet. *City of Milwaukee* is the sole surviving example of a pre-1940 classic period Great Lakes car ferry. *City of Milwaukee* is in excellent and nearly original condition with only minor changes.

Fort Michilimackinac. A significant archeological site and reconstructed fort. Fort Michilimackinac was a strategically located fortified trading post. The fort was built as a link in the French trade system, which extended from Montreal through the Great Lakes region and northwest to Lake Winnipeg and beyond. Overlooking the Straits of Mackinac connecting Lake Huron and Lake Michigan, the fort served as a supply post for French traders. In 1959, the Mackinac Island State Park Commission began archeological excavations at the site of Fort Michilimackinac. Archaeological data, in combination with documentary data, were used to begin reconstruction of the fort on its original site. Today, 13 of the 19 interior buildings have been reconstructed, as well as the perimeter stockade wall. Archeological investigation of the remaining structures continues on an annual basis. The fur trade system relied greatly on travel over the Great Lakes, as well as over land and through rivers.

Grand Hotel. A late 19th-century hotel on Mackinac Island. In 1882, US Senator Francis B. Stockbridge of Michigan purchased the site of the hotel and formulated a scheme to finance its construction. He created interest in the building and the oversight of the operation of the hotel among the three major transportation companies that served the island and that wanted to promote the use of their transportation systems. Thus, the Detroit and Cleveland Navigation Company, the Michigan Central Railroad, and the Grand Rapids and Indiana Railroad formed the Mackinac Island Hotel Company, which, in turn, built the hotel in 1887. The Grand Hotel remains one of Michigan’s most popular architectural attractions. One of the last remaining large wood frame hotels of the late-19th century, the Grand Hotel is the American dream of “a summer place.” A huge structure on a bluff overlooking the water, the white clapboard hotel is graced by a great veranda.

Mackinac Island. Significant for its cultural values and one of the country's premier tourist destinations since the mid-19th century. Mackinac Island's strategic location in the center of the Great Lakes and its striking natural beauty have combined to give it a role of outstanding importance in the development of the American economy and cultural values. Mackinac Island was designated a national historic landmark district in 1960, and the nomination was updated in 2000. At the time of the update, the NHL district had 445 contributing resources. The NHL district's areas of significance are Architecture, Commerce, Conservation, Entertainment / Recreation, Exploration / Settlement, Health/Medicine, and Military, and express at least part of all eight themes in the NPS thematic framework. Mackinac Island had a history as a national park before there was a National Park Service. The federal government created the Mackinac National Park in 1875, and in 1895 turned the national park over to the State of Michigan. Mackinac Island State Park covers roughly 80% of the island. The park is governed by the Michigan Department of Natural Resources and the Mackinac Island State Park Commission.

St. Mary's Falls Ship Canal (Soo Locks Historic District, Soo Canals). Important for their contribution to industry and commerce and a feat of engineering. The Soo Locks Historic District is historically significant for many reasons. The property is important for its contribution to the industry and commerce of the United States by providing an inexpensive and convenient transportation route to and from the upper Great Lakes. The locks are also significant engineering feats, having required much time, organization, and capital investment to design and operate them. Several buildings on the locks property possess architectural significance for their continuity and elegance in design, as well as being the work of master architects. The history of hydroelectric power in the Soo Locks Historic District is also significant because it is the site of an early hydroelectric plant. Construction of the canal in 1855 allowed exploitation of the resources of the Lake Superior area. It permits passage between Lake Superior and Lake Huron and ranks with the Erie and the Illinois and Michigan Canals as the most successful waterways constructed during the antebellum era.

SS Milwaukee Clipper. The oldest passenger steamship on the Great Lakes. Built in 1904–1905, and substantially rebuilt in 1940, the steamship *SS Milwaukee Clipper* is the oldest US passenger steamship on the Great Lakes. Many of the design elements introduced in the 1940 rebuild are still being included in modern ocean-going passenger ships. The quadruple-expansion steam engines installed in 1905 are the only known surviving examples of this important engine type.

Potential National Historic Landmarks

These resources have the potential to qualify as national historic landmarks because they are either already listed at a national level of significance on the National Register of Historic Places (first four resources on this list) or have been determined by the SHPO to be eligible for listing in the national register at a national level of significance (last two resources on this list).

Fayette Historic Townsite. This townsite is the most intact post-Civil War-era charcoal iron-smelting company town in the United States. The site, established by the Jackson Iron Company in 1867 in response to the demand for iron after the war and in operation until 1890, has remained largely undisturbed over the past century. The town's location on Snail Shell Harbor in the Garden Peninsula provided deep water close to shore for transport of the product by ship.

The likelihood that this would be found to be a property of national significance by national historic landmark standards is unclear. Comparative study would be required to see how Fayette is similar to or different from the many other extant iron producing communities. The most distinguishing characteristic seems to be that iron and other supplies were shipped by water, but it is unclear if that is unique or differentiates Fayette from similar sites to any appreciable degree. There are several industrial towns listed as national historic landmarks and a few blast furnaces. Fayette is notable in that the site makes visible the means of production and of transportation, as well as the lives of workers.

Leland Historic District (Fishtown). Leland Historic District is one of Michigan's most scenic villages and has much historic integrity.



Resources along the coastline of Michigan Great Lakes that, while significant in their own right, are insufficiently related to maritime heritage in Michigan to be included in this study

The first four resources described below are national historic landmarks. The last three may have potential to become national historic landmarks. While these are significant resources, most are only tangentially related to maritime history and are not evaluated further in this study.

- St. Clair River Tunnel (St. Clair Railroad Tunnel, Grand Trunk Tunnel), nationally significant as the first full-size subaqueous tunnel built in North America. While the tunnel would not have been needed were it not for an extremely active shipping lane (the St. Clair River) this resource is tangentially related to maritime history.
- USS *Silversides* (SS-236), a submarine launched at Mare Island Naval Yard, California, on August 26, 1941. The *Silversides* is a fleet-type submarine (built to maintain fleet speeds averaging 17 knots) of the Gato (Drum) class. By 1945, this submarine made it impossible for any Japanese ship to sail the ocean. Without this commerce and the raw materials it supplied to the war effort, Japan found it impossible to continue the war outside of homeland. No other World War II submarine exists that sank more ships than the USS *Silversides*. Though a maritime resource, the submarine has no connection to Michigan's maritime history.
- Bay View, one of the finest remaining examples of two uniquely American community forms, the Methodist Camp Meeting and the independent Chautauqua. Designed for the first purpose in 1876 as the country's only scenically planned campground, and adapted for the second from 1885 to 1915, Bay View is a major monument of American religious, cultural, social, and educational ideals embodied in an artistically shaped community plan with 437 contributing buildings. Although the siting and success of Bay View can be attributed in part to its location on the lake, the community forms for which Bay View is significant are not exclusive to a situation near the water.
- Redridge Steel and Log Dams, a set of two historic dams. The steel dam was constructed between 1900 and 1901 downstream of a second structure—a stone-filled, log crib dam built in 1894 that continues to impound a reservoir. The Redridge steel dam is one of three fixed steel dams constructed in the United States between 1895 and 1910. It is the larger of only two surviving examples of its type. The nearby log crib dam is an extremely rare survivor of many such structures built in Michigan in the 19th century. It was constructed by the Atlantic Mining Company to provide water for its stamp mill. These dams are more associated with the production at the stamp mills in the area than with the maritime aspects of their production (e.g., shipping or raw or finished materials). It would seem that the dams have a tangential connection with maritime heritage.
- Mackinac Bridge, a bridge to connect the Upper and Lower Peninsulas. This bridge was first envisioned in the 1880s, but did not become a reality until 1957. Designed by engineer David B. Steinman, the bridge is the "world's longest suspension bridge between anchorages," a way of measuring suspension bridges that made Mackinac superlative. The connection between the Upper and Lower Peninsulas had profound effects, including the closure of ferry services. The significance of the bridge to maritime resources in the immediate area is that it led to their decline. Where formerly ferries had transported people and goods between the Upper and Lower Peninsulas, much of that need was eliminated with the construction of the "Mighty Mac." The bridge has limited ability to communicate aspects of maritime heritage.
- Blue Water Bridge, a bridge spanning the St. Clair River between Port Huron, Michigan, and Sarnia, Ontario. It is an "arch cantilever" type bridge—the largest and most complex form of truss bridge and is an extremely rare design. The Blue Water Bridge is among the oldest surviving examples, completed in 1938. This bridge was needed to connect the United States and Canada across an extremely active shipping lane (the St. Clair River). However, as discussed above for the St. Clair River Tunnel and Mackinac Bridge, this resource would have limited ability to communicate aspects of maritime heritage.

The growth of Leland's commercial industries started in 1853 and continued through the first three decades of the 20th century. The utilitarian designs of commercial and residential structures in the district remind visitors of a previous way of life for those in the fishing industry. Now gray and weather-beaten, some of the remaining structures still serve their original purpose.

The likelihood that this would be found to be a property of national significance by national historic landmark standards is unclear. Among national historic landmarks, the most similar properties are the Nantucket Historic District, which encompasses an entire island that was a premier 18th- and 19th-century whaling port, and the Kake Cannery, which demonstrates trends and technology in the Pacific salmon canning industry. It would appear that fishing communities are not well represented by existing national historic landmarks, though more intensive study would be needed to determine if Fishtown would be an appropriate national historic landmark. Study would involve addressing the theme of commerce and maritime history on the Great Lakes, not just in Michigan, and the relation of the Great Lakes fishing economy to economic development of the United States. There would also have to be a search of comparable properties around the Great Lakes.

SS Badger. This Lake Michigan car ferry was part of the expansion program of the Chesapeake & Ohio Railroad, which began in 1951 for ferry service. One ferry of this expansion period was christened “*Badger*” after the teams of the University of Wisconsin. Much was made of the statement that the *Badger* and sister ship, *Spartan* (named after the teams of Michigan State University), were the largest and best-equipped car ferries in the world, but not the least of the ships’ distinctions was likely being the last large coal-burning, passenger-carrying steamers ever to be built in America.

The likelihood that this would be found to be a property of national significance by national historic landmark standards is unclear. The *SS City of Milwaukee* National Historic Landmark (see above) represents the same themes as the *SS Badger*, and maintains a high degree of integrity. However, it seems the NHL significance text for

the *City of Milwaukee* does not address the end of the car ferry era (after about 1940), omitting whether or not development of car ferries in the 1950s was significant regarding design, use, etc. Additionally, since the *Badger* is in continued use, integrity may also be an issue.

Belle Isle Park. This is a unique urban park and the largest midwestern example of the work of landscape architect Frederick Law Olmstead, famous for his design of New York City’s Central Park. Belle Isle is the repository of many of Detroit’s historically significant turn-of-the-century buildings—most constructed between 1890 and 1915. The park features a system of canals designed for canoeing and several scenic inland lakes. Buildings and sculptures dot the island, ranging from the massive glass-domed horticultural conservatory to simple, open frame shelters. The Dossin Great Lakes Museum and Livingston Memorial Lighthouse are included in the national register nomination for Belle Isle Park. Additionally, the Michigan State Historic Preservation Office believes that, because the Livingston Memorial Lighthouse is unique, it may possess a national level of significance in its own right, likely for its design characteristics.

Regarding the potential significance of the park as an outstanding example of F. L. Olmstead’s work, evaluation would have to place the park’s 1881–1884 design within the milieu of Olmstead’s design, how it evolved, what designs were most influential on the development of landscape architecture design, and if the characteristics of this park design best reflect Olmstead’s design ethic. Belle Isle represents recreational history and a designed landscape, among other themes. The likelihood that this would be found to be a property of national significance by NHL standards is unknown because there is a combination of resources present that is difficult to compare without deeper study. Evaluating the Livingston Memorial Lighthouse as an individual national historic landmark would require comparative study.

In addition to Belle Isle itself, there are at least two properties on the island that may be national register-eligible in their own right: The Detroit Boat Club, constructed in 1902, was home to the Detroit Boat Club until 1996.

After losing their two prior clubhouses on that site to fire, the current boathouse was constructed of concrete, reportedly the first concrete building in the nation (*Detroit News*). While the building appears to maintain good integrity, it is in poor condition. Also, the separate Detroit Yacht Club is an active and privately owned yacht club with a clubhouse built in 1923 and designed by architect George Mason. Context would be necessary to evaluate either the claim that the Detroit Boat Club's concrete clubhouse building was the first constructed in the country or if "boat clubs" as a building type are nationally significant, and if so, if either the Detroit Boat Club or Detroit Yacht Club constitute nationally significant examples.

Edison Sault Power Plant. This massive horizontal hydroelectric plant, completed in 1902, was pulled together by the visionary entrepreneur Francis Clergue, who hoped to use the power generated by the 21-foot drop between Lake Superior and the lower portion of the St. Mary's River to spawn new industries and transform Sault Ste. Marie, Michigan, into an industrial powerhouse. While the vision of an industrial powerhouse did not materialize, the plant still operates today, helping to serve the electric power needs of Michiganders as far away as Mackinac Island. The plant was constructed of sandstone excavated during the digging of the power canal (Hunt's Guide). The powerhouse is 1,340 feet long (0.25 mile) and 80 feet wide. It is one of the oldest continually-operating power plants in North America (*Power Magazine*). More research is necessary to analyze the national scope of influence to determine if this resource would merit NHL designation. The integrity of the plant would have to be assessed because the plant underwent a modernization campaign in 1987. It is unknown if there are any influential technological advances associated with the Edison Sault Plant or if its design is particularly exemplary, although it is worth noting that the exterior retains excellent integrity.

Detroit Lighthouse Depot. This lighthouse depot was completed in 1874 and served as a distribution point for supplies for lighthouses and their keepers. Supplies, such as wicks, oil, tools, and other necessities for keeping lighthouses in good working order, were stored and distributed from depots.

The General Depot on Staten Island shipped supplies to depots like Detroit, which would arrive at the depot by rail for distribution by ship. At the time, the US Lighthouse Service was subsumed by the US Coast Guard in 1939—there were 30 lighthouse depots (NRHP multiple property nomination "Light Stations in the United States"; lighthousedepot.com). The likelihood that this would be found to be a property of national significance by NHL standards is unknown. Research and comparative analysis would be necessary. There are no lighthouse depots listed as individual national historic landmarks; whether one is listed as part of a district is unknown. The Ninth District Lighthouse Depot in St. Joseph, Michigan, is the only depot listed individually on the National Register of Historic Places. The General Depot on Staten Island still stands, but remains unprotected and vacant (lighthousedepot.com).

SIGNIFICANCE CONCLUSION

As mentioned previously, these nationally significant and potentially nationally significant resources comprise a small fraction (13 out of 270) of the resources that the study team identified as contributing to Michigan's maritime heritage. The unusual challenge with this special resource study is determining whether or not, taken together, these 13 resources could be said to represent Michigan maritime heritage comprehensively enough to convey its overall national significance. Given the broad nature of Michigan maritime heritage resources overall, it does not seem that the 13 resources on this list—the *highest* number that might meet NPS significance criteria for inclusion in the system—would be sufficient to represent the much larger collection of Michigan maritime resources, comprising at least 270. This means that the Michigan maritime resources, as a collection, do not meet the national significance criteria necessary to warrant a recommendation for inclusion in the national park system.

As the finding on the first criterion for potential designation as a unit of the national park system is negative, the study will not fully assess Michigan maritime resources against the other criteria—suitability, feasibility, and need for direct management. Those criteria are summarized briefly below.

Suitability. Many Michigan maritime heritage resources are already protected within NPS units. Other NPS units outside the state feature elements of maritime heritage such as lighthouses, ships, and maritime culture. Further, other entities beyond the National Park Service actively maintain maritime heritage resources throughout the country. Because this genre is well represented, it is unlikely that a full analysis of this criterion would result in a positive finding for the suitability of adding Michigan maritime heritage resources to the national park system.

Feasibility. One factor in determining the feasibility of adding resources to the national park system is the projected expense of management. The resources identified in the survey cover a broad expanse of geography and of resource types. These resources, taken as a whole, would be extremely expensive to manage to NPS standards. Landowner interest is another factor in determining feasibility. The interest of the resource owners and managers in ceding their responsibilities to the National Park Service was not expressly investigated but likely varies from very positive interest to very negative. It is unlikely that Michigan maritime resources as a whole would be feasible to manage as a unit of the national park system. Assisting these resources through existing NPS programs would be much more feasible.

Need for NPS Management. NPS policies acknowledge that many times resources are more appropriately managed by other entities and organizations. As the case studies have shown, Michigan maritime resources are in varied states of preservation and success. Many coalitions are working to promote and protect these resources. The ways in which the National Park Service programs could play a role in these efforts is examined in the study. Ultimately, it is not clear that the National Park Service should have an ownership or management role for the maritime heritage resources given other options that exist.

OVERALL CONCLUSION FOR SPECIAL RESOURCE STUDY CRITERIA

Michigan has a great wealth of maritime heritage resources. Many are currently managed for preservation and public interpretation by capable entities. Collectively these resources do not lend themselves to management as a unit of the national park system and do not meet the criteria to be designated as such. Chapter 3 and chapter 4 of the study describe opportunities currently or potentially available through the National Park Service and other entities that may be more appropriate for the resources in the study area.

APPENDIX D: POTENTIAL NATIONAL HISTORIC TRAILS HISTORIC CONTEXT AND SIGNIFICANCE STATEMENTS

1. Overview
2. Historic Context: The Maritime History of Michigan
3. Tribal Context: Gitchi-Gumee Anishnaabek: The First People of the Great Water
4. Trail Histories: Jiimaan to Mi-shi-ne-macki-nong: Odawa Trade Routes
5. Lake Huron Beacon of Hope Trail: Michigan's Lighthouses, Life Savers & Shipwrecks

OVERVIEW

National historic trails (NHT) have as their purpose the identification and protection of historic routes, associated historic remnants, and artifacts for public use and enjoyment. The criteria for national historic trails are presented in the National Trails System Act. National historic trails must be both nationally and historically significant, and they must offer interpretive or recreational opportunities to the public. National historic trails generally consist of remnant sites and trail segments and are not necessarily continuous but connect segments and sites along the trail with a shared history.

While no single historically-traveled route could connect the many and disparate resources in Michigan, the NHT model seemed like a fit for the goals of the legislation if historically significant routes could be identified. The study team explored the first criterion for a national scenic trail, national significance, with the help of historians.

Two potential trails were identified: Jiimaan to Mi-shi-ne-macki-nong: Odawa Trade Routes and Lake Huron Beacon of Hope Trail: Michigan's Lighthouses, Life Savers & Shipwrecks.

Jiimaan to Mi-shi-ne-macki-nong: Odawa Trade Routes — This route follows as closely as possible the original routes of travel used by Anishnaabek mariners, and later, European American explorers. The trail follows established maritime trade routes that extended far beyond the confines of what is today the state of Michigan. The period of importance of these trails in the course of national events dates from the Middle Woodland Period to end of the French occupation of Michigan in 1761, though they are important to indigenous communities to this day. The components of the maritime heritage trail are the routes themselves, along with primary Anishnaabek trading centers along Michigan's coastlines. The historical and cultural relevance these trails have had for the Odawas span centuries and influenced wars, alliances, marriages, treaties, and tribal locations. The Odawas remain a part of Michigan and reside in their present location because of their role as traders before and during the historic period. Please see the essay below for an in-depth history and description of these trails.

This proposal was not fully explored in the study because of the size and complexity of considering this trail to its logical extent: the actual trail system is much bigger than just Michigan waters and stretched into several states and Canada, beyond the scope of this study. Additionally, national historic trails need partner organizations to function well, and the study team did not identify any organizations that could fulfill such a role. There is the potential for such a trail to be feasible if a cooperating entity is formed or identified. An international historic trail connecting Canadian First Nations, the United States, and the American Indian Great Lakes Heritage would require deep involvement of potential partners to be viable.

Lake Huron Beacon of Hope Trail: Michigan's Lighthouses, Life Savers & Shipwrecks — This route follows the Michigan coast of Lake Huron from the southernmost point to the Straits of Mackinac. Unlike the relatively straight shorelines of Lake Ontario, Lake Erie, and Lake Michigan, the numerous bays, barrier shoals, and islands of Lake Huron presented both physical hazards and navigational challenges. There are two periods of significance for the proposed Lake Huron Beacon of Hope Trail: from the middle of the 1820s to just before the start of the American Civil War and the decade beginning in 1871. Lighthouses, lifesaving stations, and nearby shipwrecks present unique opportunities for the public to view three distinct, yet related, components of Michigan's maritime heritage. Nearly all of the sites selected for inclusion in this trail's proposal feature those three components and already provide interpretive and recreational opportunities to the public. Most of the sites have already been listed in the National Register of Historic Places and most are associated with preservation societies or stewardship groups interested in the site's continued preservation.

This proposal was not carried forward for further NHT analysis because the National Park Service felt that the Lake Huron routes were not well-documented enough at this time to establish a historical trail alignment. Additionally, national historic trails need partner organizations to function well, and the study team did not identify any organizations which could fulfil such a role.

More information about National Historic Trails can be found at www.nps.gov/nts

Opposite Page, Map 1: The lighthouses and life-saving stations of Michigan.



THE MARITIME HISTORY OF MICHIGAN

by Wayne Lusardi

People have wandered the shores and travelled the waters of the Great Lakes since the lakes were created by retreating glaciers some 10,000 years ago. The shorelines of North America's inland seas have been altered dramatically by changes in water levels over the millennia, and the Great Lakes have simultaneously provided a barrier and a natural corridor for the exploration, colonization, and development of both indigenous cultures and the United States and Canada. Connecting the Atlantic Ocean with the heartland of North America, the areas surrounding the Great Lakes were accessible by water long before a system of roadways and railroads was established. Abundant natural resources, inexpensive land, and a relatively peaceful international border following the War of 1812 encouraged westward expansion and the development of lakefront communities early in the 19th century. Michigan borders four of the five Great Lakes and has more freshwater coastline than any other state in the nation. Consequently, the maritime heritage of Michigan is rich in examples of prehistoric and historic trade routes, navigational infrastructure, shipwrecks and coastal landscapes.

Humans have occupied the shores of the Great Lakes since the last glacial retreat, continually moving northward as the environment became more hospitable (Shott and Wright 1999: 63). Native peoples hunted and camped along shorelines and river mouths to take advantage of the area's abundant natural resources (Pott 1999: 359-360). During the Lake Stanley phase of Lake Huron development (8,000-5,500 years ago), water levels were considerably lower than today and the lake consisted of two separate basins separated by a dry land corridor extending from what is now northeast Michigan southeasterly to Point Clark, Ontario. The ridge would have provided a natural corridor for the migration of caribou and consequently for Late Paleo-Indian and Early Archaic hunters seeking to exploit the herds. The entire landscape is now inundated, although recent acoustic and visual surveys by the University of Michigan have identified the possible remnants of caribou drive lanes, hunting

blinds, and habitation sites beneath the waters of Lake Huron (O'Shea and Meadows 2009: 10120).

Native Americans began inhabiting the areas surrounding the upper Great Lakes nearly 10,000 years ago, but it was not until the Late Archaic period (5,000-2,500 years ago) that more permanent settlements were established. Many of the artifacts from the period are related to fishing activities. Fishing equipment from upper Great Lakes archeological sites includes bone and copper fishhooks, gorges and spears, and notched pebble net sinkers (Cleland 1982). Extensive fishing and lake travel in Michigan began during the Woodland period (2,500-500 years ago) when indigenous peoples extended their use of the lakes for water transportation. Their boat building technologies and traditions often reflect this maritime connection.

Collectively referred to as Anishnaabek, the Odawa, Potawatomi, and Ojibway peoples originated in eastern North America and migrated to what is now Michigan during the Woodland Period more than 1,000 years ago. The three cultures spoke similar dialects of the Algonquian language and were organized socially and economically as the Three Fires Confederacy (Clifton et al. 1986: v). Odawa by definition means "to trade" and each family owned a section of trade route that was both a geographical path or waterway and a set of relationships with trading partners along the way (McClurken 1986: 11). So important were the trade routes that marriages were arranged to strengthen and safeguard their ownership. The Odawa supplied the Chippewa to the north with corn, tobacco, roots and herbs harvested by the Odawa and their southern Huron neighbors, and in return received skins and fur to be used locally or to be traded southward (Ellis 1974: 87 and McClurken 1986: 11). More than just a highway for material goods, the Anishnaabek routes facilitated cultural exchange throughout the Great Lakes region.

Michigan's first mariners navigated in small boats, typically dugout canoes on the inland waterways and bark canoes on the big lakes. Canoes facilitated trade, communication and social travel, and served as platforms for hunting, fishing, and gathering aquatic resources from the region's biologically rich shoreline wetlands (Pott 1999: 359).



Figure 1: Night fishing using Ojibway bark canoes (Royal Ontario Museum).



Figure 2: La Salle constructing the *Griffin* above Niagara Falls in 1679.

Ojibway bark canoes (Figure 1) were widely emulated because of their steadiness in rapids, shallow draft, and high cargo capacity (Ellis 1974: 87). Bark canoes, known in Algonquian as *wiigwaas jiimaan*, were extremely seaworthy and were often paddled by Anishnaabek across the open waters of the Great Lakes out of sight of land (McClurken 2009: 2). Because of their light weight, the canoes could also be carried long distances overland between waterways. The craft could be repaired easily without special tools, could be turned over to serve as a temporary shelter, and some canoes were large enough to carry five tons or more of cargo along with the crew (Adney and Chapelle 1983: 3).

Jean Nicolet, the first European to enter what is today Michigan, traveled by canoe through the Straits of Mackinac by way of the Ottawa and French Rivers in 1634. Nicolet and other early European explorers followed existing routes established by the Odawa and other indigenous traders. French Jesuits founded the Raymbault mission at Sault Ste. Marie in 1641, but relocated to St. Ignace 30 years later after realizing the strategic importance of the Straits (Heldman 1999: 294).

Adrien Joliet was one of the first Europeans to paddle along the eastern shore of Lake Huron in 1669 (Tongue 2004: 7). The French quickly adopted the Anishnaabek bark canoe to carry goods and people across the lakes. In August 1679, René-Robert Cavelier, Sieur de La Salle constructed the 45-ton barque *Griffin* in the Niagara River above the falls to explore and colonize the upper lakes (Figure 2). On his upward journey, La Salle experienced the wrath of the inland seas when, according to chronicler Father Louis Hennepin, a violent storm was encountered and all took to their knees in prayer, save the pilot, who instead “did nothing all that while but curse and swear against M. LaSalle, who as he said had brought him thither to make him perish in a nasty lake, and lose the glory he had acquired by his long and happy navigations on the ocean” (Hennepin 1903; Hemming 1992: 3; Quaife 1944: 30). A month later after dropping off LaSalle and an exploration party near Washington Island at the entrance to Green Bay, *Griffin* was lost in northern Lake Michigan, becoming the first of thousands of historic craft to go down in the upper Great Lakes (Catton 1976: 17; Thompson 2000: 15).

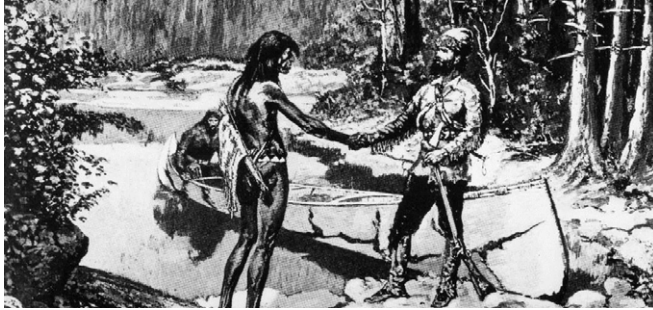


Figure 3: French traders using Anishnaabek bark canoes.



Figure 4: Net fishing from a Mackinaw boat with pond net stakes in the background (Thunder Bay Maritime Research Collection).

Traders, trappers, and missionaries followed in *Griffin's* wake, adopting or exchanging Native American technologies, often using Anishnaabek bark canoes (Figure 3) and dugouts (Feltner and Feltner 1991: 11; Halsey 1990: 13). When English explorers began entering French-claimed territories and tensions between the two nations heightened, both scrambled to construct fortifications and outposts at strategic locations throughout the Great Lakes. The Straits of Mackinac witnessed extensive colonial activity, and Fort de Buade was established at St. Ignace in the 1680s to discourage the incursions of English fur traders from the north. The French abandoned the outpost in 1705, but established Fort Michilimackinac on the southern shore of the Straits in 1715 (Heldman 1999: 294-295). The fort survived the French and Indian War (1754-1761), but it was ultimately surrendered to the British in September 1761 (Pilling and Anderson 1999: 312). The British remained at the Straits of Mackinac until the Jay Treaty went into effect in 1796 following the close of the American Revolution when all Northwest Territories west of Pennsylvania and north of the Ohio River were ceded to the newly established United States (Feltner and Feltner 1991: 18; Tongue 2004: 8).

Many of the earliest vessels lost in the Great Lakes were related to colonial-era naval and military activities.

The British sloop *Welcome* from Fort Mackinac was lost in the Straits in 1781 (Feltner and Feltner 1991: 48), and the warship *Hope* stranded on the south shore of Drummond Island in 1805 (Malcomson 2001: 53). The American warships *Hamilton* and *Scourge* foundered on Lake Ontario in August 1813 (Cain 1983). The *Nancy* was scuttled and burned near the mouth of the Nottawasaga River in Georgian Bay in August 1814 to prevent capture by Americans (Sabick 2004), and the *General Hunter* went ashore near Southampton, Ontario after the war in August 1816. Other colonial vessels and British and American warships were lost in Lake Ontario and Lake Erie. The first ship reported wrecked on Lake Superior occurred in 1816 when the schooner *Invincible* went ashore at Whitefish Point (Thompson 2000: 15).

Following the end of international hostilities many of the first Euro-American residents of the Great Lakes were seasonal fishermen who built their shanties on the shores and extracted their fill from the virtually untapped waters. The fishermen utilized a vessel peculiar to the Great Lakes known as the Mackinaw boat (Figure 4), a small one or two-mast sailing craft with retractable centerboard that could easily navigate shoals surrounding the approaches to small islands and shallow natural harbors, and could be beached practically anywhere along the shoreline.



