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Prepared By: Kenneth J. Vrana Bottomland Preserve Specialist

February 1989

Michigan Sea Grant College Program, 334 Natural Resources Building Michigan State University East Lansing, MI: 48824 (517) 358-9568

This document was prepared in part
through financial assistance provided by the
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National Oceanic and Atmospheric Administration



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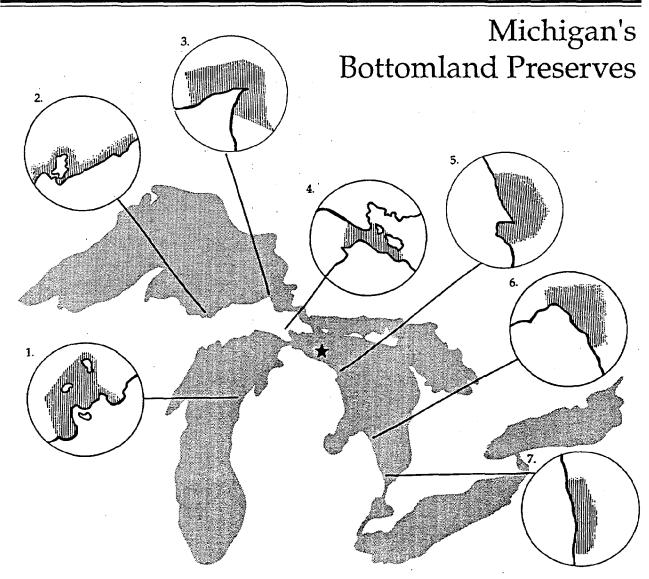
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Michigan Sea Grant College Program
334 Natural Resources Building
Michigan State University
East Lansing, MI 48824
(517) 353-9568

The Michigan Sea Grant College Program is a cooperative program of Michigan State University and The University of Michigan in Great Lakes research, extension, and education. Funding is from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and the State of Michigan.

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- 1. Manitou Passage Preserve 282 sq. miles
- 2. Alger Preserve 113 sq. miles
- 3. Whitefish Point Preserve 376 sq. miles
- 4. Straits of Mackinac Preserve 148 sq. miles
- 5. Thunder Bay Preserve 288 sq. miles
- 6. Thumb Area Preserve 276 sq. miles
- 7. Sanilac Shores Preserve 163 sq. miles
- ★ Emergency preserve designation (Rogers City area)

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#### History

Approximately 40 percent of Michigan's land area is underwater and defined as Great Lakes bottomlands. Within these bottomlands rest an estimated 6,000 or more shipwrecks, many in remarkable condition due to the preservation qualities of cold, fresh water. Sport divers have brought attention to the recreational, historical and archeological values of underwater cultural resources since self-contained underwater breathing apparatus (scuba) became publicly available during the 1950s. Shipwrecks were souvenir opportunities for sport divers initially guided by a "treasure" ethic which espoused a rule of "finders, keepers." During the 1970s, a "conservation or preservation" ethic gained credibility which spurred passage of Michigan Public Act 184 of 1980 and Public Act 452 of 1988.

The goal of Public Act 452 is to preserve and protect property of cultural or recreational value on Great Lakes bottomlands. An important feature of this Michigan legislation is designation of bottomland preserves. "A bottomland preserve is simply an area set aside for the protection of natural and/or historical and archeological resources. It is not a state park in the sense that other areas operated by the Department of Natural Resources are. It has no entry fee, personnel, physical facilities or developed attractions. It is more like a wilderness area, protected yet accessible to those with the interest and necessary skill (Swinehart 1988)." Removal of shipwreck artifacts or archeological site disturbance is restricted within preserve areas.

Currently, seven bottomland preserve areas are authorized, totaling nearly five percent of Michigan's Great Lakes bottomlands. Increasingly, Great Lakes preserves are viewed as national scuba diving attractions. Economic benefits to the Munising area alone were estimated at \$3.4 million in 1984 and \$2.4 million in 1985 from scuba divers and associated non-divers visiting Alger Bottomland Preserve (Kinnunen 1985, 1984). Community organizations, private businesspeople and sport divers have indicated strong desires to provide an increased level of visitor services and facilities for optimal recreational and economic benefits.