Figure 5: A typical fish tug of the late 19th century (Thunder Bay Maritime Research Collection).

When the American Fur Company began to fish commercially on Lake Superior in 1834, larger schooners were built specifically to catch and haul fish (Labadie 1989: 5). By the 1860s fishing became the most important industry in Michigan outside of agriculture and lumbering and in many areas employed more Michiganders. Whitefish, lake trout, and perch constituted most of the catch (Dunbar and May 1988: 311). Eventually the small Mackinaw boats and schooners were replaced by steam tugs (Figure 5) that could extract immense quantities of fish from the lakes, primarily through gill netting. Net stakes were driven by the thousands into the lake bottom, so many that coast surveyors began plotting them on charts as hazards to navigation.

Michigan helped feed the nation. The fishing industry in the state developed early in the 19th century and with the advent of refrigeration, fishermen were able to ship lake trout and whitefish long distances across the country. By the 1940s, however, commercial fishing in Michigan had begun a rapid decline, in part due to overfishing but also a result of the introduction of exotic species (NOAA 1999: 133). A handful of fishing vessels were wrecked in the lakes but most of the small vernacular fishing craft met their demise as rotting hulks dragged ashore and stripped, or abandoned in out of the way places along the shorelines of the Great Lakes.



Figure 6: The modern fish tug Janice Sue docked at historic Fishtown (photo by W.R. Lusardi).

Today only a few resources associated with the once-thriving fishing industry remain in Michigan, including Fishtown on the Leelanau Peninsula (Figure 6), and similar villages at Isle Royale.

When the Erie Canal opened in 1825, it provided a direct link between the Atlantic Ocean and the Great Lakes. The canal fostered a population surge across the region and by the 1830s steamboat loads of immigrants were sailing westward across the inland seas (Andrist 1964: 77-78). The population of the upper Great Lakes quadrupled in the decade following the canal's opening (Labadie 1989: 22). Whether it was for fish or animal hides, lumber or grain, limestone, salt, taconite or coal, many of the small communities that border the Great Lakes were settled and developed where natural resources were abundant and commercial shipping facilitated their means of extraction and transportation. Michigan, in particular, provided all of these resource types and because of its direct access to four of the five Great Lakes, the state experienced more shoreline development than its neighbors.

Michigan's extensive maritime heritage developed around trade, communication, resource extraction and commercial shipping.



Figure 7: Driving logs to coastal communities for processing and transport throughout the Great Lakes.

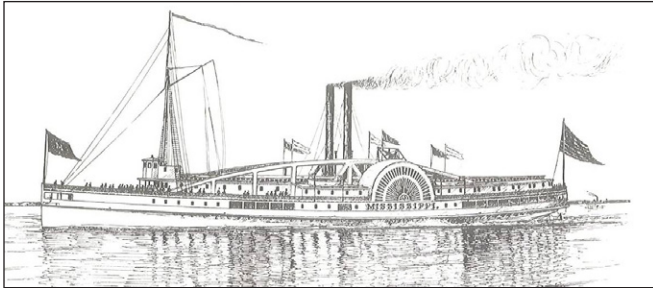


Figure 8: A typical mid-19th century paddle wheel steamboat on the Great Lakes (Thunder Bay Maritime Research Collection).

Thousands of schooners, steamers, and other ships would ultimately sail the Great Lakes carrying immigrants, coal, and finished goods westward, and returning to American industrial centers such as Detroit, Toledo, Cleveland, and Buffalo with raw materials, particularly forest products, iron and copper ore, grain and cement. By the 1850s businessmen from Detroit, Cleveland and the east coast had moved northward seeking to exploit the old growth white pine and hardwood forests of northern Michigan and the Upper Peninsula. The lumber industry boomed. The product was used primarily to construct cities and towns across the region. Dams were constructed initially to back up rivers thus allowing greater navigation, particularly for driving logs downstream to lakeshore sawmills (Figure 7). Dams also turned wheels in grist mills, and later produced hydroelectric power for larger communities. Individual sawmills could easily process more than 1 million board feet of logs a season, and this multiplied by the hundreds of sawmills in operation throughout Michigan by the mid-19th century accounted for the quick depletion of a once abundant natural resource.

Although the lumber industry provided Michigan with a new source of wealth, agriculture remained the backbone of the state's economy. By 1850 Michigan was producing 5,500,000

bushels of corn and only a slightly less amount of wheat. Oats, wool, potatoes, butter, cheese, and maple sugar likewise made their way from the farm to the smaller cities and towns that provided centers of trade and commerce between the state's interior and the lakes (Dunbar and May 1988: 309-310).

Lumber, of course, was not used solely to build cities, and nearly all of the vessels sailing the Great Lakes through the mid-19th century were constructed of white oak and similar hardwoods. Dozens of shipbuilding centers sprang up across Michigan from Manistee to Detroit, and shipyards such as James Davidson's in West Bay City built wooden ships in excess of 200 feet in length, a tradition that continued well beyond the advent of iron and steel hulled ships (Rodgers 2003: 7).

Ship types often developed on the Great Lakes in response to a particular type of trade. Early steamboats plied the lakes carrying package freight and passengers westward starting in 1818 with the *Walk-in-the-Water* (Barry 1973: 40-41). The lake steamboats featured two side paddlewheels (Figure 8) unlike their inland river counterparts propelled by a single stern paddlewheel. The shallow draft vessels could negotiate many of the shoals of the not yet developed harbors, could be fueled by



Figure 9: A variety of sailing and steam-powered craft preparing for the start of the shipping season. Most are canal schooners (Thunder Bay Maritime Research Collection).

cordwood obtained anywhere on the lakes, and were designed to carry large cargoes in their holds, while the upper works were elaborately decorated and furnished to accommodate cabin passengers (Barry 1973: 45). The steamboats were not without mishap and many wrecked in Michigan waters. In October 1836 the small paddlewheel steamer *Don Quixote* foundered on Lake Huron (Mansfield 1899: Chap. 35), though precisely where remains a mystery. The side-wheel steamer *New Orleans*, built in 1838 on the hull of the burned steamer *Vermillion*, ran aground west of Sugar Island in Thunder Bay in June 1849. Area fishermen rescued the passengers and crew, and most of the cargo and machinery was later recovered. The side-wheeler *Benjamin Franklin* hit the reef at Thunder Bay Island less than a year later in 1850 and the *Albany* met a similar fate at Presque Isle in 1853. Many side-wheelers that did not wreck were laid up or abandoned as a result of the financial panic of 1857 (Devendorf 1996: 7). Some side-wheelers like the *Detroit* (1859-1872) and the *Emerald* (1863-1909) experienced longer careers and were later rebuilt as steam barges before ultimately wrecking in the lakes.

The quintessential workhorse of the day, schooners sailed the lakes by the thousands in the late 19th century (Figure 9) and hundreds were lost in Michigan waters.

Schooners known as canallers were designed with dimensions specifically to allow passage through the Welland Canal that bypassed Niagara Falls and connected Lake Erie with Lake Ontario. The Welland first opened in 1829 but was rebuilt several times to allow for larger vessels (Barry 1973: 63). The canallers that passed through the locks featured hulls that were relatively straight sided and flat bottomed, had retractable centerboards, and configured as nearly as possible to the locks' dimensions. Even the bowsprits or forward-most spars were hinged to allow maximum hull length, and thus, carrying capacity (Barry 1973: 123). Smaller schooners, usually involved in more local endeavors such as fishing or bark transportation for tanneries, are also found in the archeological record though in far less quantity as they were not pushed to the limit by corporate shippers at the end of seasons when the weather turned foul. A class of schooners even larger than canallers, some in excess of 200 feet in length, also saw service. These giant vessels often wrecked in shallow water, their deeper drafts likely contributing to their unfortunate ends. Schooners are not the only sailing craft found on the lake bottom, and many square rigged 3-masted barks and 2-masted brigs, as well as small sailboats were wrecked or abandoned in Michigan waters.



Figure 10: A steam barge or “lumber hooker” (Thunder Bay Maritime Research Collection).

By the second half of the 19th century, the preferred method of transporting large quantities of lumber and other bulk cargoes with minimal expense was by using a system comprising a steam barge (Figure 10) that towed from three to six schooners in consort (Figure 11). Most Great Lakes schooners after 1870 were employed as tow-barges and were no longer intended to be self-propelled. It was not uncommon for a steam barge and consorts to haul between 1.5 and 2 million feet of lumber per trip (Bazzill 2007: 40-41). Hundreds of vessels engaged in the lumber trade were lost throughout the Great Lakes and both steam barges and schooners are well represented in the archeological record across Michigan. One of the earliest lumber hookers wrecked in the state was the *City of Port Huron*, built at Port Huron in 1867 and lost near Lexington between Port Sanilac and Fort Gratiot lights in September 1876. Occasionally multiple vessels were lost simultaneously when steam barges wrecked with their schooners in tow. The wooden lumber hooker *B.W. Blanchard*, for example, ran aground on North Point Reef while towing the schooner barges *John T. Johnson* and *John Kilderhouse* during a blinding snowstorm in November 1904. The vessels carried a combined load of 2 million feet of lumber valued at \$28,000. *Blanchard* and *Johnson* were completely wrecked, while the *Kilderhouse* was eventually recovered (*Alpena Argus* 12/7/1904: 1).

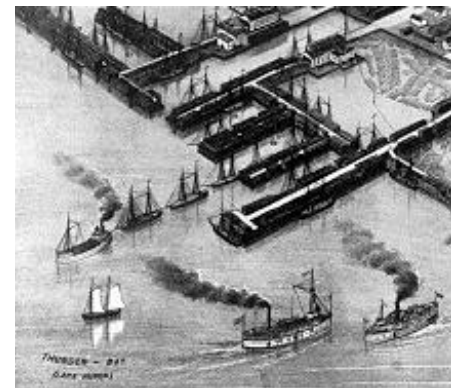


Figure 11: A steam barge towing three schooner barge consorts from the docks at Alpena in 1881.

The lumber boom in Michigan and other states across the region ended nearly as quickly as it began. Widespread deforestation and overuse of a slowly regenerating resource silenced the saws, and one by one the mills closed. Today the evidence of this once thriving industry can be seen throughout northern Michigan. Wooden pilings once used to support docks, wharfs, and bridges can be found by the thousands on river and lake bottoms (Figure 12). Concrete foundations that supported boilers and saws are familiar sights along Michigan’s coastline. Cribbs and abutments for dams and bridges, cables, pipes, and other submarine structures, general refuse, sunken logs, slab wood, and dredge spoil were deposited across the maritime landscape.

The beginning of the 20th century also witnessed the widespread abandonment of vessels engaged in the rapidly declining lumber trade. Ship “bone yards” developed wherever vessels could be left for later retrieval or perpetual decay, and giant bone yards around major ports such as Sarnia, Ontario contain dozens of intentionally abandoned vessels. Whitefish Point east of Alpena served as a bone-yard for F.W. Gilchrist’s schooner barge fleet abandoned when he moved his sawmill operations to Oregon. The schooners *Light Guard*, *Knight Templar* and *S.H. Lathrop* were stripped and run up on the beach where their “old bones will be allowed to bleach on the shore of the bay” (*Alpena Argus*, 5/14/1902: 5).

The steamers *Sidney O. Neff* and *Wisconsin* were similarly abandoned at Menominee (Kohl 2001: 336-337), and nearly identical ship bone yards appeared at Muskegon, Rogers City, Saugatuck, Manistique, and wherever older vessels without purpose were abandoned en masse.

Rock and mineral extraction would eventually outpace the lumber business in many Great Lakes communities. Copper and iron ore have been mined extensively in Michigan's Upper Peninsula since the 1840s (Dunbar and May 1988: 296-305). It was not until the development of a canal in 1855 to bypass the rapids of the St. Mary's River connecting Lake Superior with the lower lakes, however, that the shipment of valuable mineral ore reached its full potential. Prior to the locks at Sault Ste. Marie, the schooner *Algonquin* and the steamers *Independence* and *Julia Palmer* were moved around the rapids on rollers (Dunbar and May 1988: 305). The steamer *Illinois* was the first vessel to pass through the locks from Lake Huron to Lake Superior on June 18, 1855, while the steamer *Baltimore* passed southward into northern Lake Huron (Dunbar and May 1988: 308).

The opening of the Sault locks not only facilitated access to Lake Superior's vast natural resources but for the first time allowed all areas of the Great Lakes direct access to ocean shipping. It is no coincidence that automobile and shipbuilding industries developed and thrived in Michigan as a result of abundant natural resources and an established means of moving the resources and finished product. A steel mill in a landlocked region could not easily compete with one along the Michigan shoreline with direct access to world shipping.

Because of its protected location within America's heartland the Great Lakes were able to support multiple war efforts from the War of 1812 through the Civil War and the World Wars of the 20th century. The Great Lakes provided the country with an area to train troops and seamen, and build ships for the United States and its allies. Michigan in particular contributed an abundant range of natural resources, particularly iron for America's steel mills to build and equip armies, and agricultural commodities such as corn and wheat to feed the troops.

Stone and ore carriers were likewise developed to facilitate the transportation of specific cargos, as were the loading and unloading facilities along the shorelines of the Great Lakes. Large bulk carriers with open cargo holds and twin decks could haul considerably more raw material than schooners or steam barges. Engines placed close to the stern and a pilothouse far forward became the standard profile of a "lake boat," a practical tradition that continues today. By the 1880s iron and steel ships were being constructed on the Great Lakes yet wood continued to be used for shipbuilding beyond the turn of the century (Devendorf 1996: 8). With the advent of steel came the development of another craft unique to the Great Lakes. Whalebacks, invented in 1888 by Captain Alexander McDougall, were steel-hulled bulk carriers with rounded decks and long, snout-like bows resembling the hulls of early submarines. Only 41 were constructed, most before 1893 when it was realized the design of their rounded decks and narrow hatches made unloading bulk cargo difficult (Wright 1969). By the beginning of the 20th century most bulk freighters were built of steel and some were approaching 600 feet in length. These giant vessels and the shipping corporations that built and owned them would eventually lead to the demise of the independent lake carriers still attempting to eke out a living by hauling smaller loads to and from smaller ports (Devendorf 1996: 10).

By the late 1890s northern Michigan was developing a new industry. All the necessary ingredients were locally available for the manufacture of Portland cement including high grade limestone, marl, shale, and clay (Haltiner 1986: 51). Stone quarrying commenced at Petoskey, Charlevoix, Alpena and other northern Michigan cities and the maritime cultural landscape of the area would never be the same. One by one limestone bedrock quarries sprang up across the state, giant factories were built, and deep water channels dredged into lake bottoms. Michigan Portland cement was shipped across the region and helped transform America's wooden cities into concrete metropolises. The limestone cement quarry at Alpena was deemed the largest on the planet by the middle of the 20th century (Michigan Historic Marker S0145; Dunbar 1967: 84).



Figure 12: Abandoned dock pilings occur by the hundreds along Thunder Bay River (photo by W.R. Lusardi).



Figure 13: The Calcite quarry near Rogers City in 1929.

It superseded nearby quarries at Rockport and Alabaster, but was soon dwarfed by cement-producing or dolomite quarries at places with names indicative of the natural resources extracted from the area: Stoneport near Presque Isle, *Calcite* (Figure 13) at Rogers City (Michigan Historic Marker S0214), and Port Dolomite at the Straits.

Like fishing, passenger service, and lumber hauling, Great Lakes ships and port facilities for the stone trade were specifically designed or adapted to transport a particular resource. Cement, for example, was originally carried in individual cloth sacks carted by hand into a ship's hold. In 1915 the Huron Transportation Company revolutionized the shipping of cement as a bulk cargo. Self-unloading machinery was installed on the 292-foot steamer *Samuel Mitchell*, and in September 1916, the ship transported the first load of bulk cement ever carried by a self-unloading vessel (*Alpena News*, Special Supplement 2007: 5). Just as ships were adapted for specific trades, so too were shoreline facilities; the taconite docks of western Lake Superior are in no way similar to the cement docks of Lake Huron or the grain elevators on Lake Michigan.

Like the lake merchant ships before them, stone and ore carrying vessels were not without mishap and many were lost in the lakes. The 308-foot steel whaleback *Clifton*, built in 1892 and converted into a self-unloader in 1923, went down with 28 souls in September 1924 in lower Lake Huron. The 623-foot, 10,000-ton electric driven propeller *Carl D. Bradley*, a Rogers City stone carrier, was lost in November 1958 southwest of Gull Island in Lake Michigan with 33 crewmen. The 588-foot, 8,000-ton steel bulk carrier *Cedarville*, another Rogers City vessel, went down in the Straits of Mackinac after colliding with the Norwegian freighter *Topdalsfjord*, in May 1965 with 10 lives lost. Perhaps the most famous ore carrier lost in the Great Lakes was the 729-foot steamer *Edmund Fitzgerald* that sank with all hands in Lake Superior near Whitefish Point in November 1975 (Thompson 2000: 195, 305, 319).

The same Devonian limestone outcrops sought after by the cement industry, together with shifting sands and glacial till shoals, were responsible for many of the shipwrecks in Michigan waters. Wreck traps occur at Point aux Barques, North Point Reef, Thunder Bay Island, Presque Isle, the Straits of Mackinac, the Manitou Passage on Lake Michigan, Whitefish Point and the Keweenaw Peninsula on Lake Superior and dozens of similar locations (Thompson 2000: 19-21).

The wreck trap at North Point Reef alone features an outcrop of rock that extends more than a mile from shore and rises to depths as shallow as 5 feet. The wooden lumber steamer *Galena* went ashore there carrying 272,000 feet of lumber in September 1872. The oil-burning passenger freight propeller *Congress* (1861-1868), the ore laden schooner *Empire State* (1862-1877), and the schooner *E.B. Palmer* (1856-1892) loaded with red sandstone building blocks wrecked on North Point Reef, as did the *Blanchard* and *Johnson* in 1905. Dozens of other vessels wrecked on the reef but were eventually recovered (Pecoraro 2007: 163). Through the centuries, hundreds of vessels hit similar reefs in heavy seas, limited visibility, or as a result of pilot error. Most vessels could be salvaged, repaired, and put back into service, though of the 1,500 historic losses reported in Michigan, one third resulted from stranding, while the remainder included foundering, collisions, fire, intentional abandonment, and other miscellaneous causes.

The United States Government recognized the area's hazards to navigation and attempts to reduce the number of shipwrecks in the Great Lakes began early in the 19th century. In 1822 there were only 70 lighthouses in the entire nation. Twenty years later the number increased to 256 lighthouses including three in Michigan. Fort Gratiot light began operation in 1829 and is the oldest surviving lighthouse in Michigan and the first on Lake Huron. Thunder Bay Island light followed in 1832, the same year the first floating lightship was positioned at Waugoshance Shoal just west of the Straits of Mackinac (Hyde 1986: 16). In 1838 Congress divided the country into eight districts including two for the Great Lakes, and the U.S. Lighthouse Board was established by Congress in 1852. By the end of the 1850s nearly a dozen lights were operational along the Michigan shores including the Marquette Harbor light (1853), Rock Harbor light (1855), Grand Island North Light (1855), Charity Island light (1857), Pointe aux Barques light (1857), Beaver Island light (1858), Grand Traverse light (1858), Point Betsie light (1858), and St. Clair Flats light (1859) (Hyde 1986). All of the lighthouses were distinctly different in appearance, particularly those along the same stretch of coastline, to avoid visual misidentification of the light and consequent location approximation by mariners.

A series of life saving stations were likewise established across the Great Lakes beginning in the 1870s (see Map 1). The United States Life Saving Service began as a federal agency in 1848 to save the lives of shipwrecked mariners and passengers. Under the Newell Act of 1848, the United States Congress appropriated \$10,000 to establish life-saving stations along the New Jersey coast to provide "surf boats, rockets, carronades and other necessary apparatus for the better preservation of life and property from ship-wrecks" (Stonehouse 1994: 8). In 1871 Sumner Kimball was appointed chief of the Treasury Department's Revenue Marine Division and initiated the full time employment of crews for the life-saving stations. By 1874, stations were constructed along the eastern seaboard and Gulf of Mexico from Maine to Texas. The first life-saving stations to serve Michigan became operational in 1876 at Point aux Barques, Ottawa Point, Sturgeon Point, and Forty-Mile Point on Lake Huron, and Point aux Bec Scies and Grande Pt. Au Sable on Lake Michigan. Stations appeared on Lake Superior the following year at Two Heart River, Vermilion Point, Sucker River and Crisp's Point (Stonehouse 1994: 19). By 1878 the Life Saving Service was established as a separate agency of the United States Department of the Treasury (Stonehouse 1994: 15, 19).

Full time crews manned the life-saving stations on the Great Lakes from April until December, the period when wrecks were most likely (Figure 13). In 1915 President Woodrow Wilson signed the Act to Create the Coast Guard, merging the Life Saving Service with the Revenue-Cutter Service to create the United States Coast Guard. When the act was signed there were 271 stations along the Atlantic, Pacific, Gulf of Mexico, and the Great Lakes (Stonehouse 1994: 198). Thirty-five of these stations were located within the state of Michigan (Stonehouse 1994: 60-61).

Despite improvements to navigation, countless ships, nonetheless, never reached their destinations. Even with more accurate charts and advanced positioning and lifesaving equipment, modern freighters still occasionally sink in the Great Lakes. The great storm of 1913 alone was responsible for the loss on Lake Superior of the *Henry B. Smith* and *Leafield* together with 40 men (Brown 2002: 168).



Figure 14: Thunder Bay Island Life Saving crew.

The *Plymouth* went down in the same storm on Lake Michigan, while *Light Ship 82* was lost in eastern Lake Erie. The worst affected was Lake Huron with eight vessels and 194 seamen including the 570-foot *Isaac M. Scott* that went down with all hands. *Scott*, like many of its contemporaries, sits upside down on the lake bottom (Hemming 1992: 77, 137). Many of the wrecks that occurred by the middle of the 20th century were the result of collisions, usually in fog and resulting from pilot error. Ships like the *D.R. Hanna* (1919), *W.C. Franz* (1934), *Viator* (1935), and *Monrovia* (1959) all went down as a result of collisions in the busy shipping lanes of Lake Huron. The German freighter *Nordmeer*, one of Lake Huron's most recent shipwrecks, ran upon a shoal and stuck fast in 1966. Attempts to free the vessel failed, and in a few harsh winter seasons, ice all but destroyed the steel vessel. A salvage barge involved in the recovery of deck machinery and scrap steel from *Nordmeer* sits on the bottom near the larger wreck (*Alpena News*, 7/11/1975: A1). A similar fate was shared by the Liberian freighter *Francisco Morazan* when it ran aground in bad weather in northeastern Lake Michigan at South Manitou Island in 1960 (Kohl 2001: 264).

The salvage or complete recovery of stranded or sunken vessels has always been a lucrative business and large wrecking companies such as that operated by the Reid family of Port Huron recovered hundreds of vessels over time (Doner 1958).



Figure 15: The 1917 salvage of copper and iron ore from Pewabic in Thunder Bay (Thunder Bay Maritime Research Collection).

Not only were shallow water shipwrecks refloated, but deep water salvage was also possible with primitive diving equipment. The passenger freight propeller *Pewabic*, for example, went down as a result of collision in 1865 in 165 feet of water. The wreck was extensively salvaged of its copper and iron ore cargo in the 1890s and again in 1917 (Figure 14) when copper was at a premium for the war effort in Europe (Bowen 1991: 55). The steel-hulled bulk freight steamer *Grecian*, a Globe Iron Works creation from 1891, stranded at Detour then foundered in Thunder Bay while under tow southbound for repairs. Two large steel tanks known as canolons were sunk and fastened to *Grecian's* stern by hardhat divers intending to raise the vessel in 1909. Unfortunately the tanks exploded when filled with air and when the crippled wreck plunged back to the lake bottom it broke its keel and collapsed amidships rendering salvage pointless.

Perhaps not as romanticized as passenger vessels, paddle wheelers, or sailing craft, barges also played an important role in Great Lakes maritime history. Wooden and steel barges were used to transport billions of tons of cargo, haul dredging equipment and spoil, and even railroad cars across the lakes. Many barges were lost with little fanfare and others were intentionally sunk to serve as pier foundations, breakwaters, or boxes to hold riprap for shoreline reinforcement (Feltner and Stock 1983: 21).

An estimated 10,000 ships were lost in the Great Lakes during the last 330 years, the majority being American and dating from the 1830s to 1900. Countless other submerged cultural resources, everything from inundated prehistoric landscapes to modern aircraft, pilings and shoreline structures to fishnet stakes, isolated artifacts to huge piles of dredge spoil and historic trash, exist on the lake bottom. Because of the fresh, cold water, much of this archeological record is incredibly well preserved. Shipwrecks, in particular, are often completely intact and many still have their masts standing and artifacts in place. These and other heritage resources, particularly lighthouses and coastal landscapes, have always been popular tourist destinations, and excursion vessels have enabled countless visitors to experience these historic treasures firsthand beginning in the mid-19th century. One by one previously industrialized waterfront communities were transformed into recreational centers as log booming ponds were replaced by small boat marinas, sawmills turned into lakeshore restaurants, lighthouses changed from navigational aids to tourist destinations, and the agony associated with shipwrecks was replaced by the excitement of exploring and preserving them as historic time capsules.

Maritime heritage is shared by citizens throughout the state of Michigan (Figure 15). The state is unique in its sheer number of historic resources and holds the greatest number of lighthouses and the longest freshwater shoreline in the nation. More than half of the life-saving stations on the Great Lakes are located within Michigan. The state is home to the locks at Sault Ste. Marie that connect the largest freshwater lake in the Western Hemisphere with the rest of the world. Michigan also has the most state underwater shipwreck preserves and the only fresh water National Marine Sanctuary in the country. A deep sense of stewardship for the numerous shipwrecks, submerged cultural resources, life-saving stations, and lighthouses led to the establishment of historic preservation societies and maritime museums throughout the state. Many of these irreplaceable Michigan resources are listed on the National Register of Historic Places, and many are located on public lands or within parks that allow and encourage all to share our collective maritime past.

References Cited

- Adney, Edwin T. and Howard I. Chapelle. 1983. *The Bark Canoes and Skin Boats of North America*. Smithsonian Institution Press, Washington, DC.
- Alpena Argus*. Weekly publication, Alpena, Michigan. 12/7/1904.
- Alpena Argus Pioneer*. Weekly publication, Alpena, Michigan. 12/1/1909.
- Alpena Evening News*, Daily publication, Alpena, Michigan. 7/23/1903, 5/25/1910.
- Alpena News*. Daily publication, Alpena, Michigan. 9/25/1917, 7/12/1974, 7/11/1975, Special Supplement 2007.
- Alpena Weekly Argus*. Weekly publication, Alpena, Michigan. 10/22/1890, 5/14/1902.
- Andrist, Ralph K. 1964. *The Erie Canal*. American Heritage Publishing Company, Inc., New York.
- Barry, James P. 1973. *Ships of the Great Lakes: 300 Years of Navigation*. Howell-North Books, Berkeley, California.
- Bazzill, Dina M. 2007. *The Missing Link Between Sail and Steam: Steambarges and the Joys of Door County, Wisconsin*. East Carolina University, Greenville, North Carolina.
- Boulton, William. 1876. *Complete History Alpena County, Michigan*. Argus Books and Job Rooms, Alpena, Michigan.
- Bowen, Dana Thomas. 1991. *Memories of the Lakes*. Freshwater Press Inc., Cleveland.
- Brown, David G. 2002. *White Hurricane: A Great Lakes November Gale and America's Deadliest Maritime Disaster*. Barnes and Noble, New York.
- Cain, Emily. 1983. *Ghost Ships*. Hamilton and Scourge: *Historical Treasures from the War of 1812*. Beaufort Books, New York.
- Catton, Bruce. 1976. *Michigan: A Bicentennial History*. W.W. Norton and Company, Inc, New York.
- Cleland, Charles E. 1982. "The inland shore fishery of the northern Great Lakes: its development and importance in prehistory," in *American Antiquity* 47 (4): 761-783.

- Cleland, Charles E., Richard D. Clute and Robert E. Haltiner. 1984. "Naub-Cow-Zo-Win Discs from Northern Michigan," in *Midcontinental Journal of Archaeology* 9 (2): 235-250.
- Clifton, James A., George L. Cornell and James M. McClurken. 1986. *People of the Three Fires: The Ottawa, Potawatomi and Ojibway of Michigan*. The Michigan Indian Press, Grand Rapids.
- Devendorf, John F. 1996. *Great Lakes Bulk Carriers 1869-1985*. Apollo Printing, South Bend, Indiana.
- Doner, Mary Frances. 1958. *The Salvager: The Life of Captain Tom Reid on the Great Lakes*. Ross and Haines Inc., Minneapolis.
- Dunbar, Willis F. 1967. *Michigan Historical Markers*. Michigan Historical Commission, Lansing.
- Dunbar, Willis F. and George S. May. 1988. *Michigan: A History of the Wolverine State*. William B. Eerdmans Publishing Company, Grand Rapids, Michigan.
- Ellis, William D. 1974. *Land of the Inland Seas: The Historic and Beautiful Great Lakes Country*. Weathervane Books, New York.
- Feltner, Charles E. and Jeri Baron Feltner. 1991. *Shipwrecks of the Straits of Mackinac*. Seajay Publications, Dearborn, Michigan.
- Feltner, Charles E. and Stanley J. Stock. 1983. "Shipwrecks of Thunder Bay, Part I" in *Chronicle: the Quarterly Magazine of the Historical Society of Michigan* 19 (3): 16-21.
- Haltiner, Robert E. 2002. *Stories the Red People Have Told, and More: A Testimonial to N.E. Michigan's "Long-Ago People."* Robert E. Haltiner, Alpena, Michigan.
- Haltiner, Robert E. 1986. *The Town that Wouldn't Die: A Photographic History of Alpena, Michigan from its Beginnings through 1940*. Village Press Inc., Traverse City, Michigan.
- Halsey, John R. 1990. *Beneath the Inland Seas: Michigan's Underwater Archaeological Heritage*. Michigan Department of State, Lansing, Michigan.
- Heldman, Donald P. 1999. "Euro-American Archaeology in Michigan: The French Period" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 292-311. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.
- Hemming, Robert J. 1992. *Ships Gone Missing: The Great Lakes Storm of 1913*. Contemporary Books, Chicago, Illinois.
- Hennepin, Father Louis. 1903. *A New Discovery of a Vast Country in America*. Edited by Reuben Gold Thwaites. A.C. McClurg and Company, Chicago.
- Hyde, Charles K. 1986. *The Northern Lights: Lighthouses of the Upper Great Lakes*. Two Peninsula Press, Lansing, Michigan.
- Kohl, Cris. 2001. *The Great Lakes Diving Guide*. Seawolf Communications, West Chicago, Illinois.
- Labadie, C. Patrick. 1989. *Submerged Cultural Resources Study: Pictured Rocks National Lakeshore*. Southwest Cultural Resources Center Professional Papers No. 22, Santa Fe, New Mexico.
- Lusardi, Wayne R. 2007. "Northeast Region: Thunder Bay National Marine Sanctuary," in *Fathoming Our Past: Historical Contexts of the National Marine Sanctuaries*. Edited by Bruce G. Terrell. US Department of Commerce, National Marine Sanctuary Program, Silver Spring, Maryland. Pp. 12-15.
- Malcomson, Robert. 2001. *Warships of the Great Lakes 1754-1834*. Naval Insitute Press, Annapolis.
- Mansfield, J.B. 1899. *History of the Great Lakes, vol. 1*. J.H. Beers and Company, Chicago.
- McClurken, James M. 1986. "Ottawa" in *People of the Three Fires: The Ottawa, Potawatomi and Ojibway of Michigan*. Edited by James A. Clifton, George L. Cornell and James M. McClurken. The Michigan Indian Press, Grand Rapids. Pp. 1-38.
- McClurken, James M. 2009. *Our People, Our Journey: The Little River Band of Ottawa Indians*. Michigan State University Press, East Lansing.

Michigan Historic Marker S0145, located at Ford Avenue and Wessel Road, Alpena, Alpena County, erected 1958: "Portland cement, so-called because it resembles in color stone from the Isle of Portland in the British Isles, was first produced in the United States in 1871, in Michigan in 1896. Because of Alpena's location in the midst of immense limestone deposits, the Huron Portland Cement Company, founded at Detroit in 1907, chose this site for its plant. Cement production began here in 1908. Able management and skilled workmen made this the world's largest cement plant. From Thunder Bay, ships of the Huron fleet deliver cement to all parts of the Great Lakes region."

Michigan Historic Marker S0214, located at 1035 Calcite Road, Rogers City, Presque Isle County, erected 1960: "Limestone is a mineral raw material essential in making steel, chemicals, and cement. Henry H. Hindshaw, a geologist, established in 1908-09 the commercial value of this area's limestone for industry. The high purity of this deposit and the availability of water transportation led to the development here of a port and quarry. Both are named Calcite, after the principal ingredient of the stone. The Michigan Limestone and Chemical Company, founded in 1910, began operation in 1912. Purchased by Carl D. Bradley and the United States Steel Corporation in 1920, the company came under the ownership of U.S. Steel upon Bradley's death in 1928. In 1951 the company became a division of the corporation. Self-unloaders of the division's Bradley Transportation Line carry limestone from this, the world's largest limestone quarry, to industrial ports around the Great Lakes."

NOAA. 1999. *Thunder Bay National Marine Sanctuary: A Federal/State Partnership for the Management of Underwater Cultural Resources*. National Oceanic and Atmospheric Administration, Silver Spring, Maryland.

O'Shea, John M. and Guy A. Meadows. 2009. "Evidence for Early Hunters Beneath the Great Lakes" in *Proceedings of the National Academy of Sciences of the United States of America*, vol. 106 (June 23): 10120-10123.

Pecoraro, Tiffany A. 2007. *Great Lakes Ship Traps and Salvage: A Regional Analysis of an Archaeological Phenomenon*. East Carolina University, Greenville, North Carolina.

Pilling and Anderson. 1999. "Euro-American Archaeology in Michigan: The British Period" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 312-316. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Pott, Kenneth R. 1999. "Underwater Archaeology in Michigan" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 359-367. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Quaife, Milo M. 1944. *The American Lake Series: Lake Michigan*. The Bobbs-Merrill Company, Indianapolis, Indiana.

Rodgers, Bradley A. 2003. *The Bones of a Bulk Carrier: The History and Archaeology of the Wooden Bulk Carrier/Stone Barge City of Glasgow*. East Carolina University, Greenville, North Carolina.

Shott, Michael J. and Henry T. Wright. 1999. "The Paleo-Indians: Michigan's First People," in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 59-70. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Stonehouse, Frederick. 1994. *Wreck Ashore: The United States Life-Saving Service on the Great Lakes*. Lake Superior Port Cities Inc., Duluth, Minnesota.

Stonehouse, Frederick. 1992. *A Short Guide to the Shipwrecks of Thunder Bay*. Thunder Bay Underwater Preserve, Alpena, Michigan.

Thompson, Kate and Wayne R. Lusardi. 2004. "Lessons Beneath the Waves: Maritime Heritage Revealed through Shipwrecks" in *Current: The Journal of Marine Education* 20(3): 30-34.

Sabick, Christopher R. 2004. *His Majesty's Hired Transport Schooner Nancy*. Texas A&M University, College Station, Texas.

Thompson, Mark L. 2000. *Graveyard of the Lakes*. Wayne State University Press, Detroit.

Tongue, Stephen D. 2004. *Lanterns and Lifeboats: A History of Thunder Bay Island*. Sarge Publications, Alpena, Michigan.

Wright, Richard J. 1969. *Freshwater Whales: A History of the American Ship Building Company and its Predecessors*. The Kent State University Press.

GITCHI-GUMEE ANISHNAABEK: THE FIRST PEOPLE OF THE GREAT WATER

by Eric Hemenway, Little Traverse Bay Bands of Odawa Indians

The purpose of this report is to demonstrate the cultural, social, economic and religious ties the Great Lakes has to the Anishnaabek. The focus of this work will center on the Odawa of northern Michigan and use examples of their history and their interaction with the Great Lake to bring a greater sense of awareness to the importance the Great Lakes has, and still does to this very day, to an aboriginal people whom call the Great Lakes their ancestral homelands. These diverse and significant interactions will demonstrate a long, cultural continuity that establishes a deep sense of heritage for the Odawa.

The Odawa (historically known as the Ottawa), along with the Ojibway/Chippewa and the Potawatomi, comprise the Anishnaabek. The Anishnaabek have a long and intimate relationship with their homelands in the Great Lakes. The Anishnaabek believe themselves indigenous to the Great Lakes, with oral histories and beliefs that place themselves in and around these vast bodies of fresh water countless generations before the arrival of Europeans (McClurken, 3). In the traditional language of the Anishnaabek, the more accurate translation for Great Lakes is Gitchi-Gumee, or Great Lake, not lakes. The Great Lakes was seen as one, connected body of life giving water. Only until after European arrival did the Great Lakes become known as five, distinct lakes. For ease of understanding and comprehension in relation to the Great Lakes maritime heritage study, Great Lakes will be referred to throughout this report.

The Origin of Existence: The Importance of Water to the Anishnaabek

The Odawa, as with many other indigenous peoples of the Great Lakes, do not believe in the theory they originated from Asia, crossed a land bridge at the Bering Straits and migrated south to inhabit North America. On the contrary, the Anishnaabek have creation beliefs that have them originating from within North America.

One very prevalent belief is that the Anishnaabek were created along the eastern coast and migrated into the Great Lakes (McClurken, 3). Various bands of Ojibway, Odawa and Potawatomi all have their different translations of the migration belief. The Odawa historian Andrew J. Blackbird gives accounts of the Odawa living along the Ottawa River before European contact (Blackbird, 79).

Many of the migration beliefs are laid out in multiple birch bark scrolls, depicting the journey the Anishnaabek made, following a divine path that lead directly through and around the Great Lakes (Cleland, 5-10). These scrolls, which originate from various locations within the Great Lakes, are exclusively associated with the Anishnaabek. The scrolls, in turn, are primarily associated with the Midewin (McClurken, 15). The Midewin is an ancient ceremonial society of the Anishnaabek. One important function the Midewin has is that it tells the migration story of the Anishnaabek into the Great Lakes (Warren, 78-80). Blackbird, while not specifically mentioning the Midewin migration in this particular account, simply gives a truism that was relayed to him from his ancestors over time.

Another common belief relating to the creation of the Anishnaabek and how they came to inhabit the Great Lakes incorporates a story of a great flood and how the world came to be through the actions of certain divine characters and animals during the flood (Kientz, 299-301, Blackbird, 72-77). This story of the flood, like the migration story, has multiple interpretations throughout the Great Lakes tribes but retains the same theme and purpose of origin and creation. Many Anishnaabek communities in the Great Lakes have retained the sacred stories of the flood and migration.

A location of great importance for the Anishnaabek during the migration was the straits of Mackinac. Here, the Ojibway, Odawa and Potawatomi each decided on which lands they were going to inhabit (Warren, 80-82). The Ojibway went north, the Potawatomi south and the Odawa stayed at the straits. To this day, these bands of Anishnaabek live in the same areas their ancestors had decided upon centuries.

The Potawatomi have reservation lands in south western Michigan, The Odawa along the north western coast of the Lower Peninsula of Michigan and at Manitoulin Island in Ontario. And finally, the Ojibway primarily occupy the Upper Peninsula of Michigan, with reservations extending west into Wisconsin and Minnesota. Ontario has many Ojibway communities as well.

The strait of Mackinac's special connection to the Odawa, Ojibway and Potawatomi extends beyond the history of the three tribes deciding where to continue their journey during their migration. Mackinac would be a vital economic hub and village location for the Odawa and Ojibway for more than two centuries. But, as with many significant locations for the Anishnaabek along the Great Lakes, value has multiple layers. Mackinac Island itself holds a special place in the religious beliefs of the Anishnaabek. Multiple beliefs relating to powerful spirits inhabiting the island and the efforts of the Odawa and others to appease those spirits, are a part of the cultural fabric of the tribe (Kientz, 298-99). Also, the fact Mackinac Island served a principal burial location is another important indicator to the ceremonial and cultural value Mackinac Island has for the Anishnaabek. The importance of burials in relation to the Great Lakes will be discussed later in this section.

The migration, creation and other culturally significant stories of the Anishnaabek are of a sacred nature. Many times the writing of these stories is prohibited. The telling of them orally is appointed to certain individuals and told during special times of year. In order to uphold the integrity of these traditions of the Anishnaabek, limited writing will take place in regards to sacred knowledge.

The Fight to Control the Trade of the Great Lakes

The story of the Odawa cannot be told without their relationship to the water of the Great Lakes. In fact, the name Odawa roughly translates into "trade" in Anishnaabamowin, the language of the Anishnaabek. The Odawa, Ojibway and Potawatomi all speak very similar dialects of Anishnaabamowin.

The Odawa acquired the name "trade" or "traders" with their first encounter with Europeans in the Great Lakes, which occurred in 1615 at the Georgian Peninsula in Ontario (Kientz, 227). On this inaugural meeting, the Odawa came into contact with the French explorer Samuel de Champlain, whom was travelling with French priests, explorers and traders, in an effort to find an alternate route to Asia (Thwaites, 4). The party of Odawa Champlain stumbled upon were approximately 300 Odawa men, whom claimed to be picking and drying blueberries. But what Champlain probably found was a war party heading east. The first name the French gave the Odawa was "Cheveux Releves" or "raised hairs" due to the men wearing their hair in a short, spikey style. The men also had their bodies tattooed and adorned with paint (Trigger, 299). Hostilities would not develop between the Odawa and the French upon first contact. After this fateful meeting, a relationship based on trade was immediately developed. This relationship between the French and Odawa, which had its origins in trade, eventually would develop into alliances in war, religion and politics (White, 25). All of these factors would help shape the future and identity of the Odawa for the next two centuries.

The French travelling the Great Lakes in the 1600s relied initially on the Huron and later, on the Odawa for much of their journeys and survival in their voyages in their new environment. The Odawa were the only tribe known to travel out of the distance of land, giving them a tremendous advantage in travel (McClurken, 2). Trade was a major catalyst for these early relationships but the contact between the two vastly different peoples' cultures would drastically venture beyond economic interests. Diseases, new religions, warfare, tribal diaspora, new technology and intermixing of the races would be some of the repercussions European contact had on the Great Lakes tribal nations. All of these factors that drastically altered Indian communities would be partially enabled due to the ability of the Odawa to transport people and goods along the water ways of the Great Lakes. For better and for worse, the Odawa taking advantage of their position in the Great Lakes trade system would forever alter the fate of not only their tribe, but many other tribes as well.

Their journeys and actions would inevitably influence the future actions of the French and British in North America in the 17th, 18th and 19th centuries, through trade, culture exchanges and subsequent wars.

The Huron and Odawa were the first, primary trading partners with the French in the western Great Lakes, due to their prominent position as middlemen in the trade networks of the Great Lakes in the late 17th century (Garrad and Heidenreich, 396). An important factor that aided both of these tribes in the 17th century was the position of their villages at the time of French contact. The Huron's principal territory from 1615-1650 was known as Hernoia (Heidenreich, 369). Huronia was located on the eastern portion of the Georgian Bay, between Lake Huron and Lake Simcoe. Not only did this position afford the Huron an advantage in trade, it also acted as a buffer between two of the dominant tribes of the Great Lakes; the Iroquois in New York and the Anishnaabek west of Lake Huron. Both the Iroquois and Anishnaabek had long standing rivalries preceding European contact, but Huronia managed to thrive despite the hostilities between the two powerful tribes on either side. A major reason Huronia thrived was due to its ability to exchange goods between a multitude of communities, both tribal and European. But this delicate balance of power would drastically shift and was later destroyed with the introduction of European goods and diseases.

The Iroquois nation sent out to dominate the fur trade in the Great Lakes in the 1640s, with the aid of large acquisitions of firearms from the Dutch (Trigger, 354). By 1649, one thousand Seneca and Mohawk warriors, a huge show of force at the time, attacked and effectively ended Huronia (Tanner, 30). Refugee Huron fled westward, taking up sanctuary in Odawa villages. The viciousness the Iroquois displayed in their attacks and the large number of Iroquois warriors deployed created a widespread diaspora in the western Great Lakes for the next thirty years (White, 1).

Having firearms this early in the historic period in Great Lakes history gave the possessor of the firearms a huge military advantage over their opponents whom did not have them.

The message was clear from the Iroquois; they were bent on the extermination of the Huron or any other tribe that posed a threat to their hegemony in the Great Lakes. The Iroquois would control the fur trade by means of controlling the lands and routes that were the foundation of the trade. By 1640, beavers had almost been extinguished in Iroquois and Huron territory, strengthening their desire for new lands rich in that valuable trade resource (Trigger, 353). But another critical factor for the Iroquois setting out against the Huron was that the Iroquois needed to bolster their population. The Iroquois themselves had their populations declining, due to warfare and diseases by 1640 (Tanner, 29). The Huron population spoke an Iroquoian dialect. This translated into captives that could be easily absorbed and adopted into the Iroquois tribe. Their aggression toward the Huron served multiple purposes.

The Iroquois Wars, or Beaver Wars, 1640 to 1701, were partially rooted in the need to control the fur trade and the trade routes. The Iroquois waged a fierce and savage campaign as far west as Wisconsin, Illinois and south into Pennsylvania and Ohio (Tanner, 30-31). The Odawa were in the middle of this maelstrom of conflict that engulfed the entire Great Lakes region. The demise of the Huron by 1650 left the Odawa as the dominant tribe in the fur trade (McClurken, 42). The position of Odawa villages at the center of the Great Lakes and their prominent position as middlemen in the fur trade made them rivals with the Iroquois (Havard, 31). During all the mayhem of the Iroquois War, the French still sought to establish reliable trading partner, secure trading routes and territories rich in furs. The fur trade was so lucrative, that even the threat of war would not alter French and Odawa men from venturing great distances to obtain furs. Both took great risks to transport goods throughout the Great Lakes. The Odawa were disbursed as far west as Minnesota due to the Iroquois wars but established a major village at Chequagmon Bay, on the shores of Lake Superior in Wisconsin from 1660-70 (Feest and Feest, 772). During their removal from Michigan, the Odawa were still able to introduce trade goods to tribes whom had limited contact with European trade goods, thus carrying on their trade and introducing new technology to various tribal communities (Cleland, 93-94).

Beyond Simple Economics

The Odawa provided the immediate fix to the French's economic problem by bringing the French furs and taking French trade goods to westerly tribes in exchange. The Odawa, due to their previous trading excursions, often were the first tribe to introduce European goods to tribes west of the Great Lakes (Kientz, 245). So important was the Odawa position in the trade network, that in a 1653 treaty between the French and various Iroquois, one provision was that the Odawa and other ally Indians were not be disturbed in their trade with the French (Smith, 101). While this treaty was not entirely honored by all the league of Iroquois, it is important to note that Odawa trade was influencing other nations' politics.

The acquisition of trade goods was important for the Odawa for multiple reasons. The obvious benefits of becoming wealthier was a factor for the Odawa engaging in trade, but many social and cultural factors were taken into account as well. Having a plethora of trade goods raised the status of a chief not only with his immediate village, but of surrounding villages as well (White, 100-01). Elevated status meant more trade opportunities, as well as having access to allies in times of war. Status also meant the ability to intermarry with far reaching communities whom had access to territories rich in natural resources. Kinship networks provided to be a very valuable, economic resource for the Odawa well into the 19th century (Tanner, 171).

The exchange of gifts was a very important function at any important meeting or council the Anishnaabek were engaged in. Anishnaabek chiefs, as well as other Great Lakes tribal leaders, would expect visitors to bestow gifts to their hosts. Trade and gift giving was seen as friendship (Havard, 18). The absence of gift giving was seen as a potentially hostile action. The French were quick to adopt this way of conducting formal business with the tribes and trade good became an important item in cultural exchange (White, 104). Late on, the British would not be generous, and their reluctance to give gifts would add to hostilities with numerous tribes. Pontiac's War in 1763 saw numerous tribes drive the British out of the Great Lakes.

Fort Michilimackinac at the Straits of Mackinac was one fort that fell to Ojibway and Sauk warriors. The powerful Ojibway chief Minavanna gave this rousing speech to an English captive by the name of Alexander Henry after the attack, which was won by the Indian forces:

Englishman, out father the King of France, employed our young men to make war upon your nation. In this warfare many of them have been killed, and it is our custom to retaliate until such time as the spirits of the slain are satisfied. But the spirits of the slain are to be satisfied in either of two ways; the first is by the spilling of the blood of the nation by which they fell; the other by covering the bodies of the dead, and thus allaying the resentment of their relations. This is done by making presents. Englishman, your king has never sent us any presents (Armour, 27)

Minavanna's speech is strong line of evidence demonstrating the important role gifts plays in Anishnaabek culture and society. And once again, a major focal point of historic events occurred at the Straits of Mackinac. Mackinac would be pivotal area in the Great Lakes for nearly three centuries. Battles, important councils, villages, trade posts and influential leaders would be a part of the influential history of this area.

As discussed earlier in Minavann's speech, another important cultural function that required gifts was the act of "covering the dead". When an Anishnaabek lost one of their own at the hands of another, the matter traditionally could be resolved in two ways. The first being the grieving community would send a war party against the wrong doers, demanding the debt be paid in full with blood. The other method was giving gifts to the village or family that suffered the loss. This formal ceremony was an ancient process of mending broken friendships, preventing further bloodshed and establishing order. Once the dead were "covered" with the appropriate amount of gifts, peace could ensue. Not giving gifts to make amends for the loss of life led to into more lives being taken. European trade goods became central items for covering the dead, due to their rarity and value.

Generosity was a hallmark of Anishnaabek chiefs and the chiefs demanded the same generosity in return. Many times, Anishnaabek chiefs would disperse all the trade goods they had, rendering them in a state of poverty. But the esteem and prestige the chiefs gained from their acts was more valuable than material possessions (Kientz, 249-50).

The Era of Prosperity for the Odawa

The Odawa, Ojibway, Potawatomi, Huron, Illinois, Nipising, French and other Great Lakes tribes would finally band together and drive the Iroquois back east at the conclusion of 17th century, eventually taking the fight into Iroquois territory. Major victories against the Iroquois in Michigan occurred in 1662 on the shores of Lake Superior, just west of Sault Ste. Marie. This spit of land would later be known as Iroquois Point, because of the crushing defeat the Iroquois suffered at the hands of the Odawa, Ojibway and Nipising (Tanner, 31). The Illinois dealt the Iroquois another blow in 1667. By 1670, the Iroquois were no longer the threat they previously were and the Odawa came back home to the straits of Mackinac in that year. They established a village at St. Ignace, with the Huron and a small group of French priests (McClurken, 3). Eventually the Iroquois war came full circle where it started in Huronia and New York. By the late 1690s, the Odawa, Ojibway, Nippising, French and other tribes began striking Iroquois villages, many times deep in their territory in New York (Havard, 62-64). By the end of the 17th century, the Iroquois were not strong enough to protect their own homelands. In 1701, the Great Peace, or the treaty of Montreal, was created. More than forty tribes from the entire Great Lakes region gathered and agreed to this historic peace. Once peace was established, the Odawa would have unrestricted access to trade routes and territories spanning thousands of miles. Stipulations in the 1701 Montreal treaty between the French, their Indian allies and Iroquois plainly state peace is to be adhered by all nations signing the treaty (Havard, 211). A universal peace meant access to Montreal without fear of attacking Iroquois war parties. By 1701, the main trading partner for the French were the Odawa and their Anishnaabek kin. From 1701 to 1750, this was a golden era of trade and prosperity for the Odawa.

The Odawa, who were experts at navigating the Great Lakes, became the partners of choice for the French traveling the Great Lakes after the fall of Huronia. By having the Odawa as their guides, the French were able to penetrate into villages and tribal communities they would have been unable to on their own (Warren, 130). In addition to being savvy entrepreneurs, the Odawa also acted as “cultural brokers”, bringing the French and their new technology to western tribes. In some instances, the Odawa were the first tribe to bring European goods to other tribes, such as the Sioux and Cree. In the 1660s, the French explorer Nicolas Perrot made these observations in regards to the Odawa and trade:

The Sioux, who had no acquaintance with the firearms and other implements, which they saw among the strangers-for they themselves use only knives and hatchets of stone and flint-hoped that these peoples, who had come near them would share with them the commodities which they possessed; and, believing that the latter were spirits, because they were acquainted with the use of iron.conducted them. . .to their lages. . . The Sioux returned to their own country with some small articles which they received from the Outaouas. . . and they entreated the strangers to have pity on them and to share with them that iron, which they regarded as a divinity. . . They (the Ottawas) gave to the envoys a few trifles such as knives and awls; the Sioux declared that they placed great value on these, lifting their eyes to the sky, and blessing it for having guided to their country these peoples, who were able to furnish them so powerful aid in ameliorating their wretched position. (Innis, 43-44).

The influence of European trade goods altered every Indian community they came in contact with. Whether it be French or Indian traders introducing the new trade items, the repercussions of European technology on Indian life was undeniable (White, 98). Great Lakes tribes, over the course of two centuries, would create a great demand for European goods. This demand would inevitably alter tribal lifestyles to the point tribes became dependent on trade goods (Innis, 107-08). Metal goods and firearms made living in an unforgiving landscape like the Great Lakes much easier. Normal subsistence cycles would also change to accommodate economic needs.

For example, it was common for Anishnaabek hunting in the winter to leave a certain number of female and male beavers in their lodge, to ensure sustainability of the resource for future generations (Kientz, 237). Beaver meat was a staple in the winter and their furs used to produce various articles of clothing. As the value of the beaver pelts skyrocketed with European influence in the 1600s, the beaver populations were nearly exterminated by the 1850s (Innis, 332). The beaver, an indigenous animal to the Great Lakes, had multiple cultural ties to the Odawa, including being included in important burial ceremonies (Cleland, 54). The beaver would have its cultural and subsistence value altered with the introduction of European goods and economic values.

Radical departures from traditional beliefs and customs would also be introduced. These departures would be in the form of a new religion that would influence, fracture, destroy and at times, help Great Lakes tribes. But without a doubt this new religion would impact all Indian tribes in North America. This new religion was Christianity. French traders looked for furs. French priests sought out souls to save. Both in many instances relied on their Odawa guides to help them navigate terrain and populations that could be hostile and unforgiving. The cultural exchange that occurred was swift and its impact felt immediately. This quick introduction of beliefs and its impending influences could not have happened as quickly without the Great Lakes. The waters acted as a conduit between populations that were as different as two populations could possibly be.

The cultural, economic and spatial changes that the Odawa experienced during their prominence in the fur trade would change the tribe forever in northern Michigan. But these changes for the Odawa did not only occur in Michigan. The great distances the Odawa men went in their trading endeavors has to be examined more closely to see how their trade routes have a direct impact on the heritage of the Great Lakes. There are some critical factors that gave the Odawa an advantage over not only the French but other tribes as well; knowing the waterways, having access to far reaching communities and having the means to travel there.

The Vehicle of Trade

For countless centuries, the Odawa, along with other Anishnaabek, had been navigating the fierce waters of the Great Lakes in birch bark canoes (Smith, 78). The birch tree is an indigenous tree to the Great Lakes and one of the most important natural resources for the Anishnaabek. Birch bark was used to; make containers, start fires, provide shelter and manufacture canoes. The canoes could be made anywhere in the Great Lakes, were durable, strong and easy to maneuver. This combination of lightweight and strength made the birch bark critical to the fur trade that dominated economics in the Great Lakes from 1600-1840. A birch bark canoe could haul up to 4 tons, which included paddlers and their own personal gear (Armour, 8). And when it came time to portage the many difficult passes along the numerous river routes connecting the Great Lakes and their trade destinations, the versatility of the birch bark canoe was unmatched. The preferred route from Mackinac to Montreal consisted of traveling Lake Huron to the Ottawa River to Lake Nippising and finally onto the French River (Armour, 7). This was the shortest route to Montreal. During the historic period until the end of the French period, Montreal was one of the major trade centers in North America. According to Nicolas Perrot, the Odawa had great success as traders due to their great skill to navigate canoes on the Great Lakes and its river systems (Trigger, 821).

The Odawa were renowned for their craftsmanship of their canoes, which enabled them to travel such far distances in trade and war. In fact, the Odawa often sold the canoes themselves to the French (Kientz, 245). It was an amazing feat for a vessel made of tree bark, to be navigated thousands of miles on the some of the most turbulent fresh waters in the world.

But having the means to travel the Great Lakes is only part of the formula that made the Odawa such valued trading partners. The other portion of that formula was having the authority to carry out business in distant tribal communities throughout the vast region of the Great Lakes. Before European contact, the Odawa had pre-existing trade relationships with various tribes (Smith, 80).

The Odawa traded food goods, such as berries and corn with their neighboring tribes (Smith, 92). Other important food staples the Odawa harvested were maple sugar and large quantities of fish (McClurken, 25). Trade of goods and foods was an important identifier of the Odawa people, as explained by historian James McClurken:

The Ottawa's location between the highly specialized, sedentary, horticultural Huron communities to their southeast and the nomadic Ojibwa hunters in the north, provided them an opportunity to develop expertise in trade. By their commerce northern meats and furs were traded to southern farmers, and crops were in turn exchanged to northern hunters. The Ottawas' middleman position in the native trade system became a primary distinguishing feature of their society. The name Ottawa itself means "to trade" and emphasizes the prominent role this activity played in the economic and political lives of the people. (McClurken, 26).

The far reaching communities the Odawa visited and the routes the tribal traders took to reach those communities are steeped in the cultural heritage of the Great Lakes. The many villages the Odawa visited were in fact, not Odawa villages. Villages throughout the Great Lakes had Odawa ties to them, whether it is through marriage or lands that were conquered by the Odawa (Hamlin to Cass, 1835). Many of these marriages were strategic moves among the Odawa to establish kinship networks to better enable trade relationships with various tribes and access to trading hubs, such as Montreal and Green Bay. An essential element of the trade was having access, or better yet, control of important trade routes. The Odawa ensured access to the critical river and lake routes through kinship networks and marriage (McClurken, 27). The Odawa even went as far as to claim control of the Ottawa River, thus expecting payment in the form of gifts from any tribes utilizing the river to Montreal (White, 106).

The villages and their locations are the mapped evidence of how far reaching the Odawa had an impact on communities throughout the Great Lakes and the great extents the Odawa went to sustain their place in the fur trade.

It was common for an Odawa man, who was active in the fur trade, to travel for more than six to eight months out of the year, sometimes covering 400 to 500 leagues (Kientz, 245). Hunting, war and making trade voyages were primarily a man's duty. But Odawa men were not exclusive to the fur trade. One rare, documented history is that of an Odawa woman from Mackinac by the name of Netnokwa. Netnokwa was recognized as a headwoman, had multiple husbands and carried out trade over a great expanse in the Great Lakes, ranging from Mackinac to Manitoba (Tanner, 54). And like her male counterparts, she experienced the dangers, hardships and difficulties that came with trading on the Great Lakes. Netnokwa navigated the many communities, personalities and potentially dangerous situations with the same authority and respect as any male trader. This glimpse into Netnokwa's life, via the memoirs of her adopted white son John Tanner, tells of how the fur trade wasn't exclusively male. While the voyages to obtain goods and furs were predominately handled by male traders (due to extreme physical exertions), women were not excluded.