Bottomland preserves are not the sole domain of scuba divers. Great Lakes bottomlands and overlying waters are held in public trust by the State of Michigan for all citizens. Pleasure boaters, sport fishers, swimmers, sight seers, commercial fishers, charter boat operators, historic preservationists and researchers also derive recreational, educational, commercial and scientific values from these resources. An understanding of these often conflicting values has led to development of underwater or aquatic park concepts in Michigan.

Underwater or aquatic parks accept recreational, educational, commercial and scientific use and development under a management framework, to protect the resource base from a specified level of degradation. Aquatic parks definitionally broaden responsibilities of park administration to include water surface and coastal zone use, as well as underwater activities.

# Research Justification

Michigan state government has recognized the importance of bottomland preserve establishment, but state development of aquatic parks with shore-based visitor facilities and services has never been fully examined due to fiscal limitations. In the absence of state support, community organizations, private businesspeople and sport divers surrounding designated bottomland preserve areas have provided management guidelines, interpretive and promotional materials, museum displays, mooring systems and diving accident procedures. A private organization entitled the Michigan Bottomland Preserves Council was recently formed to coordinate development and promotion of preserve areas. These responsibilities are usually associated with park management at some governmental level.

Local efforts have been exemplary but sporatic, depending mainly on the energy of volunteers aided by technical assistance from cooperative extension agents. Government involvement is essential from a jurisdictional standpoint, since bottomlands are held in public trust by the State of Michigan. Problems of conflicting use between sport divers, commercial and sport fishers, scientific communities or others need identification and resolution by a management entity with clear authority to execute public policy.

Careful planning must be undertaken to match Great Lakes resources protection with optimal recreational development. If recreational use accelerates beyond the capacity of available management frameworks, facilities and services, resources degradation will increase and visitor safety and enjoyment will be compromised. "Designation as a bottomland preserve by the state may not be adequate to provide the levels of planning, management, and capital investment to develop preserve areas as underwater [or aquatic] parks. The complex development of these resources probably requires a mix of planned public and private investments . . . however, the preserves seem likely to serve as models of public and private partnership in developing new recreational and tourism opportunities (Kinnunen et al. 1985)."

# Research Objectives

The community development process provides a planned approach to identify and prioritize bottomland preserve community and user needs for establishment of underwater or aquatic parks in Michigan. An important preliminary step in this process is gathering current information about the resource base within preserve communities. This includes human as well as physical resources. To accomplish this first step, an on-site inventory of management frameworks, user services and facilities existing in bottomland preserve areas was completed during summer 1988. Personal interviews with local businesspeople, government employees, involved sport divers and others were conducted at this time. Information from the on-site inventory was then supplemented with reference materials from state, university and private sources. A draft bottomland preserves inventory was reviewed by preserve community members during winter 1988.

This document answers the question, "where are we now?" It provides a critical base for conducting a needs analysis of community members, and existing and potential bottomland preserve users. The needs assessment will help answer the question, "where do we go?" in terms of development of underwater or aquatic parks in Michigan. A needs assessment is planned for completion during 1989 by Michigan Sea Grant College Program. Other beneficial uses of the Michigan Bottomland Preserves Inventory are as follows.

- 1) Enhance communication between state government employees, bottomland preserve community members and private businesspeople.
- 2) Provide a base for development of preserve management plans and coordination of management plans with governmental entities, private businesses and other interested organizations.
- 3) Provide a reference document for development of interpretive, educational or promotional materials.
- 4) Stimulate the flow of ideas and innovations between preserve areas.
- 5) Enable development of a funding strategy in conjunction with information provided by a needs assessment.

An information weakness within the inventory is the lack of cumulative data on law enforcement citations, court cases and scuba diving emergency medical incidents. Currently, such information is not seperated out of other law enforcement and emergency medical data stored by the Department of Natural Resources Law Enforcement Division. The total number of preserve related citations, cases and incidents was not deemed large enough to expend the effort of retrieving this information. The value of this information will become greater with increased recreational use of bottomland preserves. In addition, the inventory lists only licensed dive charter operations which are based at particular bottomland preserve areas. An undetermined number of licensed and unlicensed charter operators trailer small craft to various bottomland preserve areas.