In the bigger picture of how the fur trade transcended Anishnaabek communities, women played a major role. Odawa and Ojibway women would often marry French fur traders, as a means of securing better access to goods and prices. The arrangements were beneficial to French traders as well, as this gave them access to trading partners across the Great Lakes. Social and economic lines blurred and often crossed one another between the French and Indian women whom married and established working relationships (Skaggs and Nelson, 87). A number of Odawa and Ojibway women from Mackinac were married to French traders and merchants throughout the 18th and 19th centuries. These Anishnaabek women often held considerable sway when it came to negotiating for goods. The mutual benefits lasted several generations and created a powerful kinship network that enhanced the Odawa's position as preeminent traders.

The Upper Country

The dangers a trader faced on the Great Lakes between the 17th and 19th century was on many levels, administered by nature and men alike. The upper Great Lakes would be known by the French as the “Pay d’en Haut” or “Upper Country”. This territory was seen as a wild frontier, inhabited only by Indians, the vast lakes themselves and an untamed wilderness, equally filled with dangers. Bears, wolves and cougars all roamed freely, with the cougar being perhaps the most dangerous animal in the Great Lakes, as it was infamous for attacking children (Armour, 97).

Winters were long and exhausting. Traders and Indians many times resorted to violence to settle differences, or to steal goods outright (White, 107-08). Unethical traders would obtain furs from Indians by trading them rum and brandy. During these particular exchanges, it was common for extreme violence to commence once the Indian became drunk, often attacking each other and any others who were present (Tanner, 35). The issue of using alcohol in trade was a very severe problem for all tribes in the Great Lakes.

Laws and regulations were passed by French, British and later American officials, outlawing traders using intoxicating liquors to cheat Indians out of their goods and also to prevent hostilities (Wyckoff, 2). Indians would be poverty stricken within a matter of days, alienating all their furs they worked so hard to acquire during the winter, for a few days of debauchery. The Odawa were not exempt. Odawa historian Andrew J. Blackbird gives an account on how the Odawa from Little Traverse actually signed a pledge to abstain from alcohol (Blackbird, 59-60).

But little law enforcement could be done during the French Period in the vast and remote Pays d’en Haut. Unethical trade practices resulted in huge profits for traders. Alcohol would plague tribes later during treaty negotiations with the United States in the 19th century, as Michigan territorial governor Lewis Cass made extraordinary efforts to keep Anishnaabek chiefs in a drunken stupor during the immensely critical treaty councils at the Saginaw Treaty of 1819. Approximately 187 gallons of wine, whiskey, gin and rum were specially ordered for this treaty (Cleland, 213).

The Straits of Mackinac

The Straits of Mackinac hold a great deal of history, cultural significance and heritage to the Odawa and other Anishnaabek. As demonstrated earlier, the depictions of how Mackinac played a critical role in the consequent settlement of Michigan and other Great Lakes areas by the Odawa, Ojibway and Potawatomi in their migration into the Great Lakes tells of a deep connection to the area. The importance of Mackinac to the Odawa and its relation to the Great Lakes warrants more attention.

The Odawa fought and expelled another tribe from the Mackinac area many years before the arrival of Europeans to Michigan. As the story relates, the great Odawa war chief Sagima landed at an area known today as McGulpin Point at Mackinac. Here, Sagima and his band of warriors extracted revenge against the Mouscodesh tribe, for the killing of an Odawa woman and committing a serious grievance against Sagima and his warriors (Schoolcraft, 203). The story of Sagima routing the Mouscodesh is also told by Andrew J. Blackbird (90-92). In both accounts, the Odawa warriors travel from Manitoulin Island, in their birch bark canoes, to wage war and take control of northern Michigan. What ensued was the expulsion of the Mouscodesh tribe from Michigan. This tribe is believed to have ancestral ties to the modern Mascouten, or Fox, tribe. These ancient rivalries would meet again, centuries later at Detroit.

The Odawa believe they have inhabited the Straits of Mackinac approximately for seven hundred years, starting with the defeat of the Mouscodesh until the present day. The only time the Odawa were uprooted and removed from Michigan during this time span was during the Iroquois wars, from 1650-70 (Feest and Feest, (772-73). It is an amazing display of staying power in an area that has been contested for by the Iroquois, Winnebago, Sauk, Fox, Miami, French, British and American forces. Throughout the multitude of struggles to control Mackinac, the Odawa and Ojibway have been longest standing communities at this area.

Both the Odawa and Ojibway benefitted tremendously from their strategic location at Mackinac. The Huron, Potawatomi, Illinois, Sauk, Fox, Menominee, Winnebago, Nipising, Algonquin and Cree are some of the tribes that would all come to Mackinac to trade. But Mackinac would also serve as an important location for diplomatic councils, especially during the French regime (White, 78-79). The French, British and Americans would all fight to control the straits of Mackinac through subsequent wars. The French and Indian War, 1754-61, Pontiac's War's 1763 and the War of 1812 all had Mackinac bear an important influence on these wars. During all the fighting by foreign forces to control their homelands, the Odawa were able to take advantage of their positions as; trade middlemen, warriors, kinship networks, clever political maneuvering and having Mackinac as their home to be able to stay at Mackinac. It could be argued that without having deep roots to Mackinac and the Great Lakes, the Odawa may have been removed as other tribes were. But their value and desire to stay in the Great Lakes would show its self, time and time again throughout history.

Once at Mackinac, Odawa traders would take their canoes, laden with trade goods, deep into the frontier of the Great Lakes. One such territory that was frequented was northern Minnesota and Manitoba. Here, the Ojibway and Cree tribes were the dominant population, living primarily in dense swamps and open prairies. Both areas afforded an abundance of fur bearing animals, primarily the coveted beaver. And the Odawa went into these villages to do business. The female Odawa Chief Netnokwa, along with other Odawa from Wagankising (Little Traverse, Michigan), would spend winters at Red River in Manitoba during the early 1800s. Some Odawa from Little Traverse had spent years hunting in these far western territories, such as the Waganakasing chief Peshuaba (Tanner, 40, 50, 54). Other important trapping and trading areas were Green Bay and Chicago, both of which would develop into major American urban centers. But before American settlers came to populate these two, distinct cities of the mid-west, they were large villages for Indians.

Odawa trade was brought to the villages of the Lakota, or Sioux, in the plain areas of North and South Dakota. During their dispersal from Michigan during the Iroquois Wars, the Odawa were pushed as far west as Wisconsin and Minnesota (Kientz, 228). Despite their displacement at the hands of the Iroquois, the Odawa still traded. Tribes not yet familiar with European good were amazed at the items that the Odawa produced in exchange for furs. Lakota and Dakota villages would have European goods introduced to them by the Odawa. But fighting would break out between the two tribes, resulting in the Odawa migrating back to their homelands in Michigan (White, 22). But before the Odawa left the Sioux people, their introduction of European trade goods would alter how the Sioux would interact with the French and other Great Lakes tribes in trade, politics and eventually, war. The need to control the waterways and fur territories would extend to every tribes and European power that inhabited the Great Lakes.

The major hub of all trade in the 18th and 19th centuries in the Great Lakes was the Straits of Mackinac. This center of commerce and activity was vital not only for trade in North America, but for Europe as well. The furs that traded hands at Mackinac would eventually find their way to Europe, to fill a fashion demand for beaver fur hats and goods. Mackinac was extremely important because of its central location and the vast majority of Odawa were living at the straits area in 1679 (Smith, 100). Trappers and traders, who caught their furs in the western Great Lakes, such as in Manitoba or north of Lake Superior, could not make the round trip to Montreal and back in one season. Winters in the Great Lakes started in November, making travel on the Great Lakes impossible by December and January. The frozen water ways would not become passible until the spring months of April or sometimes May. This meant traders had a relatively short window of opportunity to travel and carry out their business.

During the long and difficult winters, many Anishnaabek families separated into smaller villages units, to preserve food and other resources. Many Odawa would head south to areas such as Muskegon, Grand Rapids, Kalamazoo and Manistee.

These areas, all near rivers, offered excellent trapping of beaver and other fur bearing animals during the winter. Once spring would arrive, the Odawa families would venture back up north, with their canoes filled with their furs and other goods (Blackbird, 45). The inland water routes would serve a very important function of supplying furs and offering transportation as well. During the 1760s, more than 2,000 Odawa would live near the St. Joseph River, Saginaw Bay and at Detroit, all areas with easy access to the Great Lakes (McClurken, 7).

Evidence of Mackinac's importance in the fur trade is shown by the French expanding Fort Michilimackinac in the 1730s and 40s, to meet the demand of trade and resulting prosperity of the French and their Indian allies (Walthall, 205). This period of 1720-50 is the longest period of peace for the Odawa and Anishnaabek at Mackinac during the French and British eras. The Odawa would later relocate their principal village from Mackinac, thirty miles south to Waganakising in 1742, due to the soil becoming exhausted from extensive corn production at Mackinac (McClurken, 7).

Connections Beyond Trade

The rugged terrain north of Lake Superior and into Lake Nipigon was another trade route the Odawa utilized on a continual basis. The Odawa traded with the Ojibway in this far reaching region of the Great Lakes. A voyage on the unpredictable waters of Lake Superior was always a dangerous proposition. The birch bark canoes were at the mercy of this mighty lake whenever the Odawa set out on its great and terrible waters. The Odawa, along with other Anishnaabek, would always make the proper offerings to the entities that controlled the waters, and thus, their fate. The fierce water spirits known as the Underwater Panther, Underwater Serpent and others would have offerings and efforts by the Anishnaabek to secure safe travel (Kientz, 286-87).

The underwater spirits were at one time a major cultural and religious component to the Odawa, Ojibway and other Anishnaabek. For a people whom depended so much on the water, it was natural that the entities that dwelled within it were properly addressed and given the appropriate amount of respect.

A multitude of ceremonies were performed to ensure safe travel, such as tobacco offering and in some cases, the offering of dogs (Blair, 60). Any storms or tempests on the lakes were attributed to the underwater panther causing these disturbances, by it drinking and waving its immense tail (Kientz, 287). No venture onto the Great Lakes would be complete without first appeasing the mighty giants of the deep in the Great Lakes.

Evidence of this respect is seen on Odawa canoes. Canoes would have the water entities painted onto them, to help ensure safe travel (McClurken, 8). Rock paintings along the shoreline of Lake Superior depict the mighty Underwater Panther, granting passage of Anishnaabek in their canoes. These same images on ancient rock painting would appear on various ceremonial objects made by the Odawa in the 1800s from their villages at Cross Village, Good Hart and Little Traverse. These objects are bags made of reeds and basswood. The striking images of the Underwater Panther and Serpent on these bags, which are of a ceremonial nature, tell of a deep connection the Odawa have to the water (Penny, 84-85). Early French priests whom visited and lived among the Odawa tell of their infallible connection to these water spirits (Kientz, 286-87). The great Odawa Chief Sagima, whom drove out the Muscodiesh, was credited with having the Great Serpent as his guardian spirit (Schoolcraft, 203). Water was not merely a means of transportation; it was a way of life and had a deep religious connection to the tribe.

The Birth of Detroit

In 1701, the French official Cadillac persuaded the governor of New France to establish a new settlement along the western shores of Lake Huron. This proposed fort and settlement, argued Cadillac, would act as a guard against the possibility of renewed Iroquois aggression and keep British trading efforts into the interior of the Pays d'en Haut in check (Cleland, 114-15). The location of the fort was strategic in nature, at a peninsula that linked Lakes Huron and Erie together. The original name for this French establishment was fort Ponchartraine. It would later become known as Detroit.

Many Odawa from the Straits of Mackinac migrated down to Detroit after 1701 (Cleland, 114). The promise of cheaper trade goods attracted many Odawa. In addition, the lands around Mackinac were becoming exhausted from extensive farming. The lands near Detroit offered fertile grounds to grow corn, beans and squash. These three staples were critical to the Odawa. It is estimated that corn constituted nearly sixty-five percent of the Odawa diet (McClurken, 26). Cadillac not only attracted the Odawa but the Huron as well (Edmunds and Peyser, 57). Detroit would grow in size initially, but not by French populations. By 1711, Indians outnumbered the French overwhelmingly and one of the most numerous tribes at Detroit was the Odawa. The Odawa, along with the Huron and Potawatomi, would be known at this time as the “Detroit Indians”. Trade was good for the Odawa during the turn of the 18th century at Detroit but the Odawa still maintained a population at Mackinac during the occupation of Detroit. The prosperity the Odawa enjoyed would once again be challenged by other tribes. First in 1706 the Odawa and Miami quarreled, which led to the Miami evacuating Detroit and settling near the mouth of the Maumee River in Ohio. The next challenge would be much more severe and deadly.

The Fox War

The year 1710 saw Cadillac invite a great number of Sauk and Fox Indians from Wisconsin to Detroit. The promises of trading goods was the public reason Cadillac invited the Wisconsin tribe but the ulterior motive was to have these western tribes as allies, in order to have access to areas rich in furs and the water ways of Wisconsin. The Sauk and Fox were endangering trade with the lucrative fur markets held by the Lakota. With the Sauk and Fox as allies, open trade could be accomplished west of Michigan. But complicating the matter was the fact that the Sauk and Fox were old rivalries to the Anishnaabek, particularly to the Odawa and Ojibway. In 1712, two large parties of Sauk and Fox arrived to Detroit (Cleland, 115). When the Sauk and Fox arrived, they were not greeted by Cadillac. Instead, a young and inexperienced French officer by the name of Charles Regnault Sieur Dubisson met them.

Cadillac had departed to the Louisiana territory at the beginning of year, leaving Dubisson in charge at Detroit. Once the Sauk and Fox arrived, tensions immediately rose at the fort. The Sauk and Fox infringed on others hunting grounds and boasted openly of their intentions of trading with the British (Edmunds and Peyser, 62). When word reached the Sauk and Fox chiefs Lamyama and Pemaussa that Odawa war parties had raided Mascouten villages earlier that year along the St. Joseph River, the two chiefs immediately rallied their warriors to attack the feeble fort and its Indian allies (Edmunds and Peyser, 66). Many tribes came at the invitation of Cadillac, but the most prominent were the Odawa, Ojibwa, Potawatomi and Huron, also known as the “Detroit Indians” (Horr, 353).

What ensued was an epic display of willpower, force and brutality. The area of Detroit saw some of the most intense inter-tribal warfare in recorded history. The Fox and Sauk warriors’ retaliation attack during May 1712 brought the wrath of the Great Odawa war chief Sagima and Potawatomi War Chief Miksawbay. The two would join together in a battle that promised no quarter to the Sauk and Fox. The Sauk and Fox fought bravely, building their own fort a mere fifty feet from fort Detroit. For weeks, musket balls and flaming arrows littered the sky. The siege wore on, testing the mettle of the Odawa and their allies. The besieging tribes almost gave up when morale became low. The Sauk and Fox taunted them with promises of their immortality and ensuing vengeance. But Sagima and the other chiefs willed their warriors to fight, and many young war chiefs saw the battle of Detroit to establish their reputation as warriors (Edmunds and Peyser, 67-70).

The Fox saw their chances of survival dwindling as time wore on. Food and water were becoming scarce. On one occasion, to save his women and children from starvation, Lamyama asked that his life be exchange for the safety of his people. This was denied by the besiegers. Or that 80 of the best Odawa and Huron warriors would square off against 20 of Sauk and Fox warriors, thus the winner of these elite warriors deciding the war. Sagima and the other French allied Indians would have none of it. And the battles raged on.

The French, who were only approximately 30 in number, were surrounded by nearly four hundred of their allies (Edmunds and Peyser, 66). Fearing their own fate, Dubisson and his comrades combined their efforts with Sagima. It should be noted that the Sagima who was attacking the Sauk and Fox in 1712 is not the same Sagima that drove out the Muscodesh from Michigan. It is interesting that a great Odawa warrior, by the same name, would appear throughout history, in times of great conflict along the shores of the Great Lakes.

Under the cover of a late spring thunderstorm, the Sauk and Fox stole away in the middle of the night, heading north, hoping to make their way to Seneca territory. There, they hoped to find refuge in the home of old Anishnaabek enemies, the Iroquois. Fate would not have it, as the Odawa, Huron and others found their trail the next morning. They tracked down the fleeing tribe and one last fight decided the Sauk and Fox's fate. Nearly eight hundred of the one thousand Sauk and Fox perished on the banks of the Detroit River. Many women and children were held as captives or adopted into other tribes. The few Sauk and Fox whom escaped managed to make it back to their home villages in Wisconsin (Cleland, 118). The French and their allied Indians would wage war against the Fox for an additional thirty years.

Detroit in 1712 offers a unique glimpse into the dynamics of tribal communities, war and extreme measures tribes went to in order to secure dominance in Michigan and along its water. While it is true that ancient rivalries between the tribes contributed to the hostilities, it cannot be discounted the role trade and control of the trade played in this brief yet devastating war. The Sauk and Fox did not hide their intentions of trading with the Odawa and French's main economic rival, the British. A shift in economics could quite possibly destroy the fragile and hard fought economic equilibrium the Odawa and their allies had fought to establish. The British becoming the main European trading partner was something the Odawa were not willing to risk. Couple this economic factor with gross offenses, acts of violence and old animosities, and the atmosphere at Detroit in 1712 was the perfect storm for war.

The strategic location of Detroit was the primary reason for its establishment as fort. The waterways of the Great Lakes at Detroit offered a valuable location in terms of trade and ease of transportation for a multitude of tribes and French traders. Detroit became a hub of commerce for the Great Lakes region and this attracted many different tribes, but a great deal of the Indian population was from tribes within Michigan, such as the Odawa, Potawatomi and Ojibwa (Horr, 355). In the time between 1700-1760, "Detroit became a center for the Ottawa." (Kinietz, 231). Michilimackinc still remained a vital location of trade during Detroit's early tenure as a French outpost but Detroit was becoming equally important. The fight to control Detroit would reach epic levels under an Odawa war leader by the name of Pontiac.

In the spring of 1763, an Odawa would help lead a multitude of tribes against the British and seriously threaten Britain's fledging empire in North America. This Odawa was Pontiac and the Indian insurrection of that year bears his name. Pontiac's War was spread over a huge range of territory, from Wisconsin to Illinois, all of the Ohio Valley up into New York and Ontario. The tribes involved comprised an amazing array of nations, such as: Odawa, Ojibway, Potawatomi, Wyandotte, Seneca, Menominee, Miami, Sauks, Delaware and Shawnee. Using a variety of ruses, trickery and decisive combat action, the Indian forces took an amazing nine out of thirteen Forts in the matter of a few months. By October 1763, Forts Sandusky(Ohio), St. Joseph(Michigan), Miami(Indiana), Venango(Pennsylvania), Le Boeuf(Pennsylvania), Ouiantenon(Indiana), Presque Isle(New York), Augustus(Wisconsin) and Michilmackinac(Michigan) were under Anishnaabek control (Dowd, 124). Fort Michilmackinac is the most famous of these, as it was a large, well established out-post taken by the deception of a staged lacrosse game. Indian forces were heavily engaging the British in 1763 and one of the focal points was Detroit.

Detroit was crucial for an Indian victory in many ways. It housed a huge store of powder and shot, which the Indians desperately needed since the French were not supporting their efforts. This fight was entirely independent of any European support and supplies were needed.

Also, as long as Detroit was under British occupation, it had the ability to send supplies to other British soldiers elsewhere in the Great Lakes. And it was a symbol of British occupation in Anishnaabek land, breaking this symbol would be a huge moral boost for Indian forces.

From May to December of 1763, fighting around Detroit was intense. Two large schooners, The Michigan and Huron, proved to be the bane of the Anishnaabek. These two heavily armed ships brought much needed goods to the troops inside Detroit, whom the Indians resorted to starving out since they could not take the Fort by force. Pontiac, with Ojibway, Wyandotte, Odawa and Potawatomi warriors, fought bravely but could not breach the Fort. By December a tentative peace was agreed upon, as warriors needed to return to their villages to provide for their families. The coalition of warriors could not be brought back into the battlefield and by 1766 a formal peace arrangement was agreed upon. Pontiac was murdered in 1769 in Illinois by a Peroia Indian in retaliation for Pontiac's stabbing to death of a Peroia Chief, Black Dog, in Detroit some years prior (Cleland, 137).

After the violence that erupted around Pontiac's War, Odawa, Potawatomi and Huron still had villages in the Detroit area in 1768 (Askin, 53). Anishnaabek and Huron people continued to occupy the Detroit area well into the beginning of the nineteenth century. Odawas and Ojibways both granted certain tracks of land in the Detroit area to Anglo-Americans, the Odawas in 1796 and the Ojibwas in 1780 (Askin, 12-14, 322-323), demonstrating their occupation of that land during that time. As Detroit's population grew, tribes such as the Odawa and Ojibway took advantage of the opportunity by growing large amounts of corn and selling it to the residents there, along with birchbark canoes (Rogers, 762).

The Anishnaabek and other tribes of the Great Lakes did the unthinkable in 1763: they had temporarily defeated the most powerful empire in the world at the time, the British. The following actions the British took after Pontiac's war would help shape the course of American history. These actions include the Crown Proclamation of 1763, which prohibited white settlement into the Ohio Valley and Great Lakes (Cleland, 143-44).

The restrictions on land use would later be a factor in colonists revolting against Britain and leading to the Revolutionary war in 1776. It can be argued the events that took place during Pontiac's war at Detroit and the other forts around the Great Lakes played a major factor in the development of America's independence.

One hundred years after the Fox wars, Detroit would once again be a pivotal location in Odawa war efforts to protect their lands. The War of 1812 would consume the entire Great Lakes region and Ohio valley, bringing together numerous tribes in the Great Lakes, to ally with the British against American incursion onto tribal lands. Odawa warriors from Little Traverse would fight against the Americans, as did the majority of Great Lakes warriors. Warriors by the names of Assiginac, Mookmanish, Makadepensai and others from Little Traverse would follow the same trade routes previously used to trade at Montreal, only in 1812 they used these routes to engage the Americans at the battle of Niagara (Taylor, 56). Assiginac and warriors would travel in their canoes to fight the Americans at Prairie du Chien, in southern Wisconsin, on July 20, 1814, as well. Odawa and Ojibway warriors from northern Michigan would make the trip to Detroit in 1813, to fight under the leadership of perhaps the most influential and revered Indian chief in North American history; the Shawnee warrior Tecumseh (Sugden, 298).

The fact that one of the largest Indian wars to resist American expansion took place in the Great Lakes is a massive testament to the heritage and value the Great Lakes holds to the indigenous tribes there. The numbers are sobering and are a powerful message to what was being accomplished by Tecumseh and his Indian allies; between 1866 and 1890, the United States army had 948 soldiers killed by Indians. From 1810-1815, 5,000 United States army and militia lost their lives to Tecumseh and the warriors who followed him (Sugden, 398). The story of the War of 1812 is a lengthy, complicated tale of how the Great Lakes tribes made their last stand to protect their homelands in the Great Lakes. Warriors from all over the Great Lakes worked together, in the hopes of preserving what land and resources they had left. Major battles on the shores of the Great Lakes, with significant Indian partition, occurred at: Mackinac, Chicago, Detroit and Niagara.

Battles that occurred along major rivers were: Prairie du Chien, Fort Megis, Fort Portage, Morviantown and Saukenuk (Tanner, 106-07). Tecumseh perished at the battle of the Thames River, just north of Detroit, on October 5, 1813. Never again would one single chief be able to unite such a great number of Indians to fight for a common cause.

The repercussions were severe for the Great Lakes tribes. What ensued after the War of 1812 was: treaties, reservations, forced removal, loss of lands and forced assimilation into American society and culture. There is great attention and details spent on the war waged by western tribes. Custer's last stand, the march of Chief Joseph and Geronimo's resistance all are hallmarks of American history, and for good reason. But what Tecumseh and the Great Lakes Indians achieved was on a scale that was unmatched.

At the Heart of the Great Lakes

Long standing trade relationships with other tribes was an important factor in the success of the Odawa, as was another critical factor; their location in the center of the Great Lakes. For centuries the Odawa had been surrounded by the Great Lakes at Mackinac, L'Abre Croche (Middle Village) and the many islands of upper Lake Michigan and Lake Huron. Fresh water islands such as Beaver, Manitoulian, High, Garden, Drummond and others were also the locations of Odawa villages and burials. Garden Island, in Lake Michigan, is home to nearly three thousand pre-historic and historic Anishnaabek and Odawa burials. Garden Island was added to the National Register of Historic Places in 1978. This burial ground continues to be a sacred and important location for the Odawa to this day.

The Great Lakes would have a direct impact on one of the most important cultural elements of Odawa society; burials and caretaking of the dead. The burials on Garden Island are one example of how the Odawa historically have buried their dead in close proximity to the Great Lakes. Other islands, such as Beaver, Bois Blanc, Round and Mackinac also have a rich history of being the burial grounds of the Odawa and the Ojibwa.

The Bois Blanc island burial, known as the Juntunen site, and its close connection to another Straits of Mackinac burial, the Lasanen site in St. Ignace, give further proof of the cultural importance the Great Lakes has for the Anishnaabek

Artifacts discovered at the Juntunen site tell a very interesting story. Many of the items found in the burial pits are those of animals. In 1966, at St. Ignace, MI, a large ossuary burial was examined by Michigan State University archeologists. This site became known as the Lasanen site. Approximately 100 individuals were buried there, along with a plethora of associated burial items. These remains were deemed affiliated to LTBB Odawa and repatriated to them in 1995. A close examination of the items at the Lasanen site show many similarities to those at the Juntunen site. The following items were discovered at the Lasanen Site: an otter skull, beaver remains, copper, flint, stone tools, harpoons, iron pyrites, and bone awls (Cleland, 100-101). All, but the otter skull, were grave items. The exact same items were found with burials at the Juntunen site. A few items at the Juntunen site warrant special attention, and these are eight cow bones documented to have been discovered there (McPherron, 192). The presence of cow bones directly puts this site in a later time period, as cows are not a native animal to the Great Lakes and were introduced by the Spanish to North America. Another set of animal bones tying the Juntunen site to the Odawa is the large presence of fish bones. Numerous whitefish and sturgeon bones were discovered on Bois Blanc Island. The Odawa are historically known as fishermen at the Straits of Mackinac, with sturgeon and whitefish being the predominant catch to sustain village populations (Kinietz, 239-240, Feest and Feest, 774).

The one individual, buried with personal items at the Juntunen site, had dog bones interred with him as part of his medicine bundle. To this day, Odawa people are buried with special items to help ensure prosperity in the next life. Undoubtedly these items were to serve the same purpose. The dog bones show a special connection to other Odawa ceremonies concerning the deceased, in particular, the Feast of the Dead.

The Odawa have long held ceremonies to feed the ones who have walked on. The Feast of the Dead, as recorded during the historic period at Mackinac, shows the Odawa lining the burial pits with bark. The Juntenen burial pits were also lined with bark, another connection between the site from the historic period and one that is not. This time honored ceremony was practiced before the arrival of Europeans and still is practiced to this day in the Little Traverse Bay Bands of Odawa community. This ceremony has seen drastic changes with the influence of European customs and the Odawa having to modify their beliefs. The sacrificing of dogs is an age old Odawa custom, well noted being performed by the Odawa at Mackinac who were having their feast of the dead during the late 17th century (Kinetz, 283-284). Having the dog ceremony in the same area, strongly shows the Odawa as being the inhabitants of the Juntenen site. A very important factor is that dog bones were found interred with the human remains at the Richardson site as well. This similarity of an ossuary burial, dated to the historic period, with dog bones buried with the human remains, in the straits of Mackinac, further demonstrates the cultural continuity of the Odawa at the Straits of Mackinac, including Bois Blanc Island. This not only occurs during the French era, but hundreds of years preceding the early 17th century.

The Straits of Mackinac has three recorded ossuary burials, these being the Juntenen, Lasanen and Richardson sites. The Richardson site, which is 1.5 miles from the Lasanen site in St. Ignace, had 52 individuals in a burial pit and was dated to 1660.

There were certain activities that distinguished the Odawa from other tribes in the Great Lakes. Making canoes, fishing and growing corn were three of the prevalent characteristics associated with the Odawa. The remains themselves also reveal their identity. It was already established that the remains from the Juntenen site were Native American, but the forensic evidence shows even more. Cranial metric comparisons between the Juntenen and Lasanen sites show strikingly close similarities (Cleland, 142). Such minute differences show these to be the same people. In addition to the very close similarities of the remains themselves, a twined bag was discovered with an individual at the Juntenen site.

The Odawa were well-known for their making of plant fiber bags and mats, which we still do to this very day (Feest and Feest, 775, Penney, 84-85). Another important item found at the Juntenen site was corn. While it was unlikely that the corn was grown on Bois Blanc Island, a greater possibility was it was grown at Mackinac or L'Abre Croche (Emmet County) and traded for goods or other foods to the Bois Blanc Indians. Odawa growing corn at Mackinac and L'Abre Croche is well documented (Kinietz, 236, Wyckoff, 1).

The Juntenen remains were returned to the Odawa, Potawatomi and Ojibway in 2012 by the University of Michigan, where they were ceremonially reburied at the Straits of Mackinac by their Anishnaabek kin (Federal Register Notice, November 29, 2011).

Other prominent burials locations for the Odawa are the shorelines of Michigan, which coincide where the vast majority of villages were located (Hinsdale, 43 Map 2). The Odawa did have villages inland but the overwhelming majority of villages were located on the very shores of the Great Lakes, in particular, Lake Michigan (Tanner, 176). The prominent Odawa village from 1741 until the present day, Waganakising, or L'Abre Croche (Middle Village), also had burials on the shores of Lake Michigan (Federal Register, August 20, 2009). The Grand River area, along with Little Traverse, was the major center of Odawa populations by 1839 (McClurken, 9). There is little coincidence that in 2009, a large collection of remains from the mouth of the Grand River was repatriated to the Michigan tribes (Federal Register Notice, August 20, 2009). Other prominent burials locations, which usually coincide with Anishnaabek villages, include: St. Ignace, Mackinac Island, Grand River, Muskegon River, Kalamazoo, Detroit, Isle Royal, Detroit and the Saginaw Valley. Since the inception of the Native American Graves Protection and Repatriation Act in 1990, the 13 federally recognized tribes in Michigan have worked together, and sometime separately, to repatriate hundreds of individuals from all of these areas. The repatriation efforts of the Odawa, Ojibway and Potawatomi today is further testament to the importance of honoring the dead and the significance of burials near the Great Lakes.