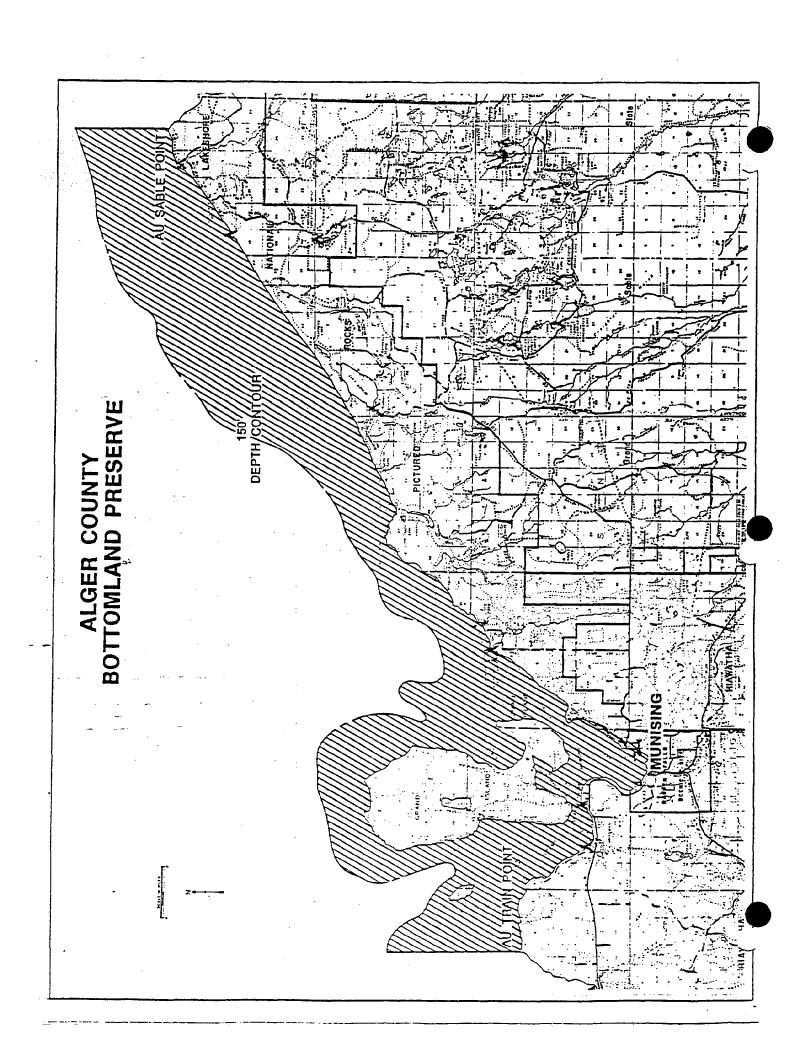
#### <u>Acknowledgements</u>

We greatly appreciate the information provided by scores of sport divers, private businesspeople, cooperative extension agents, government employees and others interested in the future of Michigan Great Lakes bottomland preserves. Their input was important in developing an accurate inventory. In addition, we wish to thank the Michigan Sea Grant College Program and the Michigan Department of Natural Resources Coastal Zone Management Program for technical and financial support. These programs continue to take a crucial role in facilitating optimal protection and development of Great Lakes resources.

We attempted to strike a balance between breadth and depth of information important to development of Michigan underwater or aquatic parks. The inventory is also intended to be a "living" document which can be updated as needed. Any suggestions, comments or corrections provided to improve the quality of this document are encouraged.

# <u>Disclaimer</u>

Loran or latitude/longitude coordinates of bottomland preserve shipwrecks were listed for management purposes. They are approximate locations that provide an impression of shipwreck distribution within the preserve area. Coordinates were also given for some vessels outside of preserve areas that are visited by preserve based charter operations. These coordinates are not intended for use by recreational divers. Contact individual bottomland preserves or charter operators for further information to plan safe and enjoyable dives on these shipwrecks.



# 1) Promotional Name/Address of Area

Alger Underwater Preserve P.O. Box 272 Munising, MI 49862 (906) 387-2138

# 2) <u>Legal Description: Alger County Great Lakes State Bottomland</u> <u>Preserve. Authorized 1981.</u>

That area of Lake Superior bottomlands, extending upward and including the surface of the water, within the longitudes 86 degrees 08 minutes 30 seconds (Au Sable Point) and 86 degrees 47 minutes and 30 seconds (Au Train Point) and lying between the ordinary high shoreline and the 150-foot depth contour based on the ordinary high-water level. It is located within Alger County and includes approximately one hundred thirteen (113) square miles.