In addition, the fact the Odawa, for more than six centuries, have lived and buried their dead within a short distance to the Great Lakes is testimony to the heritage the Great Lakes had for the tribe.

When the Odawa would be travelling to and from wintering grounds around the Great Lakes, they would often make a stop at burials to hold this important ceremony. The Odawa historian, Andrew J. Blackbird, gives this rich account that occurred during his childhood at the turn of the 19th century:

I will again return to my narrative respecting how the Ottawas used to live and travel to and fro in the State of Michigan and how they came to join the Catholic religion at Arbor Croche. Early in the spring we used to come down this beautiful stream of water (Muskegon River) in our long bark canoes, loaded with sugar, furs, deer skins, prepared venison for summer use, bear's oil, and bear meat prepared in oil, deer tallow, and sometimes a lots of honey, etc. On reaching the mouth of this river we halted for five or six days, when all the other Indians gathered, as was customary, expressly to feast for the dead. All the Indians and children used to go around among the camps and salute one another with the words "Ne-baw-baw-tche-baw-yew," that is to say, "I am or we are going around as spirits," feasting and throwing food into the fire-as they believe the spirits of the dead take the victuals and eat as they are consumed in the fire.

Blackbird's account is important on multiple levels. First, it shows the importance of the water in regards to transportation and trade. The Odawa families are bringing back their goods from the previous winter of trapping, gathering and hunting. A great deal of goods are being transported back home to northern Michigan. Blackbird tells how the families stopped, for nearly a week, to pay their respects to their dead. And the dead are buried at the mouth of the Muskegon River, meaning they are near the shore of Lake Michigan. From the straits of Mackinac to southern Michigan, the Odawa feasting their dead on the shores of the Great Lakes is well documented. The Great Lakes was essentially the main transportation routes for the Odawa, in trade and in travel in general.

Along the routes of these essential journeys, near the water, the dead were laid to rest and paid their respects with each passing season. The dead were placed in locations that did not alienate them from the Odawa, but in contrast, they were placed in locations that ensured the living decedents would incorporate them into their seasonal and ceremonial routines.

The Heritage of Fishing

The importance of fishing has been a mainstay in the ability of the Odawa to sustain themselves on the Great Lakes for many generations (Feest and Feest, 774). Fishing's importance not only meets the requirements of the tribes to feed themselves but extends to demonstrate a unique, cultural continuity for the Odawa in its relationship to the Great Lakes, which extends to religious activities and political self-identification in the 20th century. Economics would also be a factor as Odawa and Ojibway fisherman would rely on fishing to provide income for their families during difficult financial times during the late 19th century and early 20th centuries (McClurken54-55). Ancient village sites on islands in northern Lake Huron show evidence of an extreme abundance of fish bones, demonstrating the dependency the tribe had on fishing (McPherron, 191). This archeological evidence supports the oral traditions of the Odawa that they had been fishing the Great Lakes well before Europeans first visited the western Great Lakes in the 17th century.

The Straits of Mackinac would once again prove its indispensable value to the Odawa and Ojibway by providing an abundance of fish into the historic period. During the 18th century, it was estimated that up to 7,000 people could be sustained at Mackinac, due to the large amount fish inhabiting that area (White, 44). The Anishnaabek called the straits of Mackinac "where the fish lived". Mackinac, one of the most important and largest Indian villages in the Great Lakes during the 17th and 18th centuries, was possible because of the fish provided by the lakes. This surely was not a trend that coincided with European arrival but was a constitution of traditional use of the area. Specific technology, knowledge of the water and habits of the fish, could only be learned through multi-generations of fishing the Great Lakes and the area of Mackinac in particular.

Fishing the Great Lakes was a dangerous occupation, especially in birch bark canoes. Storms, winds and temperamental seas could end a fisherman's life instantly. In an account from the French official Cadillac at Mackinac in 1695, he describes fishing for the Odawa:

The great abundance of fish and the convenience of the place for fishing have caused the Indians to make a fixed settlement in those parts. It is a daily manna, which never fails; there is no family which does not catch sufficient fish in the course of the year for its subsistence. Moreover, better fish cannot be eaten, and they are bathed and nourished in the purest water, the clearest and most pellucid you could see anywhere.

I think it would be useless to explain the way in which they fish, since each country has its own method. But what I think I ought to mention is the pleasure of seeing them bring up in one net as many as a hundred whitefish. That is the most delicate fish in the lake. They are as large as a shad in France. They also catch a large number of trout that weigh up to fifty livres; they are certainly very good eating. Finally, the sturgeon, pike, carp, herring, dory, and a hundred different kinds of fish abound at this part of the lake.” (Kientz, 239-40)

Fishing was of decisive importance at other, large Anishnaabek villages in the Great Lakes as well. Sault Ste. Marie, Keewenaw Bay, Green Bay, Detroit and others all depended on fishing to help supplement dietary needs of the populations that gathered there. The Ojibway, in particular, were renowned for their skill of navigating the treacherous waters in the rapids at Sault Ste. Marie, in their quest to spear fish (Cleland, 256-57). Fishing feed the Anishnaabek and gave them the opportunity to stay in the Great Lakes.

Burials affiliated to the Odawa on the northern side of the Straits of Mackinac, at St. Ignace, also hold evidence of the importance of fishing to the Odawa. The dead were intentionally interred with harpoons made of antlers (Cleland, 55). These funerary objects demonstrate the deep connection that the water had for the Odawa. Placemen of these harpoons would be of importance in the afterlife for the deceased. The combination of locations of burials close to the water and materials placed with burials only adds to the vast importance the Great Lakes has to the Odawa.

Northern Michigan had some of the largest Odawa villages in the Great Lakes during the 18th century. The north western shore line of Lake Michigan, between Cross Village and Harbor Springs was known to the Odawa as Waganakising, or Land of the Crooked Tree. The French would later call this important location L'Abre Croche. L'Abre Croche, by 1768, would be the principal village for the Odawa in the Great Lakes (Tanner, 62-63). Important councils with other tribes and the French would be held at Waganakising. The only way so many Odawa families could survive at this important village was due to the abundance of fish Lake Michigan offered. Like their prior occupancy at Mackinac, the Odawa extensively utilized the fishing Lake Michigan provided. To this very day, hundreds of Odawa still live in and around Waganakising. And like their ancestors, Odawa men still venture out into the waters of Lake Michigan to harvest whitefish, trout and other fish in the manner of their ancestors; using gill nets and launching their boats from the same locations the Odawa had been utilizing for centuries. But the ability of the Odawa and Ojibway to pursue their ancient right of fishing the Great Lakes was not always accepted. In actuality, their right to fish was directly challenged by state and federal governments.

Fishing would later be a right the Odawa and Ojibway would fight to retain in their treaty negotiations with the United States. As the Odawa way of life changed each decade, through each century, the tribe made it a priority to sustain the right to fish the Great Lakes and inland water ways of Michigan. The Odawa fought in many wars to stay in Michigan but the conclusion of the War of 1812 against the Americans was the last military effort the Odawa made to protect their lands and rights. Post 1812 was an era that saw immediate changes for the Odawa; changes dictated by American policy, exploding American populations and the inability of the tribe to use its age old advantages as trade middlemen and its number of warriors to create influence to benefit the tribe. One of the immediate changes after 1812 was increasingly restricted access to natural resources that the tribe had depended on for thousands of years. Fishing was one of these critical natural resources. But the Odawa, as well as the Ojibway, would fight to retain the right to fish their aboriginal waters.

The Odawa fought well over a century to have their aboriginal right to fish the Great Lakes, with the traditional means of gill nets. These rights were protected under treaty stipulations. In 1836 and 1855, Odawa chiefs made the painstaking decisions of what to fight for in terms of lands and rights future generations were entitled to. Fishing, along with hunting, was priorities in these treaties (Kappler, 450-56). The right to fish had been ingrained and inherent to carry out by Odawa men for an unknown number of centuries. It fed the villages, provided a stable economy and had cultural significance. These basic rights had to be fought for with the newly established American government in order for future generations to enjoy them. But ensuring the next generation had access and the ability to fish was another battle that the tribes would fight long and hard for.

The political tie fishing has to the Odawa and Ojibway in the 20th century is well documented and profound. Indian fishermen, at the turn of the 20th century, would often work for non-Anishnaabek commercial fishermen, as wage laborers (McClurken, 54-57). But more important, tribal treaties to fish were not being recognized by states. From the time the first treaties were signed with the federal government, treaty rights were always at the forefront of Odawa communities' priorities and the tribe continually pursued them, sending delegations to Washington D.C. and Lansing, contending their rights (McClurken, 81-83). But in the day to day life of many Odawa, survival meant finding jobs that would hire Indians. Such an occupation that did not discriminate to such a large degree was fishing. The Odawa knew the lakes, where to fish and other critical information. But running their own boats and crews was not a common occurrence in the early 20th century (Cleland, 243).

Odawa and Ojibway fishermen in Lakes Michigan and Superior, from the communities of Little Traverse and Grand Traverse, contested their right to fish with gill nets in the Great Lakes during the 1970s and 80s. The same was occurring in the Upper Peninsula with Ojibway communities at Bay Mills. Indian fishermen were aware of their rights provided to them under treaty.

Fishermen at this time took the bold step of implementing those fishing rights, in direct protest from the state of Michigan (Cleland, 280). The state and non-Indian commercial fishermen did not recognize treaty rights for Indians to fish and claimed it was illegal for Indians to use gill nets. The state asserted it had jurisdiction over the fishing industry and therefore, the Indians carrying out the fishing. Tribes fought back. Multiple Odawa and Ojibway fishermen were arrested during the 1970s and 80s, which lead to high profile court cases surrounding tribes' treaty rights (Cleland, 281). These court cases were heard in the western district of the federal court in Grand Rapids, Michigan. The verdict was finally handed down in May 1979, as Judge Fox ruled that the Odawa and Ojibway, indeed, had a right to fish under the 1836 treaty. The Supreme Court refused to hear the state's appeal and the district court's ruling became final. Fishing would forever be linked to Michigan tribes' right to self-government and sovereignty under treaty rights.

The fighting became so intense, Indian fishermen would carry firearms on their fishing boats. Commercial fishermen organized major protests against Indian fishing. Slogans such as "Save a lake trout-scalp an Indian" became common place in northern Michigan (Cleland, 284). The racial tensions became extremely strained between native and non-native communities. Odawa fishermen did not buckle to the pressure and protest. One such fisherman, John Case, was an Odawa from Charlevoix, Mi. The story of John Case is a simple yet a powerful testament to the importance of fishing to the Anishnaabek.

John came from a long line of fishermen in his family. Fishing was all John knew and he did not want to change his livelihood. To say fishing was in John's blood is stating the obvious. His lineage of a fisherman literally goes back hundreds of years, perhaps thousands. During the 1980s, at Charlevoix, Mi, on the shores of Lake Michigan, John was doing what his ancestors had done for years; fishing. But in the 1980s, John was continually harassed by the state of Michigan Department of Natural Resources (DNR), local police and commercial fishermen. John's boat, fish and equipment would be illegally confiscated by the DNR (Collins, Petoskey News Review).

Large fines were levied against John for fishing. John spent time in jail, lost his fishing gear and was the target of extreme prejudice. But he persevered and maintained his right to fish was given to him and other Odawa and Ojibway fishermen by treaties. These treaties superseded state rights and jurisdiction over Indians. The tribal communities of John Case and other Indian fishermen rallied around their fishermen. The 1980s was an intense time for Odawa communities in northern Michigan. The traditional Odawa locations of Cross Village, Harbor Springs and Petoskey were once again called into service to hold councils for the Odawa (Deneau, Petoskey News Review). During these councils, the decision to pursue federal reaffirmation was decided upon by the Odawa.

This time, at the end of the 20th century, the Odawa were fighting a different battle. This battle was for the U.S. government to recognize their status as a federally recognized Indian tribe. Fishing played a huge role in the Odawa push for their federal status. John Case, along with other Indian fishermen, became the example of what Michigan tribes had the right to do under treaties. John put his life and livelihood on the line multiple times. The Odawa supported him, saying he and other Odawa had the right to fish, with nets, in the Great Lakes. The rights of Indian fishermen were a critical component for the Odawa achieving what many thought was impossible; reaffirmation of their federal status. Federal reaffirmation is different than seeking federal recognition. The Odawa of Little Traverse contended that they never lost their federal status, it was granted to them in 1836 and again in 1855 by Congress. The bold and courageous actions of John Case and other fishermen forced the state of Michigan and many others to recognize the tribe's unique and sovereign status as an Indian tribe. Fishing made all non-native communities and governments recognize what the Odawa were fighting for; inherit and sovereign rights granted under treaty. The Great Lakes, again, would prove an invaluable link and resource for the Odawa.

The 1836 and 1855 treaties would define Odawa and Ojibway politics, land bases, use of resources, economics and social structures for more than 150 years, to the present day. In order for the Anishnaabek to stay in Michigan during the 1800s, they had to agree to treaties with the federal government. The treaties were difficult and imperfect agreements that favored American interests but ultimately removed the threat of forced removal of the Odawa to Kansas (Kappler, 725-31). The Indian Removal Policy under President Andrew Jackson was a severe and genocidal policy that devastated many tribes. The Odawa were targeted for removal and were on the verge of being relocated to lands that were alien to them and without a fundamental element of their culture and identity; the Great Lakes. Odawa leaders made extraordinary efforts and concessions to stay in their homelands. Scouts were sent to Kansas to ascertain the environment there. Upon their return to Michigan, the Odawa scouts reported of a dismal environment, devoid of what needed for the Odawa to prosper. The option of relocation was never a feasible one for the Odawa of northern Michigan. Sadly, their Odawa kin to the south in Ohio, along the Maumee River, bore the brunt of the removal policy. The extremely difficult and painful time period of the early 1800s was no more evident when the Odawa in Ohio asked the Odawa in northern Michigan if they could come north to live with them, to avoid American pressure to acquire lands. The Ojibwa (leaders) at Harbor Springs, Middle Village, Cross Village and the rest of Waganakising undoubtedly had to make one of the most difficult decisions a tribe could make. The Waganakising Odawa refused the southern Odawa from joining them in Michigan, due to lack of resources and land (Karamanski, 65). The addition of hundreds of more individuals would threaten starvation and poverty to a people who were already grappling with those critical issues. Important and influential chiefs such as Pontiac and Egushawa both hailed from the Maumee River. These Chiefs, whose ancestors had been in the Great Lakes for centuries, had their people moved, against their own will. In the matter of a few decades after the War of 1812, the Odawa of Ohio were uprooted from their Great Lakes home and removed to Oklahoma. Today they have established the Ottawa Tribe of Oklahoma.

Tribes in Michigan would fight for their treaty rights for more than 150 years. For example, the Odawa from Waganakising, signed treaties with the federal government in 1836 and 1855. Those treaty rights would not be recognized for these Odawa until 1994. It was a battle that lasted 158 years. Today, the Waganakising Odawa is a federally recognized tribe, the Little Traverse Bay Bands of Odawa Indians. And fishing played a major role in their battle to have their federal status reaffirmed by the Congress of the United States.

The community at Little Travers actually fractured after the War of 1812 and the treaty of 1836, as important War Chiefs and signatories of the 1836 treaty from Little Traverse, Assiginac, Mookmanish, Apawsuckgun, and others left their homelands along the shores of Lake Michigan, due to their distain of the treaty negotiations that they participated in with the Americans. It is telling where Assigianc and others went to after leaving Michigan. They went to Manitioulia Island, an old and familiar location in the heart of the Great Lakes. Undoubtedly part of Assiginac and the others decisions to remove to Manitoulian Island was the fact that "Ottawa Island" under the jurisdiction of Britain at the time, therefore American laws and policy did not apply. But, the historical and cultural ties to the island go much deeper and are more profound. Odawa have inhabited Manitoulian Island for many generations preceding European contact. It has always been recognized as aboriginal territory for the Odawa. The largest freshwater island in the world, Mainitoulia Island served as a haven for the Odawa during the Iroquois Wars and would serve as a refuge again after 1836. The Odawa who chose to leave northern Michigan could have relocated to a plethora of other places in the territory known today as Canada but it is telling where they did choose. Essentially they chose to stay home, in the heart of the Great Lakes. They chose to stay in a location that was familiar, where they could fish, carry out trade and harvest natural resources they were familiar with. In addition, like many other Odawa and other tribes who fought during the War of 1812, they desired to be close to where their ancestors had been laid to rest. Honoring the dead has been, and continues to be this day, a very sacred and important ceremony for the Odawa.

Part of the cultural landscape of the Odawa in the Great Lakes is where they buried their dead. And the Odawa, predominately, buried their loved one within sight of the Great Lakes or along inland lakes and rivers.

In conclusion, the connection of heritage between the Odawa and Anishnaabek to the Great Lakes can be seen on multiple levels. The connection the water has to the Odawa transcends everyday life. The fate of a people would often rely on what the water provided, by means of subsistence, political activities, economics and spirituality. Wars of various natures would be waged by the Odawa to stay home. With the majority of Odawa still living in their ancestral homelands, one could argue they have fought successfully.

BIBLIOGRAPHY

Armour, David. At the Crossroads Michilmackinac During the American Revolution. Williamston, TriKraft, 1978.

Askins, John. The John Askin Papers Volume I & II:1747-1795, 1796-1820. Detroit: Detroit Library Commission, 1928.

Blackbird, Andrew J. History of the Ottawa and Chippewa Indians of Michigan. Ypsilanti, The Ypsilantian Job Printing House, 1887.

Blair, Emma Helen. The Indians Tribes of the Upper Mississippi Valley and Region of the Great Lakes. Lincoln and London: University of Nebraska Press, 1996.

Cleland, Charles E. The Lasanen Site An Historical Burial Locality in Mackinac County, Michigan. East Lansing: Publications of the Museum Michigan State University, 1971.

Cleland, Charles E. Rites of Conquest The History and Culture of Michigan's Native Americans. Ann Arbor: The University of Michigan Press, 1992.

Collins, Audrey. "Does Indian Fishing Order Apply to Non-treaty Tribes?" Petoskey News Review November 23, 1983.

Deneau, Shelley. "Indian Elders share old ways via tape recorder." Petoskey News Review August 19, 1985.

Edmunds, R. David and Peyser, Joseph. The Fox Wars The Mesquakie Challenge to New France. Norman, University of Oklahoma Press, 1993.

Feest, Johann E and Christian. Handbook of North American Indians Northeast Vol. 15. Washington, D.C: Smithsonian Institution, 1978.

Federal Register Notice. August 20, 2009.

Federal Register Notice. November 29, 2011.

NAM M234, R.421:722-725. Augustin Hamlin to Lewis Cass December 5, 1835.

Hinsdale, Wilbert. Archaeological Atlas of Michigan. Ann Arbor: University of Michigan Press, 1931.

Hinsdale, Wilbert. Archaeological Atlas of Michigan. Ann Arbor: University of Michigan Press, 1931.

Horr, David Agee. American Indian Ethnohistory North Central and Northeastern Indians. New York, Garland Publishing Inc., 1974.

Innis, Harold. The Fur Trade in Canada. 4th ed. 1. Toronto: University of Toronto Press, 2001.

Kappler, Charles J. Indian Treaties 1778-1883. Washington: Government Printing Office, 1904.

Karmanski, Theodore J. Blackbird's Song Andrew J. Blackbird and the Odawa People. East Lansing: Michigan State University Press, 2012.

Kinietz, Vernon. The Indians of the Western Great Lakes, 1615-1760. Ann Arbor: Ann Arbor Paperbacks, The University of Michigan Press, 1940.

McClurken, James M. Gah-Baeh-Jhagwah-Buk The Way It Happened A Visual Culture History of the Little Traverse Bay Bands of Odawa. East Lansing: Michigan State University Museum, Michigan State University, 1991.

McClurken, James. "We Wish To Be Civilized: Ottawa-American Political Contests On The Michigan Frontier". Diss. Michigan State University, 1987.

McClurken, James M. "Our People Our Journey The Little River Band of Ottawa Indians". East Lansing: Michigan State University Press, 2009.

McPherron, Alan. "The Juntunen Site and the Late Woodland Prehistory of the Upper Great Lakes Area". Ann Arbor, University of Michigan, 1967.

Penney, David W. Art of the American Indian Frontier The Chandler-Pohrt Collection. Seattle, University of Washington Press, 1992.

Rogers, E. S. Handbook of North American Indians Northeast Vol. 15. Washington, D.C: Smithsonian Institution, 1978.

Schoolcraft, Henry R. History of the Indian Tribes of the United States: Their Present Condition and Prospects, and a Sketch of their Ancient Status. Philadelphia: J.B. Lippincott & Co. 1857.

Smith, Beverly Ann. "Systems of Subsistence and Networks of Exchange in the Terminal Woodland and Early Historic Periods in the Upper Great Lakes" Diss. Michigan State University. 1996.

Sugden, John. Tecumseh A Life. New York: Henry Holt and Company, 1997.

Tanner, Helen. Atlas of Great Lakes Indian History. Norman: The University of Oklahoma Press, 1987.

Tanner, John. A Narrative of the Captivity and Adventures of John Tanner, U.S. Interpreter at the Saut De Ste. Marie During Thirty Years Residence Among the Indians in the Interior of North America. London: Haldwin and Cradock Pater-noster Row, 1830.

Taylor, J. Garth. Assiginack's Canoe. Memories of Indian Warfare on the Great Lakes. The Beaver. 1986.

Thwaites, Reuben Gold. "Early Mackinac." Collections of the State Historical Society of Wisconsin Vol. XIV, 1898: 1-16.

Trigger, Bruce C. The Children of Aataentsic A History of the Huron People to 1660. Montreal: McGill-Queen's University Press, 1987.

Walthall, John A. French Colonial Archaeology The Illinois Country and The Western Great Lakes. Urbana and Chicago: University of Illinois Press, 1991.

White, Richard. The Middle Ground. Indians, Empires and Republics in the Great Lakes Region, 1650-1815. Cambridge: Cambridge University Press, 1991.

Wyckoff, Larry M. Annual Reports of the Mackinac Agent to the Commissioner of Indian Affairs, 1837-1888. 1992

JIIMAAN TO MI-SHI-NE-MACKI-NONG: ODAWA TRADE ROUTES

by Wayne Lusardi

Native Americans have lived around the upper Great Lakes for nearly 10,000 years. The original inhabitants of Michigan were largely migratory and followed big game herds such as caribou transiting the landscape following the last glacial retreat. A more hospitable climate and the development of agriculture and fishing led to population increases around the Great Lakes during the Late Archaic period (5,000-2,500 years ago). Not long after, Michigan's inhabitants began participating in a trade network that would eventually extend from Lake Superior to the Gulf of Mexico. A scarcity of particular raw materials, together with an abundance of certain others allowed Michigan natives a unique opportunity to trade and develop networks that would last for centuries.

Exchange is a primary element of culture. Michigan's archaeological record is full of evidence that long distance trade began early in the region, and materials not native to the state and artifacts not of local design have often been found at Late Archaic sites throughout Michigan. Extensive lake travel in Michigan began during the Woodland period (2,500-500 years ago) when indigenous peoples expanded their range on the lakes for water transportation (Figure 1). The large carrying capacity of a bark canoe, known in Anishnaabawomin (commonly referred to as Algonquian) as *jiimaan*, facilitated movement of huge amounts of trade materials and allowed bulk cargoes of raw materials as well as finished goods to be moved long distances more easily. Mica from the Appalachian Mountains, obsidian from the Yellowstone region of Wyoming, seashells from the Gulf of Mexico, and flint from Indiana and Ohio were highly sought after, and many of these were manufactured into elaborate ceremonial items for burials. Typical funerary goods included copper axes and awls, beautifully decorated ceramic vessels, strands of fresh water pearls, animal effigy smoking pipes, mica mirrors, and engraved turtle shell bowls (Cleland 1975: 4).



Figure 1: Odawa village along the Michigan shore (Clifton et al. 1986: 4).



Figure 2: Prehistoric copper mining at Isle Royale (Drier & DuTemple 1961: 14).

Michigan natives in turn provided their neighbors with a material abundant in the Keweenaw Peninsula and Isle Royale: copper! The distribution of Michigan copper hundreds of miles beyond where it would have been carried naturally by glaciers as float copper exemplifies how extensive the lines of trade were (Hinsdale 1983: 102). To Native Americans copper was not just another raw material. It was believed to possess positive supernatural qualities, and it was a prestige commodity in areas far from the Great Lakes (Robertson et al. 1999: 114). Among the earliest miners and metal workers in the Western Hemisphere, Michigan natives collected float copper and extracted lodes from bedrock using primitive tools and fire (Figure 2) (Drier and DuTemple 1961). Odawa traders then passed raw copper and copper implements (Figure 3) to the south in exchange for ornaments made from marine shells and other exotic goods. Shell and copper artifacts such as beads, axes, awls and harpoons, in addition to galena, red ocher, and ceremonial flint spear points were highly sought after (Cleland 1975: 3).

Elaborate trading networks fully developed between the Odawa, Potawatomi, and Ojibwa peoples of Michigan more than 1,000 years ago. Collectively referred to as Anishnaabek, the three cultures spoke similar dialects of the Algonquian language and were organized socially and economically as the Three Fires Confederacy (Cleland 1975: 14; Clifton et al. 1986: v).

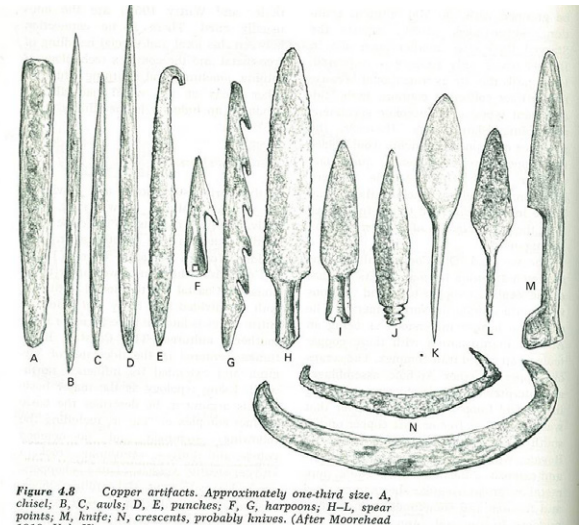


Figure 3: A variety of prehistoric copper artifacts (Jennings 1968: 126).

The Anishnaabek resided between northern Algonquian hunters and southern Huron farmers. The Odawa in particular were middlemen, great traders whose name, *Adawe*, means to trade or to buy and sell (Cleland 1975: 9). Each Odawa family owned a section of trade route that was both a geographical path or waterway and a set of relationships with trading partners along the way (McClurken 1986: 11). More than just a highway for material goods, the Anishnaabek routes facilitated cultural exchange throughout the Great Lakes region. So important were the trade routes that marriages were arranged to strengthen and safeguard their ownership. Relative peace between different cultures generally occurred along the lines of trade, though wars did ensue for their control. In the historical era, this was usually a result of Euro-American intrigue (Hinsdale 1983: 103). The Odawa were especially on guard when passing through Iroquois territory, and not until the Grand Settlement of 1701 were the Iroquois expressly forbidden to molest the Odawa or remain other than neutral in all future Anglo-French wars (White 1991: 49). Odawa trade was influencing other tribal nations' policies as well as their own.



Figure 4: The wiigwaas jiimaan (Jesse Besser Museum of Northeast Michigan).

Goods moved along the trade routes included exotic materials such as bird feathers and marine shells, but more important than these were the items necessary for survival. The Odawa supplied the Chippewa and Cree to the north with woven mats, corn, tobacco, maple sugar, roots and herbs harvested by the Odawa and their southern Huron neighbors. The corn and other food sources that the Odawa provided helped northern tribes, located in areas with shorter growing seasons, survive long, hard winters. In return, the Odawa received skins and fur to be used locally or traded southward (Ellis 1974: 87 and McClurken 1986: 11).

Michigan's first mariners navigated in small boats, typically dugout canoes on the inland waterways and bark canoes on the open lakes. These small craft provided an effective means for trade, communication and social travel, as well as platforms for hunting, fishing, and gathering (Pott 1999: 359). Bark canoes, known in Anishnaabawomin as wiigwaas jiimaan (Figure 4), were extremely seaworthy and were often paddled by Anishnaabek across the open waters of the Great Lakes out of sight of land (McClurken 2009: 2). More often, navigation was facilitated by following natural or human made waypoints along the routes. Dunes, glacial erratic or large stones, intentionally bent trees, and established shoreline campsites or villages helped guide the mariner.

According to Jacques Sabrevois de Bleury, commandant at Ft. Pontchartrain at Detroit (1714-1717), "All these nations make a great many bark canoes, which are very profitable for them. They do this sort of work in the summer. The women sew these canoes with roots; the men cut and shape the bark and make the gunwales, cross-pieces and ribs; the women gum them. It is no small labor to make a canoe, in which there is much symmetry and measurement (Kent 1997: 5)."

Birch bark canoes could haul tons of goods and more than a half dozen people, and the canoes themselves were widely emulated because of their steadiness in rapids, shallow draft, and high cargo capacity. The canoes, like the goods they carried, were also traded extensively (Ellis 1974: 87; Hinsdale 1983: 102; Kent 1997: 4-5). Even the bark was traded southward to areas devoid of birch trees to be used in canoe construction. The birch canoe was so characteristic of the culture in the vicinity of the Great Lakes that the region is occasionally referred to as the "birch bark area" (Hinsdale 1983: 107). Because of their light weight, canoes could also be carried long distances overland between waterways. The craft could be repaired easily without special tools, could be turned over to serve as a temporary shelter, and some canoes were large enough to carry five tons or more of cargo along with the crew (Adney and Chapelle 1983: 3; Kent 1997: 279).



Figure 5: Lake Panther (Haltiner 2002: 130).



Figure 6: The thunderbird represented on a shale disk from Alpena (Jesse Besser Museum of Northeast Michigan).