# 3) Known Dive Sites

| NAME  | LORAN COORDINATES OR LATITUDE/LONGITUDE | MAXIMUM<br>DEPTH |
|---|---|------------------|
| GEORGE  | 31604.5/47430.6                         | 15 Ft.           |
| HERMAN H. HETTLER                               | 31632.2/47431.4                         | 33 Ft.           |
| KIOWA   | 31499.8/47425.1                         | 35 Ft.           |
| MANHATTAN                                       | 31648.3/47438.1                         | 25 Ft.           |
| Murray Bay Schooner                             | 46 Deg. 27' 88"<br>86 Deg. 38' 80"      | 30 Ft.           |
| SITKA   | 31474.0/47421.1                         | 15 Ft.           |
| SMITH MOORE                                     | 31642.2/47442.2                         | 110 Ft.          |
| SUPERIOR  | 46 Deg. 33' 45"<br>86 Deg. 24' 91"      | 12 Ft.           |
| Sand Point Wrecks                               | 46 Deg. 27' 54"<br>86 Deg. 36' 37"      | 15 Ft.           |
| Trout Bay Rock Ledges                           | 31635.0/47425.0                         | 25 Ft.           |
| Battleship Row Rock Dive<br>Miners Castle Caves | 31580.0/47425.0                         | 32 Ft.           |

Source: Grand Island Venture.

#### 4) Buoyed Shipwreck Sites

Four sites buoyed in 1988: SMITH MOORE, Murray Bay Schooner, MANHATTAN, HERMAN H. HETTLER.

Mooring lines are 3/4 inch polypropylene connected to blue and white striped buoys. Shipwreck moorings are maintained by Alger Underwater Preserve Committee.

# 5) Jurisdiction

The National Park Service possesses Lake Superior water surface juridiction one quarter mile lakeward of Pictured Rocks National Lakeshore. Jurisdiction over this one quarter mile area is shared with the U.S. Coast Guard and U.S. Army Corps of Engineers. The State of Michigan retains concurrent jurisdiction for civil and criminal processes. The National Park Service may regulate all boating and scuba diving activities occurring on the navigable waters of Lake Superior within the National Park water surface boundaries.

The State of Michigan retains ownership of submerged Lake Superior bottomlands and the related water column throughout Alger Bottomland Preserve. The State of Michigan has title to all abandoned shipwrecks embedded in submerged lands of Lake Superior as well as geological, biological and other natural or cultural features. State title is defined as ownership under public trust. Regulation of Michigan bottomlands was transferred to the Department of Natural Resources by authority of Public Act 247 of 1955. The salvage of abandoned property of historical or recreational value on Great Lakes bottomlands is regulated by Public Act 452 of 1988. This act also provides for the designation and regulation of Great Lakes bottomland preserves. It replaces Public Act 184 of 1980.

# References:

- U.S. Congress. 1988. Abandoned shipwreck act of 1987. Public law 100-298.
- U.S. Department of the Interior. 1987. Solicitor opinion, Rocky Mountain Region, National Park Service. January 26.
- U.S. Department of the Interior. 1979. Solicitor opinion, Denver Region, National Park Service. December 20.
- U.S. Department of the Interior. 1979. Solicitor opinion, Denver Region, National Park Service. September 24.
- Michigan Legislature. 1988. Underwater salvage and preserve act. Public act 452.
- Michigan Legislature. 1980. Underwater salvage act. Public act 184.

Michigan Legislature. 1967. Deed and cession to the United States. Public act 168.

Michigan Legislature. 1955. Great Lakes submerged lands act. Public act 247.

# 6) Area Governmental Administrative Offices

#### A) Federal Government:

Pictured Rocks National Lakeshore
P.O. Box 40
Munising, MI 49862
(906) 387-2607
387-3700 (General Information)

National Park Service area. Resources management policy is preservation. Recreational use is allowed as long as it does not degrade the resources beyond some administratively defined level. Offices in Grand Marais and Pictured Rocks National Lakeshore (Munising).

2) Hiawatha National Forest 2727 North Lincoln Road Escanaba, MI 49829

U. S. Forest Service area. Resources management policies are conservation and multiple use. Specific management objectives are defined through forest planning processes. District office in Munising: (906) 387-3700.