According to the *History of the Ottawa and Chippewa Indians of Michigan* by Chief Mack-e-te-be-Nessy first published in 1887:

In navigating Lake Michigan they used long bark canoes in which they carried their whole families and enough provisions to last them all winter. These canoes were made very light, out of white birch bark, and with a fair wind they could skip very lightly on the waters, going very fast, and could stand a very heavy sea. In one day they could sail quite a long distance along the coast of Lake Michigan. When night overtook them they would land and make wigwams with light poles of cedar which they always carried in their canoes (Mack-e-te-be-Nessy 1887: 33).

Native mariners considered the Great Lakes hazardous for boats centuries before European contact. Many of the Late Woodland period shale disks found near the mouth of Thunder Bay River, for example, were incised with symbols recognizable in Algonquian mythology, and the figure of Me-she-pe-shiw is well represented (Figure 5). A panther that lived beneath the waters of Lake Huron, Me-she-pe-shiw was believed to cause storms with immense and deadly waves with the thrash of its tail. Native travelers were mindful to sacrifice dogs or tobacco to appease Me-she-pe-shiw before beginning long voyages across the Great Lakes (Cleland et al. 1984: 236-239). Me-she-pe-shiw was so revered that Odawa chiefs were known to paint the panther's image on their war canoes before going into battle.

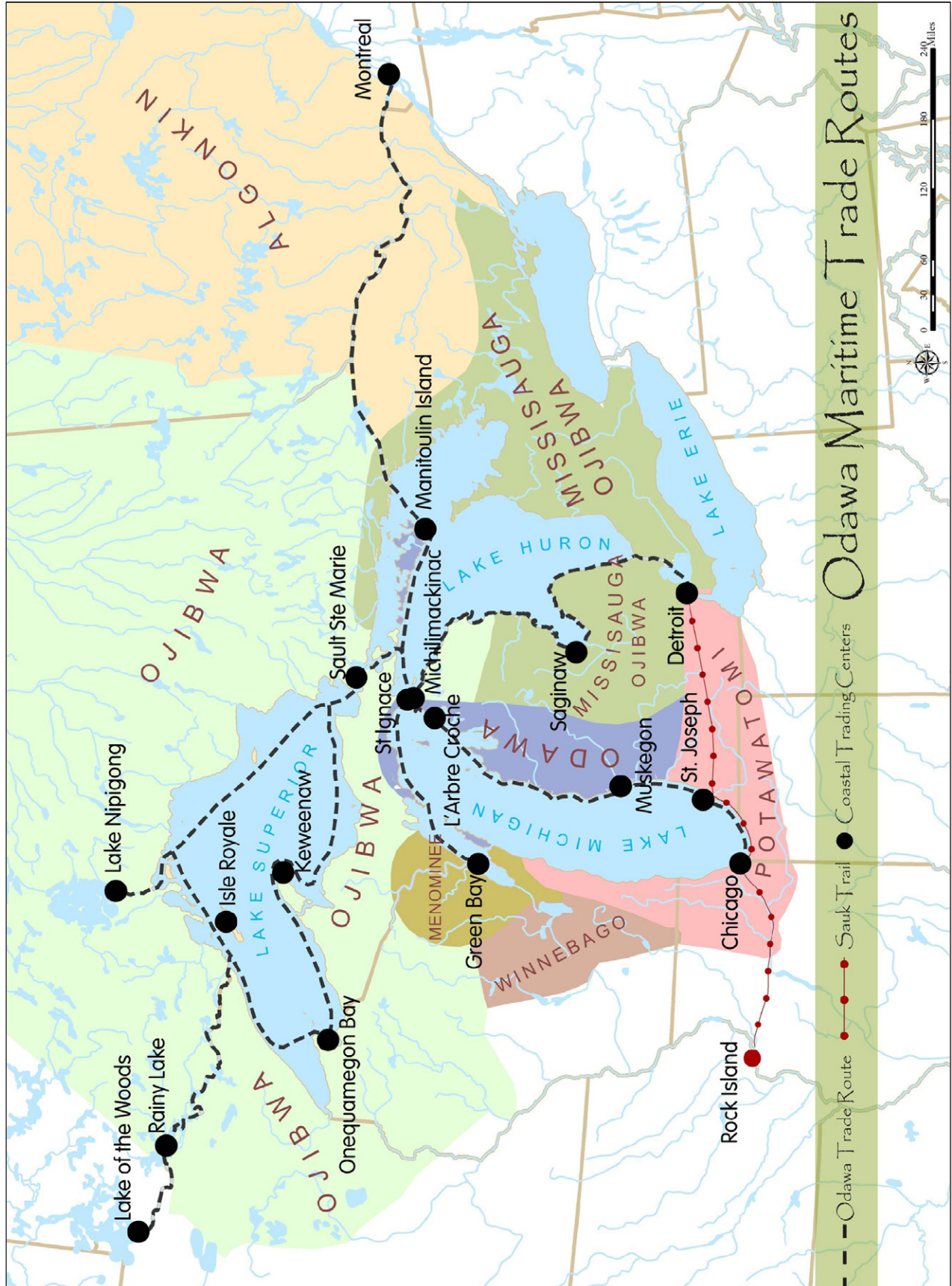
Ah-ne-mi-ke, or thunderbird, is also featured on the disks (Figure 6) and was believed to generate thunder by flapping its wings and throwing lightning bolts at malevolent water creatures (Haltiner 2002: 131). Thunderbirds and lake panthers represented the spiritual conflicts between the worlds above and below and their images are also depicted on the Sanilac Petroglyphs, the most extensive collection of Native rock carvings in Michigan (Zurel 1999: 252).

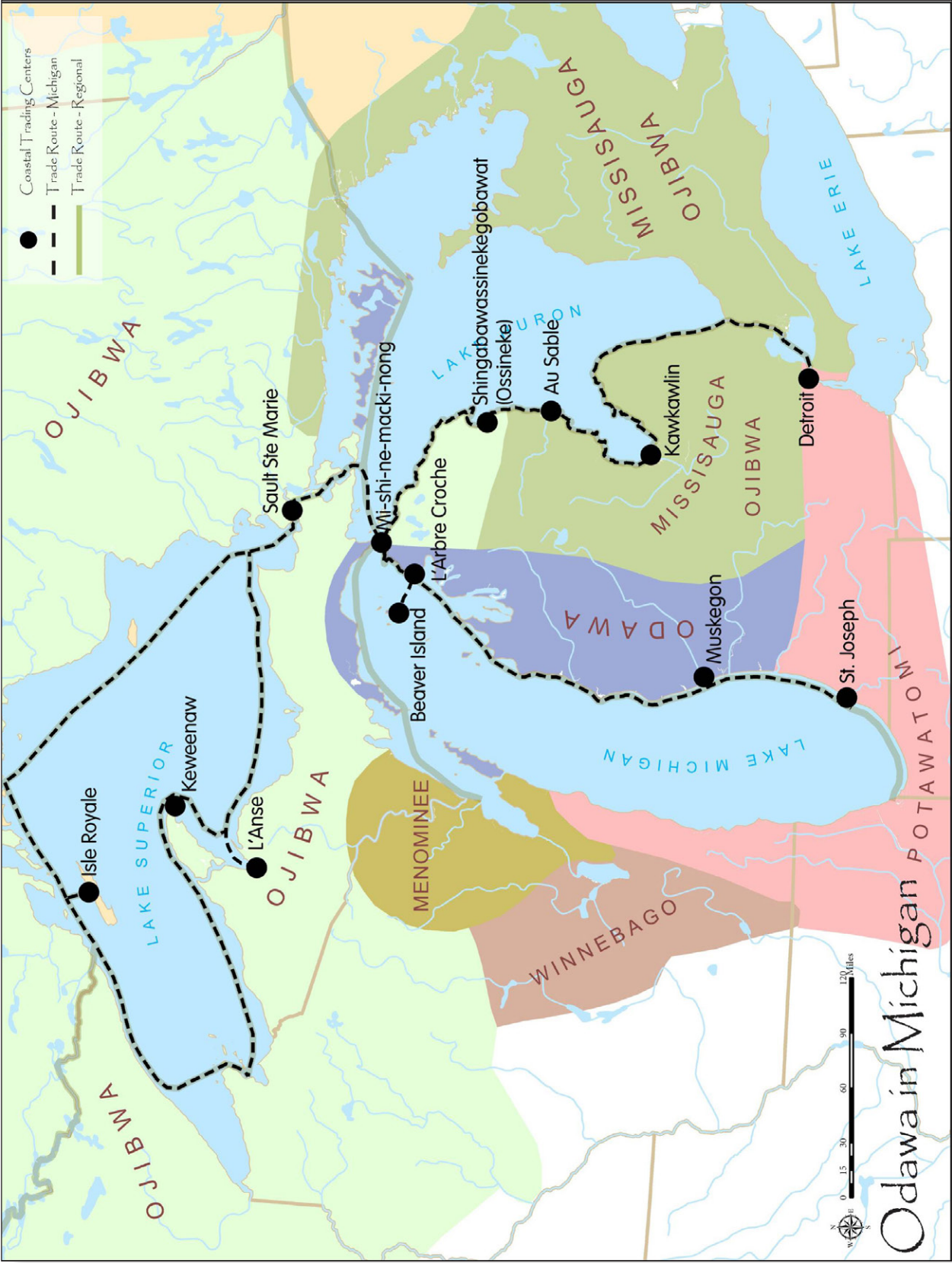
Jean Nicolet, the first European to enter what is today Michigan, traveled by canoe through the Straits of Mackinac by way of the Ottawa and French Rivers in 1634. Nicolet and other early European explorers followed existing routes long-established by the Odawa and other indigenous traders (Heldman 1999: 294). From the very beginning of their contact with French explorers, traders, missionaries and soldiers, the Anishnaabek became suppliers of goods and services vital to French survival. Anishnaabek provided the French with clothing, housing, canoes and food. Deer, moose, whitefish, lake trout, turkey and water fowl, as well as bark, pitch, cordage, maple sugar and hides became commodities with which the Indians sold or traded with their new neighbors (Cleland 2000: 15; Kent 1997: 3-4). Native-supplied natural resources were the means by which Anishnaabek prospered and Euro-Americans survived. The French in turn provided the Anishnaabek with copper kettles, iron knives, firearms and cloth. The introduction of European trade goods quickly altered daily living for the Anishnaabek, and many ancient practices were forgotten as new technology made life easier.

Over-trapping and changes in European fashion after the 1830s contributed to the decline of the Great Lakes fur trade. Trade in wild rice, meat, fish and other natural resources became even more important to the Anishnaabek and these commodities filled the gap left by the collapse of the international fur market (Cleland 2000: 15).

According to Michigan pre-historian Dr. Wilbert B. Hinsdale, “The trails or paths that the Indians habitually took in going from place to place are among the most valuable relics of their time.” Historically, they are of particular importance because many of them were followed by the first Euro-Americans and finally became main roads and routes of travel (Hinsdale 1983: 88). As often as possible the trails utilized water transportation for it was far easier to move large cargoes via canoe. Waterways provided the communication channels for trade as well as warfare and diplomacy (Tanner 1987: 39). Notable Odawa maritime trails (see Map 1) extended northward from Detroit along the western shore of lower Lake Huron around the Thumb, through Saginaw and northerly up the coast past Alpena to the Straits of Mackinac. A similar route extended from Chicago up the eastern Lake Michigan shoreline to the Straits. In a sense all Odawa trails converged at the Straits and it is no coincidence that the geographical junction of three of the five Great Lakes became strategically important early in Michigan’s history. From the Straits trails extended westward along the north shore of Lake Michigan to Green Bay. Trails northward of the Straits encompassed nearly the entire coastline of Lake Superior and its major tributaries including waterways to Lake Nipigon. Eastward the trails extended into and across Georgian Bay then along the French River through Lake Nipissing and all the way to Montreal via the Ottawa River. Secondary trails formed an elaborate web off the primary routes and in addition to these collaterals there were hundreds of local paths leading from village to village, to hunting and fishing grounds, and to agricultural fields (Hinsdale 1983: 90).

The proposed *Jiimaan to Mi-shi-ne-mackinong: Odawa Trade Routes* follows as closely as possible the original routes of travel used by Anishnaabek mariners, and later Euro-American explorers (see Map 2). The trail is continuous in that it follows established maritime trade routes, though individual mariners may have utilized only portions of the route. The routes, of course, extended far beyond the confines of what is today the state of Michigan and many traders continued into Indiana, Illinois, Wisconsin, Minnesota, Ohio and Ontario, and eventually into the nation’s heartland through a system of interconnecting rivers and waterways. The period of significance dates from the Middle Woodland Period to end of the French occupation of Michigan in 1761. The Principal Components of the maritime heritage trail are the routes themselves, along with primary Anishnaabek trading and maritime centers located along Michigan’s Great Lakes Coastlines. The historical and cultural relevance these trails have had for the Odawa span centuries, and influenced wars, alliances, marriages, treaties and tribal locations. The Odawa indeed remain a part of Michigan and reside in their present location because of their role as traders before and during the historic period.





ANISHNAABEK COASTAL TRADING AND MARITIME CENTERS IN MICHIGAN (ORIGINATING BEFORE 1761)

Detroit: The first people believed to inhabit the Detroit area were known for their elaborate burial and ceremonial mounds. The largest mound on the eastern bank of the Rouge River was 200 feet in length, 300 feet wide, and 20-40 feet tall. The mounds functioned not only for the burial of the honored dead, but also for the purposes of trade and exchange, obtaining marriage partners, and renewing social and political alliances. Another significant mound complex was located at Fort Wayne east of Detroit and dates to about 1,000 years before present (Hinsdale 1983: 67-68, 146-147; Stothers 1999: 202). French missionaries passed by what would become the city of Detroit in 1670 en route to Sault Ste. Marie. When paddling up the Detroit River, Father René Brehant de Galinée came across a stone idol venerated by the Indians to assure safe passage across Lake Erie. Galinée destroyed the idol with an axe and dropped the pieces into the river (Dunbar and May 1988: 39). In 1701 Antoine de la Mothe Cadillac founded the settlement of Fort Ponchartrain de Détroit and in 1710 Cadillac invited the Potawatomi to settle near the fort at Detroit for the French fur trade. By 1765 the city had more than 800 residents becoming the largest city between Montreal and New Orleans. The French surrendered Fort Ponchartrain to the British on November 29, 1760. Three years later Odawa Chief Pontiac led an unsuccessful six-month long siege against the fort. In response, however, a British Royal Proclamation of 1763 included restrictions on white settlement in Indian territories (Dunbar and May 1988: 86). Detroit finally passed to the United States in 1796 following the signing of the Jay Treaty two years earlier.

During the War of 1812 British General Isaac Brock with 730 troops and 600 Native Americans allied under the Shawnee Chief Tecumseh, crossed the Detroit River at Fort Wayne then besieged, captured, and occupied Detroit for 13 months (Dunbar and May 1988: 154-156).

On September 8, 1815 the Treaty of Springwells was signed by General (later President) William Henry Harrison representing the United States government, and eight Native American tribes, the Wyandot, Delaware, Seneca, Shawnee, Miami, Chippewa, Odawa, and Potawatomie, that had fought with the British against the United States (*Treaty with the Wyandot, Etc.*, 1815). Making peace with the tribes formally allied with England was the official end of the War of 1812.

Kawkawlin: Located at what is today Bay City at the mouths of the Saginaw and Kawkawlin Rivers, the Ojibwa village was named U-guh-konning or “place of pike fish” (Sharp 1974: 11, 42). The Saginaw Treaty of 1819 opened the lands of Saginaw Valley to Americans for \$1.25 per acre. Ojibwa withheld 6,000 acres from the sale to establish a large reservation near the mouth of the rivers and continue to occupy this area today (Sharp 1974: 21).

Au Sable: Douglas Houghton, the first geologist for the State of Michigan, conducted a mapping trip along the western shore of Lake Huron in 1838. Houghton produced a geological map illustrating the main features of the Au Sable shoreline including the location of an Odawa village near the mouth of the Tawas River, and an Ojibwa village along the Au Sable River, just inland from its mouth. The map also records a number of local place names in both Algonquian and English. Houghton’s map refers to Tawas Bay as Ottawa Bay, and both Tawas River and Tawas Point are referred to as Shaw-ti-mi-aw. Grass River is termed the Menom-in-e River, and the Au Sable River is rendered “Kenot-e-gong” or “Riviere au Sable,” with the note that the Indian name means “Wood River” (O’Shea 2004: 5).

Shingabawassinekegobawat: Today the site of this once thriving Ojibwa village is simply known as Ossineke. Several nearby villages include Sagonakato (at Alpena), Mujekewis (at Isaacson Bay), Shoshekonawbegoking (at end of North Point), and Shavinaws (at False Presque Isle). Just north of Hoelt State Park on the Lake Huron shoreline is located a huge stone about 6 feet in height and 12 feet across. It was considered a sacred stone by the Ojibwa who deposited many offerings and made sacrifices upon its flat surface (Haltiner 2002: 95, 143-145).



Figure 7: A glacial erratic near the mouth of Black River on the Lake Huron shore in Alcona County (photo by W.R. Lusardi).

Similar stones, some of which are glacial erratic (Figure 7), exist along the coastline south of Black River, at Devil's Creek near Ossineke, on Sugar Island in Thunder Bay, and at Huron Beach. Opposite Crooked Island on the mainland stands another large rock estimated to weigh 100 tons, pieces of which were supposedly taken by Anishnaabek as charms or tokens (Haltiner 2002: 96).

The Besser Museum of Northeast Michigan located in Alpena is home to the Haltiner Archaeology collection consisting of approximately 10,000 native Michigan artifacts. Exhibited in the Peoples of Lakes and Forests Gallery, the collection gives insight into the culture of Northeast Michigan's earliest inhabitants. The Besser Museum also curates a unique collection of prehistoric shale disks (Figure 8). The symbols inscribed on some of the disks resembled those of 18th-century Mide-wi-win birch bark scrolls. Additional study revealed a similarity with symbols in the rock art of the Canadian Shield. Relationships with symbols and myths of historic Algonquian people, mainly the Ojibwa, resulted in naming the disks Naub-cow-zo-win disks after the Ojibwa and Odawa word for "charms of personal significance" (Cleland et al. 1984: 235-250).



Figure 8: A collection of shale disks from the Hamshire site, exhibited at the Besser Museum in Alpena (Jesse Besser Museum of Northeast Michigan).

Mi-shi-ne-macki-nong: The Straits at Mackinac and its many islands were long recognized for their geographical, cultural and strategic characteristics. By the time the Anishnaabek arrived at the Straits a largely decimated culture referred to as the Mi-shi-ne-macki-nong was already living on Mackinaw Island. The area quickly became a converging point as traders moved goods between Lake Huron and Lake Michigan via canoe and up the St. Mary's River to Lake Superior. The lakes provided access to the vast western wilderness, home of numerous indigenous cultures as well as a seemingly inexhaustible supply of fur bearing animals. When Jean Nicolet, the first Frenchman to see the area, paddled his birch bark canoe through the Straits in 1634 en route to Green Bay, the French immediately recognized the significance of the Straits and the utilization of well-established maritime trade routes. Huron Indian refugees founded a village in St. Ignace in 1671. A year later Michilimackinac became the permanent trade center of the Odawa, Huron, Tiononattes and French, and the site of the annual trading rendezvous in the Great Lakes region (Kent 1997: 3). Father Marquette's French Jesuit mission was maintained until 1706, was suspended from 1706-1712, and reopened to serve the region until 1741.



Figure 9: Anishnaabek culture continues on the shore of Lake Huron (photo by W.R. Lusardi).

A National Historic Landmark and a Michigan Registered Historic Site, the Museum of Ojibwa Culture and Marquette Mission Park in St. Ignace interpret the rich archaeology and history of the 17th-century Huron Indian Village, Father Marquette's French Jesuit Mission, and local Ojibwa traditions and culture. Northeast Michigan also hosts annual pow wows and rendezvous on the Lake Huron shore (Figure 9).

Beaver Island: Native Americans lived, fished and hunted on Beaver Island since at least the Middle Woodland, and the Odawa resided there for more than 300 years. In 1832 Father Frederic Baraga (later Bishop Baraga) travelled from L'Arbre Croche to convert the Odawa living on the north shore of the island to Catholicism. He baptized 22 natives but none living at the settlement near Whiskey Point. A few years later, some of the 199 natives living on Garden Island north of Beaver Island were converted by other missionaries. Traders and trappers began to settle Beaver Island in the early 1800s to take advantage of its abundant fish supply, ample forests, and easily accessible harbor.

L'Arbre Croche: Harbor Springs on Lake Michigan was once known as L'Arbre Croche, translated "Crooked Tree." By 1741 the Odawa living at the Straits of Mackinac had exhausted their corn fields after decades of cultivation.

To keep them nearby, the French promised to help the Odawa clear fields at L'Arbre Croche, 25 miles to the southwest (Greenman 1961: 30; Leach 1883: 13).

Since traders at Michilimackinac regularly purchased canoes and large quantities of corn and fat from the Odawa, the French did not want them to live too far away. Father Pierre Du Jaunay transferred the Mission of St. Ignace to L'Arbre Croche and ministered there to the 180 warriors and their families. By 1847 L'Arbre Croche had the largest concentration of Anishnaabek in Michigan. The Odawa at L'Arbre Croche could not have survived without the plentiful abundance of fish. The continued practice of fishing throughout the centuries by the Odawa would ultimately be secured and protected in 1836 treaty negotiations with the United States Government.

The Museum of L'Arbre Croche History, founded in 1995 in the parish hall on the grounds of Holy Cross Church, displays many aspects of the region's past. The Odawa Room, for example, contains stone and wooden tools made and used by the Odawa, and L'Arbre Croche Room contains photos of local Native Americans along with a mixture of implements and religious artifacts. The Baraga Room features Bishop Baraga's writings and records of his work with the Odawa of Beaver Island.

Muskegon: Muskegon is derived from the Odawa term *Masquigon*, translated “marshy river or swamp” (Romig 1973: 386). Located at the mouth of a resource-abundant river flowing into Lake Michigan, the area was continually inhabited for 8,000 years beginning in Paleo-Indian times and extending throughout the Archaic and Woodland periods. Muskegon became a major trading center for the Odawa and Potawatomi. Father Jacques Marquette traveled through Muskegon in 1675 and French soldiers under La Salle’s command passed through the area in 1679. Odawa Chief Pentalouan lived at Muskegon in the 1730s and was a leading participant in the French-inspired annihilation of the Illinois Mesquakie (Tanner 1987: 42). In 1742 the French forced Pentalouan to relocate to Traverse Bay, but by the early 1800s when Euro-American trappers entered the area Muskegon was once again an Odawa village (Yakes 2009; Sherman 2003: 2; Tanner 1987: 134).

St. Joseph: The mouth of the St. Joseph River is situated along a strategic maritime trade route that connected the Anishnaabek of Michigan with a half dozen Midwestern tribes. The Sauk Trail (see Map 1), a combined land and water route, was literally the road out of Michigan and crossed Potawatomi territory from north central Illinois to Detroit. Although named after the Sac tribe of Illinois, the Sauk Trail was used previously and simultaneously by the Fox, Winnebago, Kickapoo, Potawatomi, Kaskaskia and Peoria. It extended from Saukenuk on Rock Island in the Mississippi River to the Illinois River near Peru, then along the north bank of the Illinois River to Joliet. From there it continued to Valparaiso and La Porte, Indiana and then into southern Michigan. The trail crossed the St. Joseph’s River at Niles, and then continued to Three Rivers, Ypsilanti and Detroit. Along the way the Sauk intersected dozens of smaller trails leading to Vincennes, Green Bay, Fort Wayne and Little Traverse Bay.

French explorers entered the St. Joseph area in 1669, and 10 years later La Salle built Fort Miami on a bluff overlooking Lake Michigan. La Salle waited at St. Joseph for the long overdue *Griffin*, and when convinced it would not arrive, he and his party became the first Europeans to cross Michigan’s Lower Peninsula (Heldman 1999: 295).

The French established Fort St. Joseph at the river mouth in 1691 and it was occupied by them, and subsequently the British, until its abandonment in 1781 when it was raided by the Spanish during the American Revolution (Dunbar and May 1988: 98-100; Cremin and Nassaney 2003: 73-74). St. Joseph became a Euro-American trading post in the late 18th century and the Potawatomi continue to live in the area today.

Sault Ste. Marie: The Ojibwa inhabited what is today Sault Ste. Marie long before the French arrived in the 17th century. Primarily fishermen, their settlements dotted the shorelines of Lake Superior, Lake Michigan and Lake Huron, as well as the St. Marys River and the Straits of Mackinac. Ojibwa gathered for the summers in places like Baaweting (Sault Ste. Marie) and broke up into family units during the winter. They hunted, fished and gathered and preserved food for the winter months. Trade routes extended from the Sault to the Straits and along the south shore of Lake Superior to Bay Mills, Keweenaw, Grand Island, L’Anse, and Onequamegon Bay. When French sovereignty ended in 1761, the English took over the wealthy fur trade and by 1820 the British had been replaced by Americans. In the **1820 Treaty of Sault Ste. Marie** the Ojibwa ceded 16 square miles of land along the St. Marys River to the United States to build Fort Brady. The **1836 Treaty of Washington** ceded northern Lower Michigan and the eastern portion of the Upper Peninsula to the United States in preparation of creating the State of Michigan (Clifton et al. 1986: 28). In return, the Anishnaabek of the Sault received cash payments and ownership of about 250,000 acres of land. Over the next 20 years, however, white settlers moved into northern Michigan in violation of the treaty. The Treaty of 1855 finally allotted lands to Michigan Indian families (Clifton et al. 1986: 32).

The Sault Tribe of Chippewa Indians Interpretive Center located in Sault Ste. Marie is a tribal community driven effort that receives donations and loans of culturally significant items from its tribal members. The artifacts are interpreted historically and ethnographically by tribal members that have passed them down for generations.

L'Anse: L'Anse is located at the foot of Keweenaw Bay on Lake Superior. The L'Anse Indian Reservation is the land base of the Keweenaw Bay Indian Community of the Lake Superior Bands of **Chippewa** Indians (successors of the L'Anse and Ontonagon Bands). The L'Anse Reservation is both the oldest and largest reservation in Michigan. It was established under the Chippewa Treaty of 1854. The **United States Supreme Court** has interpreted this treaty as creating permanent homelands for the Chippewa (Ojibwa **Anishnaabeg**) signatories to the treaty. The Treaty of 1842 ceded lands to the federal government and was one of the largest land cession agreements ever made between the United States and Indian tribes. It includes provisions and stipulations that the Chippewa retain their rights to fish, hunt and gather on these ceded lands. The L'Anse Reservation consists of 54,000 acres with approximately 14,000 acres owned by the tribal community. It is located primarily in two non-contiguous sections on either side of Keweenaw Bay in Baraga County. There is also a much smaller part of the reservation in northern Chocoma Township in northeastern Marquette County.

Isle Royale: Abundant copper deposits located at the western end of the Lake Superior basin, especially on the Keweenaw Peninsula and Isle Royale, were the source of most of the copper used prehistorically around the Great Lakes (Robertson et al. 1999: 114). Native people surface collected float copper, and miners pounded on trap rock with stone hammers, freeing the copper lodes then removing the rock debris with wooden shovels and baskets. Numerous ancient pit mines have been found on Isle Royale, along with rock hammers, chisels, wedges, and charcoal from fires used to heat fracture copper bearing rock (Dorr and Eschman 1977: 75-76; Drier and DuTemple 1961).

Isle Royale was ceded to the United States in 1783 but the British remained in control until after the War of 1812. The Ojibwa have always considered the island their own and not until the Treaty of La Pointe (1842) and the Isle Royale Agreement (1844) did they cede the territory to the United States.

Michigan State Geologist Douglas Houghton reported in 1841 the potential for copper mining on the island and the Keweenaw Peninsula and the copper boom of Michigan began (Dunbar and May 1988: 297-298), followed not long afterwards by the opening of the Sault locks. Isle Royale became a National Park in 1940.

REFERENCES CITED

- Adney, Edwin T. and Howard I. Chapelle. 1983. *The Bark Canoes and Skin Boats of North America*. Smithsonian Institution Press, Washington, DC.
- Cleland, Charles E. 1975. *A Brief History of Michigan Indians*. Michigan Department of State, Lansing.
- Cleland, Charles E. 2000. "An Overview of Chippewa Use of Natural Resources in Historic Perspective," in *Fish in the Lakes, Wild Rice, and Game in Abundance: Testimony on Behalf of Mille Lacs Ojibwe Hunting and Fishing Rights*. Edited by James M. McClurken. Michigan State University Press, East Lansing.
- Cleland, Charles E., Richard D. Clute and Robert E. Haltiner. 1984. "Naub-Cow-Zo-Win Discs from Northern Michigan," in *Midcontinental Journal of Archaeology* 9(2): 235-250.
- Clifton, James A., George L. Cornell and James M. McClurken. 1986. *People of the Three Fires: The Ojibwa, Potawatomi and Ojibway of Michigan*. The Michigan Indian Press, Grand Rapids.
- Cremin, William M. and Michael S. Nassaney. 2003. "Sampling Archaeological Sediments for Small-Scale Remains: Recovery, Identification and Interpretation of Plant Residues from Fort St. Joseph," in *The Michigan Archaeologist* 49 (3-4 June-September): 73-85.
- Dorr, John A. and Donald F. Eschman. 1977. *Geology of Michigan*. The University of Michigan Press, Ann Arbor.
- Drier, Roy Ward and Octave Joseph DuTemple. 1961. *Prehistoric Copper Mining in the Lake Superior Region: A Collection of Reference Articles*. Roy W. Drier, Calumet, Michigan.
- Dunbar, Willis F. and George S. May. 1988. *Michigan: A History of the Wolverine State*. William B. Eerdmans Publishing Company, Grand Rapids, Michigan.

- Ellis, William D. 1974. *Land of the Inland Seas: The Historic and Beautiful Great Lakes Country*. Weathervane Books, New York.
- Greenman, Emerson F. 1961. *The Indians of Michigan*. Michigan Historical Commission, Lansing.
- Haltiner, Robert E. 2002. *Stories the Red People Have Told, and More: A Testimonial to N.E. Michigan's "Long-Ago People."* Robert E. Haltiner, Alpena, Michigan.
- Heldman, Donald P. 1999. "Euro-American Archaeology in Michigan: The French Period" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 292-311. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.
- Hinsdale, W.B. 1983. *Primitive Man in Michigan*. Reprint of 1925 edition published by the University of Michigan. Avery Color Studios, AuTrain, Michigan.
- Jennings, Jesse D. 1968. *Prehistory of North America*. McGraw-Hill Book Company, New York.
- Kent, Timothy J. 1997. *Birchbark Canoes of the Fur Trade, vol. 1*. Silver Fox Enterprises, Ossineke, Michigan.
- Leach, M.L. 1883. *A History of the Grand Traverse Region*. Grand Traverse Herald, Traverse City, Michigan.
- Mack-e-te-be-Nessy. 1887. *History of the Ottawa and Chippewa Indians of Michigan: A Grammar of their Language, and Personal and Family History of the Author*. Reprint of 1887 edition. Little Traverse Regional Historical Society, Inc., Petoskey, Michigan.
- McClurken, James M. 1986. "Ottawa" in *People of the Three Fires: The Ottawa, Potawatomi and Ojibway of Michigan*. Edited by James A. Clifton, George L. Cornell and James M. McClurken. The Michigan Indian Press, Grand Rapids. Pp. 1-38.
- McClurken, James M. 2009. *Our People, Our Journey: The Little River Band of Ottawa Indians*. Michigan State University Press, East Lansing.
- O'Shea, John M. 2004. *Ships and Shipwrecks of the Au Sable Shores Region of Western Lake Huron*. Memoirs of the Museum of Anthropology, University of Michigan, Ann Arbor.
- Pott, Kenneth R. 1999. "Underwater Archaeology in Michigan" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 359-367. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.
- Robertson, James A., William A. Lovis, and John R. Halsey. 1999. "The Late Archaic: Hunter-Gatherers in an Uncertain Environment" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 95-124. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.
- Romig, Walter. 1973. *Michigan Place Names*. Walter Romig Publisher, Grosse Pointe, Michigan.
- Sharp, Odeal. 1974. *Ghost Towns and Place Names of Bay County*. Museum of the Great Lakes Historical Booklet No. 1, Bay City, Michigan.
- Sherman, Elizabeth B. 2003. *Beyond the Wind-swept Dunes: The Story of Maritime Muskegon*. Wayne State University Press, Detroit.
- Stothers, David M. 1999. "Late Woodland Models for Cultural Development in Southern Michigan" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 194-211. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.
- Tanner, Helen Hornbeck. 1987. *Atlas of Great Lakes Indian History*. University of Oklahoma Press, Norman.
- Treaty with the Wyandot, Etc., September 8, 1815. (7 Stat., 131). Ratified December 26, 1815.
- White, Richard. 1991. *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815*. Cambridge University Press, Cambridge.
- Yakes, Daniel J. 2009. "Muskegon County, Michigan History." Muskegon Community College and Muskegon County Museum. (http://www.co.muskegon.mi.us/history_of_muskegon.htm).
- Zurel, Richard L. 1999. "Michigan's Rock Art" in *Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State*, pp. 249-252. Edited by John R. Halsey. Cranbrook Institute of Science, Bloomfield Hills, Michigan.

APPENDIX I: PRIMARY EARLY 19TH-CENTURY ANISHNAABEK VILLAGES ALONG MICHIGAN GREAT LAKES COASTLINES (TANNER 1987: 131-144)

Ojibwa Villages (circa 1830) Lake Michigan

Summer Island
Garden Bay
Whitefish Creek and Taycoosh (at Rapid River
Little Bay de Noc)
Escanaba
Shabwasons (at Ahgosatown on
Leelanau Peninsula)
Ahgosa (at Old Mission Point)
Wequagemog (at Birch Lake north of Elk Rapids)

Lake Huron

Mackinaw Island
St. Martins
Shabwawa (at Cedarville)
Potaganissing (at Maxton on Drummond Island)
Shavinaws (at Besser Bell)
Shoshekonawbegoking (at end of North Point)
Mujekewis (at Isaacson Bay)
Sagonakato (at Alpena)
Shingabawassinekegobawat (at Ossineke)
Au Sable
Otawas (at Tawas)
Mesagowisk (at Wigwam Bay east of Standish)
Kawkawlin and Kishkawkaw (at Bay City)

St. Clair River

Ft. Gratiot
St. Clair
Cottrellville (at Algonac)

Lake Superior

Sault Ste. Marie
Bawating
Waishkees (at Brimley)
Naomikong
Tahquamenon (at Emerson)
Shelldrake

Grand Island
Presque Isle Point (at Marquette)
Pequaming (on west side of Abbaye Peninsula)
L'Anse
Ontonagon
Tagwagana
Buffalo (at Apostle Islands)
Mongazid
Fond du Lac (at Duluth)
Isle Royale

Odawa Villages (circa 1830) Lake Michigan

Point St. Ignace
Ainse
Milleaucoquin
Seul Choix Point
Ossawinamakee (at Manistique)
Beaver Island
La Croix (just up from Cross Village)
Arbre Croche (at Good Hart)
Little Traverse
Muquasebing (at Petoskey)
Chemagobing (at Leland)
Manistee
Nindebekatuning (at Ludington)
Clay Banks (down the shore from Stony Lake)
Wabamingo (at Michillanda at White Lake)
Muskegon
Battle Point (at Grand Haven)

Potawatomi Villages (circa 1830) Lake St. Clair

Walpole Island

LAKE HURON BEACON OF HOPE TRAIL: MICHIGAN'S LIGHTHOUSES, LIFE SAVERS & SHIPWRECKS

by Wayne Lusardi

The State of Michigan has more than 3,200 miles of freshwater coastline, more than any other state in the nation. Large scale commercial shipping began early in the 19th century and tens of thousands of vessels have plied Michigan waters. More than 1,500 ships were lost on or near the treacherous shoals around the state. In response to the huge number of wrecks in Michigan as well as around the nation, the federal government established a system of lighthouses and life-saving stations along the nation's coastline. Today, Michigan contains more than 120 lighthouses or beacons and the remains of some of its 35 historic life-saving stations (many of these are combined facilities). All of the lights and life-saving stations are situated along major shipping and transportation routes that have their roots in colonial exploration, military campaigns at the birth of the nation, westward expansion and immigration, and the natural resource extraction and commercial shipping that continues today (see Map 1).

Lake Huron is uniquely situated in the Great Lakes system. The middle of five lakes, virtually all ships traveling from the rich natural resource abundant upper lakes to the industrial cities of Ohio and New York had to pass through its waters. Consequently, huge volumes of shipping traffic passed up and down the lake from Port Huron to the Straits of Mackinac. All the iron and copper ore shipped by water from Lake Superior passed through the locks at Sault Ste. Marie and the Saint Mary's River into Lake Huron. Great quantities of grain from Wisconsin, Illinois, and Michigan destined for the east coast were loaded on board ships in Lake Michigan or Green Bay and travelled the full length of Lake Huron to Detroit and destinations beyond. Lumber made its way by boat from northern Michigan and the Upper Peninsula to all the cities on the Great Lakes. At the same time immigrants making their way westward via the Erie Canal, along with coal and package freight from the eastern states, crossed Lake Huron.

With a high volume of shipping came increased risk of accident, increased numbers of vessel losses, and an increased need for aids to navigation and rescue services.

Generally the shipping routes on Lake Huron begin at the western end of Lake Erie and continue northwards through the Detroit River, Lake St. Clair, and the St. Clair River. After entering Lake Huron, mariners followed the coastline to the tip of Michigan's thumb and from there vessels would either round Pointe aux Barques and head southwestward into Saginaw Bay, or continue northward to Presque Isle. Ships tended to hug the coastline for ease of navigation using natural and man-made waypoints, and vessels, particularly the early wood-burning steamboats, had to make landfall to refuel often. If heading to Lake Superior a ship would travel north to the Saint Mary's River and pass through the locks at Sault Ste. Marie. A ship passing from Lake Huron into Lake Michigan does so through the Straits of Mackinac and then southwestward through the Manitou Passage into lower Lake Michigan, or westwards towards Green Bay. These shipping routes were already well established in the early 19th century and would eventually become precise paths with both up-bound and down-bound lanes.

Until the beginning of the 19th century much of Michigan's coastline was undeveloped and the lakes were poorly charted. Mariners navigated by following coastline features whenever available then relied on compass headings when crossing open water. In rough weather conditions or when visibility was limited, it was easy to stray off course and many ships were wrecked on shoals along the routes, or collided into other vessels. The federal government constructed a series of lighthouses in Michigan following the opening of the Erie Canal in 1825. The canal facilitated the mass westward transportation of great numbers of immigrants. In 1825, a light was erected at Fort Gratiot at the lower end of Lake Huron, and the Bois Blanc Island light followed in 1829. Because the two lights were separated by several hundred miles, mariners required additional aids to navigation and visual references such as turning buoys to ascertain location. The ultimate goal of the United States Lighthouse Board was to position lights so that ships would always be in sight of an aid (Roach 2006: 13).



Figure 1: Surfmen to the rescue (Painting by Robert McGreevy).

In 1832 Thunder Bay Island Light became operational and a lightship was placed at Waugoshance Shoal in the western Straits, the first lightship on the Great Lakes (Hyde 1986: 103). The original light at Presque Isle began operations in 1840 filling a large gap along the Lake Huron shoreline between Thunder Bay and the Straits. The Saginaw River Rear Range Light began flashing in 1841. A light at DeTour Passage was completed in 1848, and by the late 1850s more than a dozen lights were operational along the Lake Huron shoreline, including at Cheboygan (1853) and Tawas Point (1853). Round Island light on the Saint Mary's River began flashing in 1855 coinciding with the opening of the locks at Sault Ste. Marie. The lights at Charity Island (1857), Pointe aux Barques (1857), Harbor Beach Point (1858), and St. Clair Flats (1859) all went up before the start of the American Civil War. Several of the earlier lights were entirely reconstructed or repositioned during this time as well.

None of the lights along the Lake Huron shoreline were identical. Many started as simple posts with attached lanterns and developed into more complex structures. Depending on local resource availability, some lighthouses were built of metal, while others were constructed of brick, stone, or concrete. Some were positioned in the water, others on land. Some light towers were stand-alone structures while others were attached to fog signal buildings or keeper's quarters. If located offshore or on remote islands, the keeper's had to be particularly self-sufficient and required a landing wharf, boathouse and ways, oil house, cisterns, and privies (Summary Context: 3).

The 1860s saw another dozen lights built in Michigan and no longer were large expanses of coastline devoid of navigational landmarks. Wrecks, of course, continued to occur, and additional lights were placed where conditions warranted. By 1876 the Federal government established a series of life saving stations across Lake Huron at Pointe aux Barques, Ottawa Point (Tawas), Sturgeon Point, Thunder Bay Island, and Forty Mile Point (Hammond Bay). In 1881 stations were similarly constructed at Harbor Beach, Port Austin, and Middle Island. The Bois Blanc Life Saving Station was commissioned in 1891 and the Lake View Beach Station north of Fort Gratiot light in 1898. Eventually 35 stations were located within the state of Michigan, ten on Lake Huron alone (Stonehouse 1994: 60-61).

Lighthouses and life-saving stations often worked hand in hand and their locations were specifically chosen to warn mariners of nearby navigational hazards and provide rescue to those in need. Despite the erection of aids to navigation like lighthouses, ships continued to wreck on nearby shoals and all of the combined lighthouse/life-saving stations in Michigan feature nearby shipwrecks that post-date their construction. Thunder Bay Island, for example, has no shipwrecks predating the light built there in 1832, only one wreck in the immediate vicinity that predates the life-saving station built there in 1876, and yet has six wrecks within ½ mile of the light and another seven wrecks within 2-¼ miles of the station. Many vessels in dire straits were very intentionally steered to the nearest life-saving station knowing that help would be available (Figure 1).

In 1939, the Bureau of Lighthouses merged with the United States Coast Guard, which then took over the maintenance and operation of all lighthouses and lightships. Improvements in technology ultimately led to the decrease in lighthouse personnel and by the 1960s fewer than 60 lighthouses in the country had keepers. By 1990, all lighthouses except Boston Harbor Island were automated. The automation of lighthouses made the structures obsolete to the Coast Guard and many were decommissioned and replaced by steel towers. A preservation ethic soon ensued, however, and many of the historic structures were transferred to local historical groups and other stewardship organizations interested in caring for the structures. The life-saving stations did not fare as well and only a handful of stations remain, most associated with lighthouse parks or preservation groups.

The proposed Lake Huron Beacon of Hope Trail follows as closely as possible the original routes of travel used by Native mariners, French and English explorers, American and British warships, vast numbers of immigrants and settlers moving westward across the upper Great Lakes, and ships of commerce that helped build a nation, and indeed continue to do so today. The route is of national significance because it helped two nations expand geographically, it helped move materials to build an industrialized country, it witnessed commercial and shipbuilding activities that contributed to multiple war efforts, and it allowed for the movement of food, particularly fish and grain, from the nation's rich agricultural heartland to the rest of the world.

The proposed Lake Huron Beacon of Hope Trail (see Map 2), unlike other commercial routes across the Great Lakes, is more centrally located, and thus more heavily trafficked. As a result, it witnessed a commensurate number of marine disasters. In the four years between 1849 and 1853, three steamboats, the *New Orleans*, *Benjamin Franklin* and *Albany* all stranded on rocks north of Thunder Bay. The year 1854 was the costliest season to date on the Great Lakes: 385 maritime disasters occurred resulting in the loss of 55 ships including the *Audubon* and *Defiance* when they collided within sight of the Presque Isle lighthouse.

One hundred nineteen lives and \$2.1 million in property were lost that year (Mansfield 1899: Chapter 37). In a single month, September 1872, the *Corsair*, *Detroit*, *Galena*, *Neshoto* and *Summit* all went ashore and became total losses just north of Saginaw Bay. Eight of the 12 vessels lost during the great storm of 1913 were lost on Lake Huron. The great number of shipwrecks on Lake Huron resulted in equally great efforts to ensure mariner's safety and a fifth of Michigan's lighthouses and nearly a third of its life saving stations are located on Lake Huron.

Because of the enormous size of Lake Huron mariners often had to navigate beyond site of land. If a ship enters the lake from the St. Clair River in poor weather conditions its crew may traverse nearly the entire length of Lake Huron and not see land again until approaching the Straits of Mackinac. Unlike the relatively straight shorelines of Lake Ontario, Lake Erie, and Lake Michigan, the numerous bays, barrier shoals, and islands of Lake Huron presented both physical hazards and navigational challenges. The Lake Huron trail is continuous in that it follows established maritime trade routes, though individual vessels may have utilized only portions of the route. The routes, of course, extended far beyond Lake Huron and many ships continued into Lake Superior, Lake Michigan, Green Bay, and eventually into the nation's heartland through a system of interconnecting rivers and canals.

The periods of significance for the proposed Lake Huron Beacon of Hope Trail are twofold. The first dates from the middle of the 1820s and extends to just before the start of the American Civil War, a period of approximately 35 years. This period is characterized by the growth of a newly formed nation, the development of the Erie Canal to facilitate a direct maritime link between the Great Lakes and the eastern seaboard, and the massive migration of people westward utilizing Lake Huron as a major transportation route. It was also a period when the first lighthouses appeared on the lakes.

The second period of significance covers the decade beginning in 1871. That year there were 1,662 sailing ships, 682 steamboats, and 131 barges operating on the Great Lakes, a total of 2,475 vessels compared to only 10 vessels in 1810, 493 in 1845, and 1,457 in 1860.



Figure 2: The Fort Gratiot lighthouse (Hyde 1986: 81).

The year 1871 witnessed 591 foundering, collisions, groundings and explosions, a 57% increase from 1860 (Thompson 2000: 17). Despite the establishment of shipping routes and aids to navigation such as lighthouses, one in four ships continued to wreck annually and mariners continued to require assistance. Consequently, the 1870s saw the establishment of life saving stations across the country with many commissioned on Lake Huron.

Lighthouses, life-saving stations, and nearby shipwrecks present unique opportunities for the public to view three distinct yet related components of Michigan's maritime heritage. Nearly all of the sites selected for inclusion in this trails proposal feature those three components and already provide interpretive and recreational opportunities to the public. Most are located within state, county, or municipal parks or on public lands. Most of the sites have already been listed on the National Register of Historic Places, and most are associated with preservation societies or stewardship groups interested in the site's continued preservation.

Lighthouses, historic life-saving stations, and shipwrecks provide a variety of outdoor recreational uses in Michigan. In addition to being strategically positioned along historic shipping lanes, most of the sites are located along Huron Shores Heritage Route 23 that follows US 23 from Saginaw to Mackinaw City. Sightseeing, boating, kayaking, snorkeling and scuba diving are activities that allow visitors to personally experience many of these unique historic sites in Michigan.



Figure 3: Seen from the shore, this old hulk served as a dry dock for smaller vessels and was later filled with stone and debris for shoreline revetment at the mouth of Black River in Port Huron (photo by W.R. Lusardi).

Principal Components

1. Fort Gratiot Light & Lake View Beach Life Saving Station (see Map 3)

Construction of Fort Gratiot began in 1814, the final year of the War of 1812, to assure United States naval vessels passage into the upper Great Lakes. From 1822-1824 the fort served as a mission school. It was reactivated as a military outpost in 1828 following Chief Red Bird's attack at Prairie du Chein and a new fort was completed at Fort Gratiot in 1830. The garrison withdrew from the fort in 1837 but an attempt to seize artillery, arms, and ammunition from the fort by American sympathizers of the Canadian Rebellion led the Federal government to continue to maintain troops there (Hawkins and Stamps 1989: 6-8; Dunbar and May 284). The post was finally abandoned in 1879.

The year 1825 witnessed the construction of Michigan's first lighthouse, named in honor of General Charles Gratiot who supervised the fort's construction 11 years earlier (Roach 2006: 47). The light is located on the St. Clair River, at the southern extreme of Lake Huron, and marks the western side of the entrance from the lake into the river (Scott 1905: 100). A few years later the original 65-foot tower toppled. A new tower was erected in 1829 about ½ mile to the north of the original position, and then raised several times to 82 feet by 1861 (Figure 2). The light was equipped with a 3rd order Fresnel lens (Roach 2006: 47). A fog signal was added in 1871 and the station was automated by 1933.



Figure 4: The Harbor Island Sand Beach light (Hyde 1986: 80).

The Fort Gratiot Lighthouse, along with its accompanying dwellings, oil house and associated landscape, is listed on the National Register of Historic Places (Clifford 1994: 172).

The Lake View Beach Life Saving Station was located 5 miles north of Fort Gratiot light and went operational on July 1, 1898. The station lost its boathouse and launch way in the Great Storm of 1913 (Stonehouse 1994: 58). Today only the station's foundations remain.

Strategically positioned adjacent to Fort Gratiot, the towns of Port Huron, Michigan and Sarnia, Ontario saw the establishment of several wrecking and salvage companies in the mid-19th century. Wrecked vessels from throughout the Great Lakes were recovered and towed to the area and some were utilized as dry docks or shoreline revetments (Figure 3). Most were stripped and scuttled if they were not worthy of repair. Consequently, lower Lake Huron features one of the largest ship bone yards in the Great Lakes. Shipwrecks in lower Lake Huron near Fort Gratiot include the schooners *Amaranth* (1864-1901), *Sweetheart* (1867-1913), and *Clayton Belle* (1863-1882), and the steamer *Sachem* (1889-1928). The steamer *Aztec* (built 1889) and the barge *Province* (built 1911) were scuttled together in 1934, and the steamer *Yakima* (1887-1928), the first commercial ship on the Great Lakes equipped with electric lights, is located nearby. The giant steel freighter *Charles S. Price* (built 1910) was a victim of the Great Storm of 1913 (Kohl 2001: 210-220). A number of other shipwrecks are located in the St. Clair River adjacent to Fort Gratiot, Port Huron, and Sarnia.



Figure 5: The former Coast Guard station at Harbor Island Sand Beach (Michigan Lighthouse Conservancy).

2. Harbor Island Sand Beach Lighthouse & Life Saving Station (see Map 4)

One hundred and fifteen miles of Lake Huron separates Fort Gratiot and Pointe aux Barques and many ships caught in rough seas had no place to seek refuge. Construction of a refuge harbor in an otherwise undeveloped area thus began in 1873 and a light was placed at the end of the pier in 1875. The Harbor Beach Light marks the first turn for vessels headed north through Lake Huron (Penrose 1992: 106). The original light was replaced with a 45-foot tower in 1885 (Figure 4) that was fully automated by 1968 (Roach 2006: 43). The Harbor Island (Sand Beach) Lighthouse is listed on the National Register of Historic Places (Clifford 1994: 179).

The life-saving station at Harbor Beach (Figure 5) commenced operations on October 29, 1881 and was located inside the refuge harbor (Stonehouse 1994: 60). The station's boathouse and breakwater were destroyed by the Storm of 1913. In 2002 the United States Coast Guard demolished the station which had fallen into disrepair.



Figure 6: A portion of the schooner Kate Richmond's hull at Camp Cavell near Lexington.

Shipwrecks located within the Sanilac Shores Underwater Preserve offshore of Harbor Beach include the early bulk freighter *Goliath* (lost with 18 lives in 1848), the schooners *Kate Richmond* (1855-1885, Figure 6), *John Breden* (1862-1899), and *Dunderburg* (1867-1868), the giant 322-foot schooner barge *Chickamauga* (1898-1919), the schooner barge *Marquis* (lost 1892), the side wheel steamer *Queen City* (1848-1863), the steamers *City of Genoa* (1892-1915) and *Waverly* (1874-1903), and the steel freighter *Glenorchy* (1902-1924). The 432-foot steel freighter *John A. McGean* (built 1908) was another victim of the Great Storm of 1913 (Harrington 1998: 285-297; Kohl 2001: 221-232).

3. Pointe aux Barques Lighthouse & Life Saving Station (see Map 4)

The Pointe aux Barques Lighthouse (Figure 7) is one of the six oldest lighthouses in Michigan. Funds were appropriated by President James K. Polk and the first tower began operation in 1848. The light filled a large gap between the Fort Gratiot light and the Thunder Bay Island light more than 150 miles to the north. Pointe aux Barques was used as a turning point for vessels entering Saginaw Bay. When keeper Peter Shook drowned in 1849, his wife Catherine became Michigan's first female light keeper. In 1857, the lighthouse and dwelling were replaced with the present 89-foot tower and attached house (Clifford 1994: 193). The lighthouse was fully automated by 1934.



Figure 7: The Pointe aux Barques lighthouse (Hyde 1986: 82).

In 1972 the Pointe aux Barques lighthouse was listed on the National Register of Historic Places, and a Michigan Historical Marker was dedicated at the grounds of the lighthouse in 2007. Today the site consists of the 1857 tower, attached keeper's quarters, the 1933 assistant keeper's dwelling, and an oil house (Clifford 1994: 193). The Pointe aux Barques Lighthouse Society manages a museum in the keeper's dwelling.

Despite the aid to navigation, ships continued to wreck at Pointe aux Barques and a life-saving station was built just south of the lighthouse in September 1876 (O'Brien 1976: 36). In 1939 the last keeper retired and the life-saving station was decommissioned.

Shipwrecks located within the Thumb Underwater Preserve offshore of Pointe aux Barques include the 1893 collision mates *Philadelphia* (built 1868) and *Albany* (built 1885), the schooners *Berlin* (1854-1877), *Emma L. Nielsen* (1883-1911), and *Hunter Savidge* (1879-1899), the tugs *Anna Dobbins* (1862-1886), *E.P. Dorr* (1855-1856), and *Fred Lee* (1896-1936), and the bulk freighters *Governor Smith* (1889-1906), *Iron Chief* (1881-1904), and *Jacob Bertschy* (1867-1879). The side wheel steamer *Detroit* (1846-1854) sank in a collision off the busy shipping lanes, and the steel freighter *Argus* was lost in the 1913 storm with 24 lives. One of the most recent ships lost in Lake Huron, the 603-foot steel hulled freighter *Daniel J. Morrell*, went down off the Pointe in 1966 (Harrington 1998: 285-297; Kohl 2001: 221-232).



Figure 8: The Port Austin Reef light (Hyde 1986: 83).

4. Port Austin Reef Light & Life Saving Station (see Map 4)

The Port Austin Reef Light Station was established in 1878 and is located 2.5 miles offshore on a treacherous outcrop of rock (Figure 8). The offshore structure was built atop an octagonal brick pier set on a prefabricated crib built in Tawas and then towed to the reef. A 57-foot wooden tower held the original light and 4th order Fresnel lens. Twin fog sirens were added to the light in 1882 but were later replaced with a 10-inch steam whistle in 1895. The existing 60-foot tower with attached fog signal building was not constructed until 1899, and the brick pier was encased in concrete in 1937. The light was automated in 1953 and the original lens was replaced in 1985 with a solar powered acrylic lens (Clifford 1994: 193; Roach 2006: 39-40). The lighthouse remains an active aid to navigation, and was listed on the National Register of Historic Places in September 2011.

The Port Austin Life Saving Station, referred to before 1903 as Grindstone City Life Saving Station, is located 2 miles southeast of Port Austin Reef light. The station opened on November 29, 1881 (Stonehouse 1994: 60).

The wooden steamer *Troy* was lost with 23 lives in an 1859 storm, and the wooden bulk freight steamer *City of Detroit* (built 1866) foundered in a similar storm in 1873, both wrecks located just north of Port Austin (Kohl 2001: 221-223).



Figure 9: The Tawas Point lighthouse (Hyde 1986: 84).

5. Tawas Point Lighthouse & Life Saving Station (see Maps 4 & 5)

In 1850 Congress appropriated \$5,000 for the construction of a lighthouse at Tawas Point, originally known as Ottawa Point. The lighthouse was commissioned in 1853 but was soon replaced by a 67-foot tower about a mile from the original light in 1876 (Figure 9). The lighthouse features an attached 1-½ story keeper's dwelling and a 4th order Fresnel lens that is still operative, being one of only 70 such lenses that remain operational in the United States, eight of which are in Michigan. The lighthouse was listed on the National Register of Historic Places in 1971, and today the site is managed by the Michigan Department of Natural Resources and is a State Park (Clifford 1994: 207).

The Tawas Point Life Saving Station was built near the lighthouse and began operation on October 6, 1876. The facility consisted of a boathouse, crew's quarters with a cupola lookout on the roof, and other living structures and training equipment (Stonehouse 1994: 53). As a result of local preservation efforts the boathouse at Tawas Point was renovated and saved from destruction in 2005.



Figure 10: One of three shipwrecks on the beach at Tawas Point (photo by Ruth Laugal).



Figure 11: The Sturgeon Point lighthouse and keeper's dwelling (photo by W.R. Lusardi).



Figure 12: The Sturgeon Point lighthouse and Life Saving Station (Alpena County Library).



Figure 13: The paddle wheeler Marine City's boiler and wreckage on the beach just north of the Sturgeon Point lighthouse (photo by W.R. Lusardi).



Figure 14: The paddle wheeler Marine City's rudder on exhibit at the Sturgeon Point lighthouse. A fragment of the ship's boiler is at its base. Behind the artifact are two more rudders from area shipwrecks (photo by W.R. Lusardi).



Figure 15: The Bernice D, an open fishing boat built in 1915 and abandoned at Sturgeon Point Lighthouse in 1981 (photo by W.R. Lusardi).



Figure 16: Thunder Bay Island lighthouse and keeper's quarters (photo by W.R. Lusardi).



Figure 17 A & B: Lighthouse keepers and Life Saving Station crewmembers graffiti carved in the bedrock on the eastern shore of Thunder Bay Island (photos by W.R. Lusardi).



Figure 18: The Thunder Bay Island Life Saving Station (Tongue 2004: 60; Alpena County Library).



Figure 19: The remains of the Thunder Bay Island Life Saving Station boathouse today (photo by W.R. Lusardi).

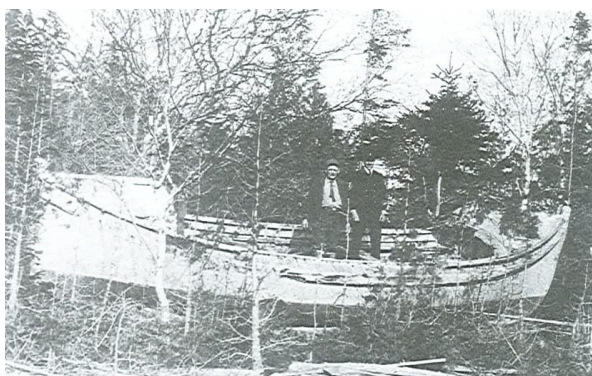


Figure 20a: Abandoned lifeboat on Thunder Bay Island circa 1890 (Tongue 2004: 55; Alpena County Library).



Figure 20b: Abandoned lifeboat on Thunder Bay Island today (photo by John Brooks).

Many ships saw their end off Tawas Point (Figure 10) including the schooners *May Queen* (1855-1859), *Table Rock* (1853-1872), and *Stranger* (1872-1880), and the schooner barge *Goshawk* (1866-1920). The steamers *Linden* (1895-1923) and *Sea Gull* (1864-1890) were also lost nearby, as was the dredge *Fort Meigs* (1901-1948) and the tug *Owen* (1881-1921) (O'Shea 2004: 20).

6. Sturgeon Point Lighthouse & Life Saving Station (see Maps 5 & 6)

The Sturgeon Point Light Station located in Alcona County was established to warn mariners of a reef that extends more than a mile into Lake Huron. The light station was built in 1869 roughly halfway between Thunder Bay Island and the northern entry to Saginaw Bay. The tower stands 68 feet in height and was originally equipped with a 6th order Fresnel lens that was upgraded to a 3-½-order lens in 1889. The 3-½-order Fresnel lens is still in place and in use (Clifford 1994: 206). Although the United States Coast Guard continues to operate the light (Figure 11), the property was transferred to the Michigan Department of Natural Resources under the terms of the National Historic Lighthouse Preservation Act and is located at Sturgeon Point Scenic Site, a Michigan state park. The Sturgeon Point Light was added to the National Register of Historic Places in 1969 and today the Alcona Historical Society operates a museum in the restored lighthouse keeper's dwelling.

In September 1876 a United States Life Saving Service station (Figure 12) was built just south of the lighthouse and the first light keeper became the first captain of the surf team. By 1939 the light was fully automated, and the Coast Guard withdrew all personnel in 1941 and thereafter dismantled the life-saving station. Only the foundation of the life-saving station remains visible today.

A dozen historic vessels have been lost off Alcona County and several shipwrecks are located very near Sturgeon Point. The 192-foot wooden side wheel steamer *Marine City* was completely destroyed when fire broke out on August 29, 1880. The ship's remains are located just off the beach about ¾ of a mile north of the lighthouse.

The Sturgeon Point Life Saving crew reached the *Marine City* about 30 minutes after the fire broke out though as many as 20 people perished in the flames (*Sarnia Observer*, 9/3/1880). The delayed response was attributed to members of the crew not on post but out picking berries at the time of the disaster (Bunting 2007: 130). Today portions of the wreck including the boiler and bilge timbers can be seen on the beach (Figure 13). The *Marine City's* rudder (Figure 14) is on exhibit at the Sturgeon Point Scenic site, along with the steam barge *Loretta's* rudder, a victim of the treacherous shoals that claimed a half dozen vessels immediately north of Sturgeon Point at Black River. The abandoned fishing boat *Bernice D.* is exhibited adjacent to the rudders (Figure 15).

7. Thunder Bay Island Lighthouse & Life Saving Station (see Maps 6 & 7)

The original lighthouse on Thunder Bay Island was built in 1831 but collapsed during construction. A new tower was completed a year later and the tower was increased in height to 50 feet in 1857 (Figure 16). The light originally featured a 4th order Fresnel lens that was later replaced with a 190mm lens. The facility features a two story attached keeper's quarters from 1868 and a fog signal building from 1892, as well as the remains of a tramway used to carry supplies from the dock (Clifford 1994: 207-208). In the limestone bedrock adjacent to the lighthouse are carved the names of the light keepers and life-saving crews (Figure 17). Thunder Bay Island lighthouse was automated in 1983 (Roach 2006: 25), and the lighthouse and adjacent fog signal building were placed on the National Register of Historic Places in 1984 (Tongue 2004: 120).

In 1861 Alonzo Persons was appointed lighthouse keeper at Thunder Bay Island. His son John D. Persons commanded the life-saving station (Figure 18) there starting in 1877, a year after the station's commission. Persons remained in command until 1915. The boathouse for the life-saving station remains intact on the western shore of the island (Figure 19). A 27-foot lifeboat (Figure 20) built in 1876 by Stephen Roberts of East Harlem, New York was damaged in a storm in 1890 and was hauled into the woods and abandoned on the island (Tongue 2004: 43, 53).



Figure 21: Wooden hull and bow remains of the *Golden Voyage* wrecked in 1994. The research vessel in the background is anchored on the *Monohansett*, lost in 1907 (photo by W.R. Lusardi).

A handful of shipwrecks occur within ½ mile of Thunder Bay Island lighthouse including the side wheeler *Benjamin Franklin* (1842-1850), the giant bulk freighter *James Davidson* (1874-1883), the fish tug *William Maxwell* (1883-1908), the steam barge *Monohansett* (1872-1907), the pleasure craft *Golden Voyage* (lost 1994, Figure 21), and the modern sailboat *Panacea*. Within 2-¼ miles of the lighthouse are located another side wheeler, the *New Orleans* (1838-1849), an unidentified barge, the canal schooners *E.B. Allen* (1864-1871) and *Lucinda Van Valkenburg* (1862-1887), the steam barges *O.E. Parks* (1891-1929) and *W.P. Thew* (1884-1909), and the bulk freighter *D.M. Wilson* (1873-1894). These shipwrecks and another 40 in and around Thunder Bay are all popular dive attractions located within Thunder Bay National Marine Sanctuary (Lusardi 2008: 42-45). The Sanctuary is jointly managed by the State of Michigan and the National Oceanic and Atmospheric Administration and protects and preserves the shipwrecks and other submerged cultural resources of northern Lake Huron. Many artifacts recovered from area shipwrecks are exhibited at the Great Lakes Maritime Heritage Center in Alpena.

8. Middle Island Lighthouse & Life Saving Station (see Maps 6 & 8)

The Middle Island Life Saving Station began operations in November 1881 (Figure 22).



Figure 22: The Middle Island Life Saving Station (Weir 2008: cover; Alpena County Library).

The primary structure at the Middle Island station consisted of a two-story 1879 Parkinson design with a boathouse, kitchen, dining room, and storage on the main floor, crew quarters on the second floor, and a lookout platform on the roof. The boathouse doors opened to a ramp extending into a sheltered embayment leading to Lake Huron, and probably contained at least two operational lifeboats. Adjacent structures included a workshop, privy, supply shed (Figure 23), and additional living spaces, with watchtowers, a cistern, and a trash midden located nearby (Lusardi 2004: 1; Weir 2008: 45). A Lyle gun false mast was located near the boathouse (Figure 24) and served as a practice target to simulate shooting the gun at a vessel in distress (Weir 2008: 81-82). The Middle Island Life Saving Station, designated Michigan archaeological site 20AL86, is located on the northwest shore of Middle Island on land owned and managed by the Michigan Department of Natural Resources.

Unlike many of the other lighthouse and life-saving station combinations on the Great Lakes, the lighthouse was constructed after the life saving station on Middle Island. The 71-foot Middle Island lighthouse (Figure 25) began operation in June 1905 and was equipped with a 4th order Fresnel lens, later replaced by a 3rd order lens. A fog signal building and a 1906 oil storage house are also located on site which is currently under private ownership and serves as a bed and breakfast (Clifford 1994: 186-187; Roach 2006: 21).



Figure 23 A & B: The remains of the Life Saving Station's boathouse floor and a small tool shed located on Middle Island in Alpena County (photos by W.R. Lusardi).



Figure 24 A & B: The Lyle gun false mast, located at the Middle Island Life Saving Station site in Alpena County (Weir 2008: 82; Alpena County Library; right photo by W.R. Lusardi).



Figure 25: The Middle Island Lighthouse (photo by W.R. Lusardi).

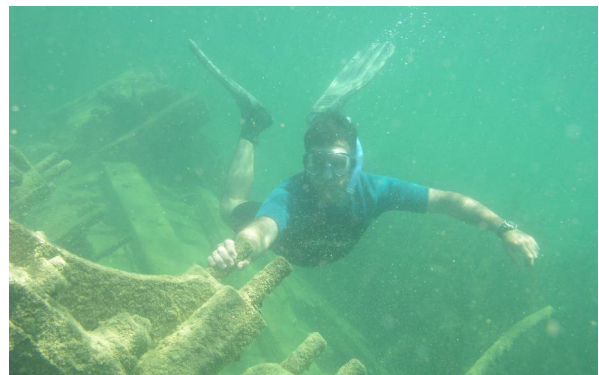


Figure 26: A swimmer investigates the engine mounts on the wrecked steam barge Portsmouth in shallow water off Middle Island (photo by W.R. Lusardi).



Figure 27: The old lighthouse at Presque Isle (photo by W.R. Lusardi).



Figure 28: Shipwreck timber stairway banister in the old lighthouse keeper's dwelling at Presque Isle (photo by W.R. Lusardi).



Figure 29: The new lighthouse at Presque Isle (photo by W.R. Lusardi).



Figure 30: An unidentified ship's stem wreckage on exhibit at the Presque Isle Lighthouse (photo by W.R. Lusardi).



Figure 31: The Forty Mile Point lighthouse and keeper's quarters (photo by W.R. Lusardi).

The propeller *Portsmouth* is located immediately off the beach from the life saving station (Figure 26). Bound down from Marquette with a cargo of 418 tons of pig iron, *Portsmouth* dragged anchors and went ashore on Middle Island in November 1867. The wrecking steamer Magnet went to the assistance of the *Portsmouth* but it was so covered in ice that the wreck was stripped and abandoned. Another dozen wrecks occur off Middle Island including the schooners and 1854 collision mates *Defiance* (built 1848) and *John J. Audubon* (built 1854), the schooner *Typo* (1873-1899), the bulk freighters *New Orleans* (1885-1906) and *Norman* (1890-1895), and the package freighter *Florida* (1889-1897).

9. Presque Isle Old & New Lighthouses (see Map 8)

Presque Isle peninsula is located midway between Thunder Bay and Hammond Bay and is where offshore shipping lanes come nearest land as up-bound vessels veer westerly towards the Straits of Mackinac and Lake Michigan, or northerly towards Detour Passage and Lake Superior. All down-bound vessels from the upper lakes began their turn at Presque Isle for a straight line to Port Huron. Consequently, the area was a choke point for vessel traffic and many collisions ensued. Presque Isle harbor, a natural embayment along the coast of Lake Huron, served as a refuge harbor and a refueling stop for wood burning steamboats. Construction of the first lighthouse there began in 1839. The 30-foot tall tower consists of whitewashed stone and brick (Figure 27). An unattached keeper's dwelling is located a few yards from the tower. The interior of the dwelling features many components such as a banister and handrail built of scavenged shipwreck timbers (Figure 28). The original light was replaced in 1871 by a 113-foot tower located a mile to the north on the tip of Presque Isle peninsula and the old light became vacant until 1897 when it was sold at public auction. The new light (Figure 29) with affiliated structures was manned by crews until 1970 when the station was automated. The U.S. Coast Guard transferred the property to Presque Isle Township in 1998 and the facility continues to serve as a lighthouse, museum, and major visitor attraction in northeast Michigan (Roach 2006: 17-20).

About a dozen shipwrecks are located within a few miles of the Presque Isle lighthouses. Several ships stranded on nearby rocks including the paddle wheeler *Albany* in 1853, and the schooners *L.M. Mason* (1861), *Portland* (1877), and *American Union* (1894). Portions of their remains are exhibited at the old and new lighthouses (Figure 30). Most of the wrecks offshore resulted from collisions in the busy shipping lanes including the Audubon and *Defiance* (1854), *Kyle Spangler* (1860), *Persian* (1868), *M.F. Merrick* (1889), *Norman* (1895), *Florida* (1897), *Typo* (1899), and *Etruria* (1905). Others ships foundered off Presque Isle including the *Cornelia B. Windiate* (1875) and *James Bentley* (1878).

10. Forty Mile Point Light & Hammond Bay Life Saving Station (see Maps 8 & 9)

The Forty Mile Point lighthouse began operation in 1897. The 52-foot tower is attached to a 2-½ story keeper's dwelling that now serves as a museum (Figure 31). A fog signal building, oil house, two privies, barn, and a bath house all remain intact. The light was automated in 1969. The lighthouse was listed on the National Register of Historic Places in 1984 (#84001830) (Clifford 1994: 172-173).

Even with the light's presence, 27 ships and 50 lives were lost in Lake Huron off Forty Mile Point (Roach 2006: 13). A life saving station was established by the Federal government on September 30, 1876 to aid distressed mariners. Prior to 1883 the station at Hammond Bay was referred to as the Forty Mile Point Life Saving Station. The life-saving crew stationed there constructed a pier in the front of the station to facilitate launching and landing boats, and cleared several acres of land of all vegetation to improve the lookout's view of the coast (Stonehouse 1994: 50).

A large section of hull from the 216-foot wooden bulk freighter *Joseph S. Fay* is located on the beach near the lighthouse (Figure 32), with the remainder of the wreck just offshore in 18 feet of water. The *Fay*, towing the *D.R. Rhodes*, was lost in a storm on October 19, 1905 and the 1st mate drowned attempting to swim to shore (Parker 1986: 121).



Figure 32: A 150-foot long starboard side section of the bulk freighter Joseph S. Fay located on the beach at Forty Mile Point near the lighthouse (photo by W.R. Lusardi).

The two-masted, coal-carrying schooner *F.T. Barney* sank in a collision off Forty Mile Point in 1868. The *F.T. Barney* was listed on the National Register of Historic Places in 1991 (#91001016) and is only one of a few Great Lakes shipwrecks listed on the register.

11. Bois Blanc Lighthouse & Life Saving Station (see Map 9)

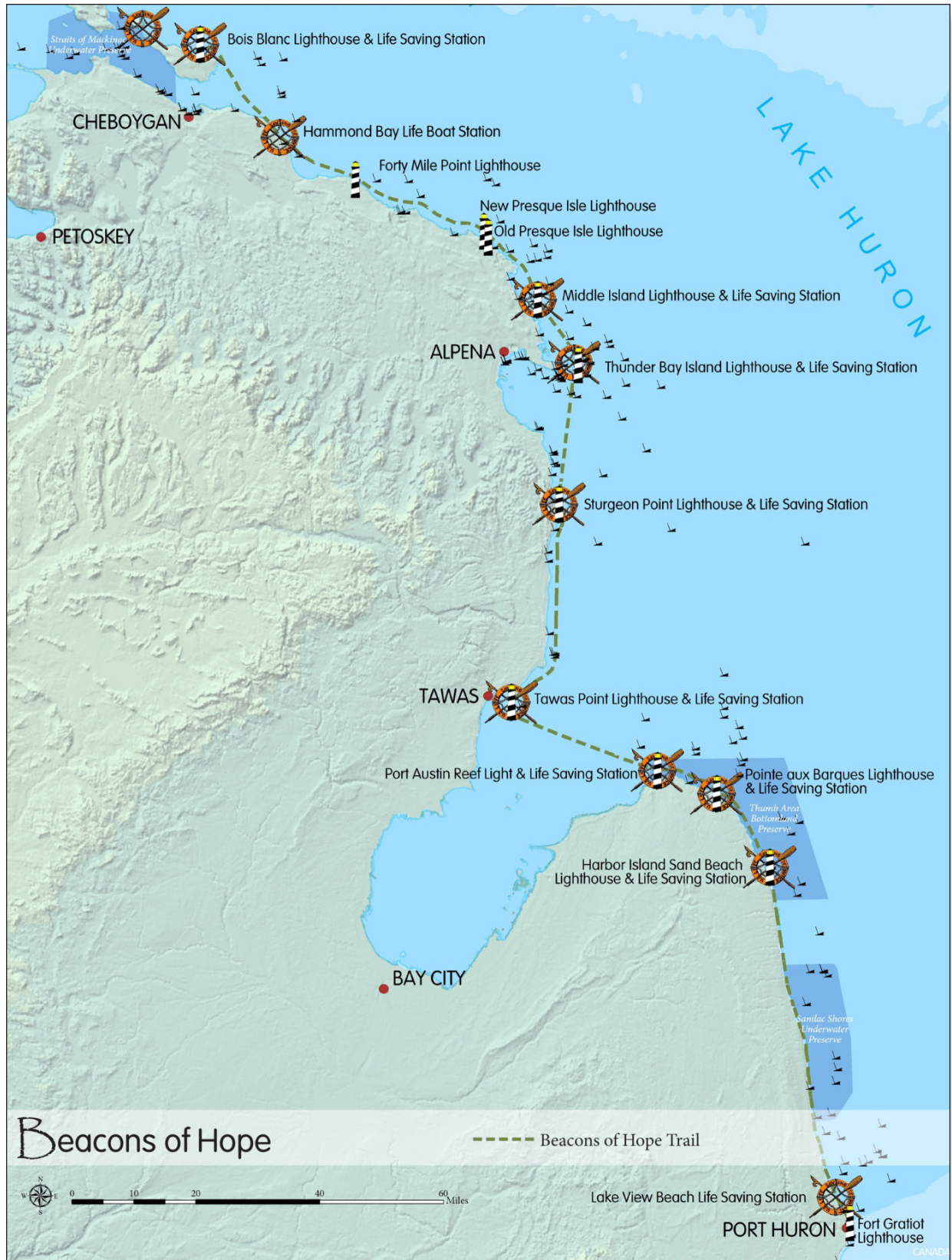
The Straits of Mackinac have always been dangerous to ships attempting to pass through the narrows while avoiding the many submerged hazards, and at the same time attempting to avoid other ships congregating in the confined shipping lanes approaching the Straits. Lights at Bois Blanc Island and Waugoshance Shoal were not sufficient, and at least 39 ships sank in the Straits after the lights became active (Roach 2006: 1). The light at Bois Blanc Island was established by the federal government in 1829, only the second on Lake Huron after Fort Gratiot. The original tower collapsed in 1838 but a new tower was built the same year. The existing tower with attached keeper's quarters (Figure 33) was constructed in 1868 and was deactivated in 1956 (Hyde 1986: 98). The light is listed on the state inventory of historic structures (Clifford 1994: 168).



Figure 33: The Bois Blanc lighthouse (Hyde 1986: 100).

The Life Saving Service established a station on the eastern shore of the island at Walker's Point on May 7, 1891 (Stonehouse 1994: 60). A captain of one of the crews at Bois Blanc, George C. Cleary, was brother to Henry Cleary, a crew captain at Marquette Life Saving Station (Stonehouse 1994: 31).

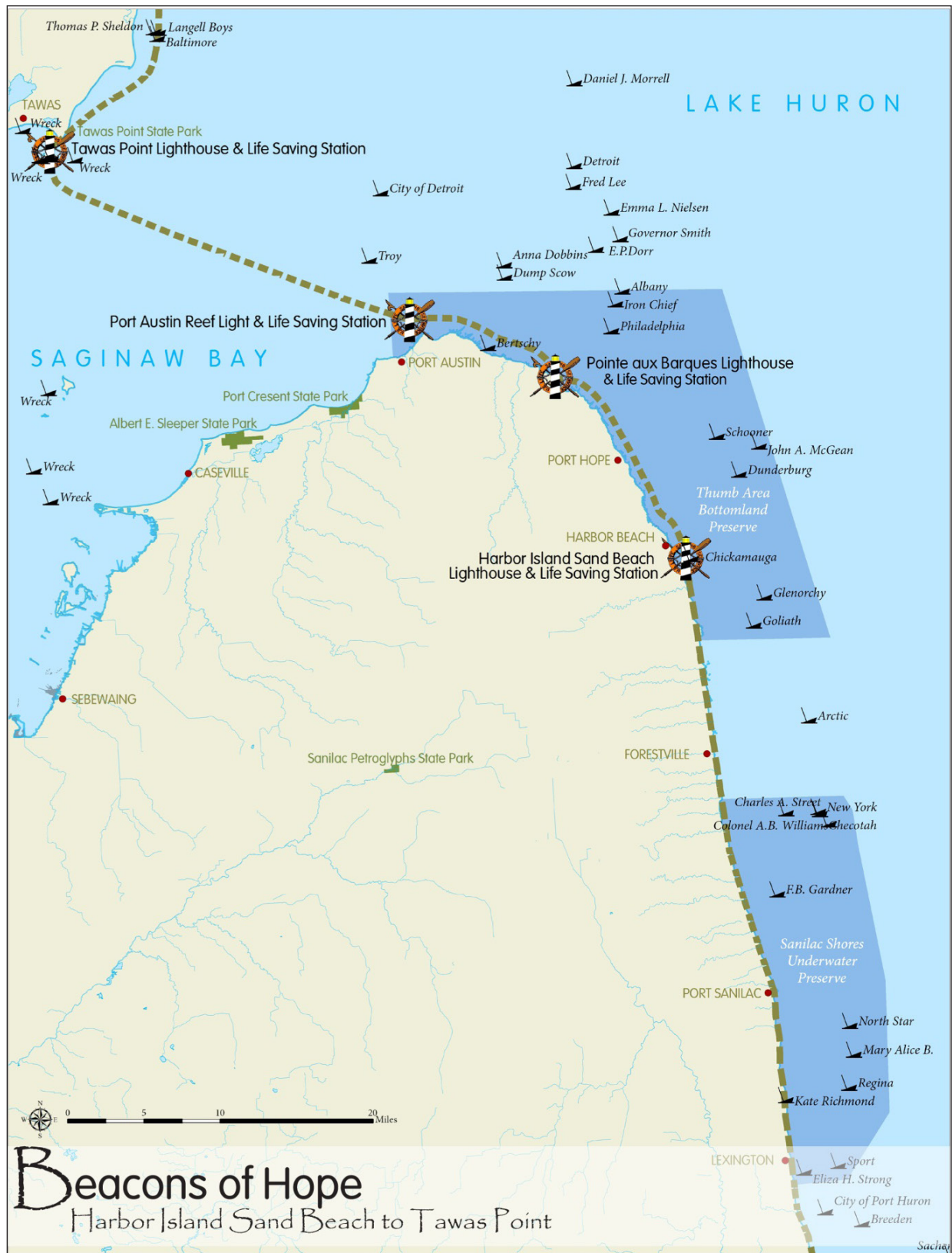
More than a dozen wrecks occur around Bois Blanc Island, many of which are now located within the Straits of Mackinac Underwater Preserve. The majority of shipwrecks in the area resulted from collisions in the congested shipping lanes approaching the Straits or Detour Passage leading to Lake Superior. The schooners *Newell A. Eddy* (1890-1893), *Kate Hayes* (lost 1856 during its maiden season), *Perseverance* (1855-1864), *James R. Bentley* (1867-1878), *Persian* (1855-1868), *M. Stalker* (1863-1886), *Albemarle* (lost 1867 during its maiden season), and *St. Andrew* (1857-1878) were lost near Bois Blanc. The steamers *William H. Barnum* (1873-1894) and *J.H. Outhwaite* (1886-1905) were also lost in the area, as was the 588-foot steel steamer *Cedarville* (1927-1965), one of the last major collision on the *Great Lakes* (Kohl 2001: 242-244, 249-260). The southeast corner of Bois Blanc Island has been the site of many strandings but only two ships, the schooners *Flight* (1857-1865) and *Bonnie Doon* (1855-1867) were total losses at that location (Feltner and Feltner 1997: 25-26).



Map 2: Beacons of Hope Trail



Map 3: Beacons of Hope Trail: Fort Gratiot Detail



Map 4: Beacons of Hope Trail: Thumb Detail



Map 5: Beacons of Hope: Tawas Point to Sturgeon Point



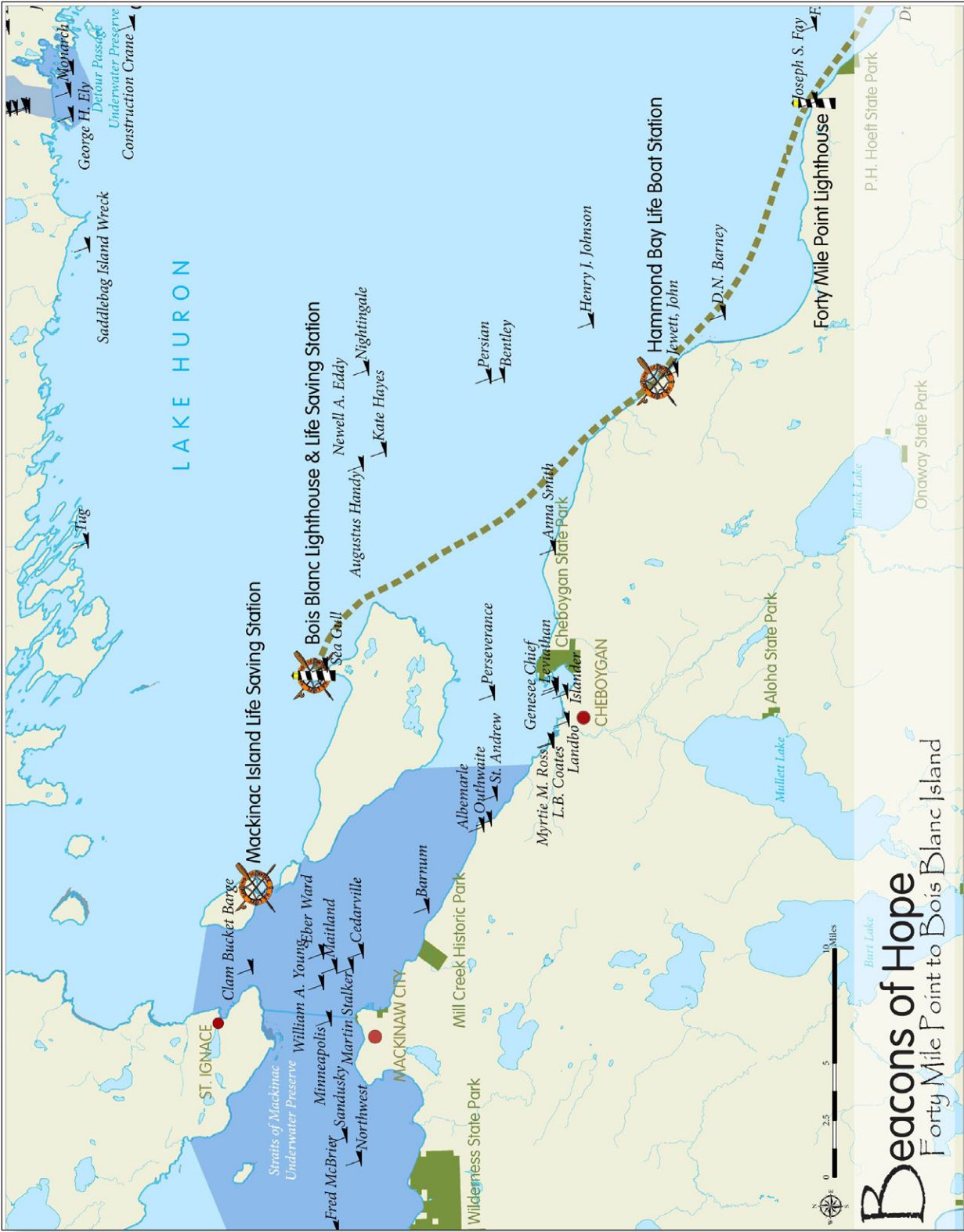
Map 6



Map 7



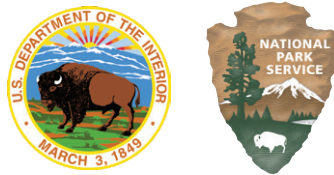
Map 8



Map 9

REFERENCES CITED

- Bunting, Robert L. 2007. *Into Oblivion: The Lives and Times Leading up to the Final Voyage of the Steamship Marine City from the Ghost Town of Alcona, Michigan on Lake Huron, 1880*. Black River Trading Company, Oxford, Michigan.
- Clifford, Candace. 1994. *Inventory of Historic Light Stations*. U.S. Department of the Interior, National Park Service, Washington, DC.
- Dunbar, Willis F. and George S. May. 1988. *Michigan: A History of the Wolverine State*. William B. Eerdmans Publishing Company, Grand Rapids, Michigan.
- Feltner, Charles E. and Jeri Baron Feltner. *Shipwrecks of the Straits of Mackinac*. Seajay Publications, Dearborn, Michigan.
- Harrington, Steve. 1998. *Divers Guide to Michigan*. Maritime Press, St. Ignace, Michigan.
- Hawkins, Bruce and Richard Stamps. 1989. *Report of Preliminary Excavations at Fort Gratiot (1814-1879) in Port Huron, Michigan*. Oakland University Research Monographs, vol. 11, no. 1.
- Hyde, Charles K. 1986. *The Northern Lights: Lighthouses of the Upper Great Lakes*. Two Peninsula Press, Lansing.
- Kohl, Cris. 2001. *The Great Lakes Diving Guide*. Seawolf Communications, Chicago.
- Lusardi, Wayne R. 2004. *Middle Island Life Saving Station Site 20AL86. Preliminary Observations*. Report on File, Thunder Bay National Marine Sanctuary, Alpena, Michigan.
- Lusardi, Wayne R. 2008. "Thunder Bay National Marine Sanctuary" in *Beneath the Inland Seas: Michigan's Underwater Archaeological Heritage*. Edited by John R. Halsey and Wayne R. Lusardi. Michigan Department of History, Arts and Libraries, Lansing. Pp. 42-45.
- Mansfield, J.B. 1899. *History of the Great Lakes, vol. 1*. J.H. Beers and Company, Chicago.
- O'Brien, T. Michael. 1976. *Guardians of the Eighth Sea: A History of the US Coast Guard on the Great Lakes*. Ninth Coast Guard District, Cleveland.
- O'Shea, John M. 2004. *Ships and Shipwrecks of the Au Sable Shores Region of Western Lake Huron*. The University of Michigan Museum of Anthropology, Ann Arbor, Michigan.
- Parker, Jack. 1986. *Shipwrecks of Lake Huron: The Great Sweetwater Sea Including the Michigan, Huron, Mackinac Straits Area*. Avery Color Studios, Au Train, Michigan.
- Penrose, Laurie. 1992. *A Traveler's Guide to 116 Michigan Lighthouses*. Friede Publications, Davison, Michigan.
- Roach, Jerry. 2006. *The Ultimate Guide to East Michigan Lighthouses*. Bugs Publishing, LLC, Durand, Michigan.
- Sarnia Observer*, Sarnia, Ontario 9/3/1880.
- Scott, George. 1905. *Scott's New Coast Pilot for the Lakes: Lights and Light-Houses, Fog Signals and Buoys, on both the American and Canadian Shores*. Speaker Printing Company, Detroit.
- Stonehouse, Frederick. 1994. *Wreck Ashore: The United States Life-Saving Service on the Great Lakes*. Lake Superior Port Cities Inc., Duluth, Minnesota.
- Summary Context Statement for NHL Lighthouse Nominations.
- Thompson, Mark L. 2000. *Graveyard of the Lakes*. Wayne State University Press, Detroit.
- Tongue, Stephen D. 2004. *Lanterns and Lifeboats: A History of Thunder Bay Island*. Sarge Publications, Alpena, Michigan.
- Weir, Andrew. 2008. *An Historical and Archaeological Analysis of the Middle Island Life-Saving Station: Applying Site Formation Theory to Coastal Maritime Infrastructure Sites*. A PAST Foundation Publication, Columbus, Ohio.



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