# B) State Government:

Michigan Department of Natural Resources District Office 6833 U.S. Hwy. 2, 41 & M-35 Gladstone, MI 49837 (906) 786-2351

# C) County Government:

Alger County County Building Munising, MI 49862 (906) 387-2076

Local government with responsibilities defined by state government and county residents. Offices in Munising.

# D) Municipal Government:

- 1) City of Munising 100 West Munising Ave. P.O. Box 250 Munising, MI 49862 (906) 387-2095
- 2) Burt Township (Village of Grand Marais) Grand Marais, MN 49839 (906) 494-2381

# 7) Scuba Diving Registration Policies and Programs

No programs. Charter boat operators maintain customer lists.

8) Alger Bottomland Preserve Management or Promotional Committees

Alger Underwater Preserve Committee Michigan corporation formed in 1983:

# Purpose:

- to promote, support and develop the Alger Great Lakes Bottomland Preserve.
- 2) to receive and administer funds and properties of all kinds for the above purpose.
- to promote for educational and historic purposes the Alger Great Lakes Bottomland Preserve.

# 9) Promotional Efforts

- A) Member of Michigan Bottomland Preserves Council: Alger Bottomland Preserve is listed with four other preserves on the council brochure, available since 1988 for regional and national distribution. Council promotion of Alger Bottomland Preserve and other preserves also includes a traveling display available for dive shows, film festivals, business conventions etc., and advertising in <u>Underwater USA</u> during 1988-1989.
- B) Alger County Chamber of Commerce: Alger Bottomland Preserve is listed in general tourism and recreation promotional brochures.

- C) Local Television: Scuba diving is promoted on Munising cable information channel 12, advertising area recreational opportunities during summer.
- D) Other <u>Underwater USA</u> advertisements: February, March and April 1986.
- E) Preserve Poster: In 1985, an Alger Bottomland Preserve promotional poster was developed by Alger Underwater Preserve Committee through a Michigan Department of Commerce "Yes M!ch!gan" grant.
- F) Alger Bottomland Preserve Brochures: A black & white brochure was first produced through advertising fees. In 1985, color brochures were published by Alger County Chamber of Commerce/Sea & Ski Scuba, Inc./dive charter businesses through a Michigan Department of Commerce "Yes M!ch!gan" grant. This brochure was later reprinted through advertising fees.
- G) Charter boat operators mail out their own brochures or information sheets.
- H) Sea & Ski Scuba, Inc.: Provides fact sheets on scuba diving services, dive sites and emergency procedures.
- I) Trade Shows or Film Festivals: The Alger Underwater Preserve Committee and charter boat operators have utilized promotional booths at "Our World Underwater" in Chicago, "Divers Showcase" in Lansing and "Great Lakes Shipwreck Festival" in Dearborn. "Our World Underwater" has been attended since 1981. Attendance is planned at "Underwater Canada" in Toronto, "Beneath the Seas" in White Plains, NY and the DEMA diving and trade show in 1989.

# 10) Special Projects

SMITH MOORE Project (June 1988): Objective was to remove sand from SMITH MOORE that interfered with recreational viewing and access to the shipwreck.

# 11) Retail Diving Shops and Air Compressor Services

A) Sea & Ski Scuba, Inc.P.O. Box 634Munising, MI 49862(906) 387-2927 or 387-2670

Retail sales, repair services, air compressor services, air cylinder and diving equipment rentals. No shop instructor, but scuba diving training is available through outside instructors.

(NOTE: Sea & Ski Scuba, Inc. will cease operations in 1989).

B) Diver Down Scuba Shop, Inc. 321 South Lakeshore Blvd. P.O. Box 711 Marquette, MI 49855 (906) 228-7777

Retail sales, repair services, shop instructor, air compressor services, air cylinder and diving equipment rentals.

C) Dyatomics Scuba Center, Inc. 113 1/2 East Truman Newberry, MI 49868 (906) 293-8060

Retail sales, repair services, shop instructor, air compressor services, air cylinder and diving equipment rentals.

# 12) Diving Charter Boats

A) Grand Island Venture 410 Mill Street Munising, MI 49862 (906) 387-4477

27 foot Sportcraft powerboat.
Carries up to 8 passengers.
Season: Memorial Day through September.
Approximately 375 diver days completed in 1988.
Carried approximately 200 divers in 1988.

B) 3 Devils Dive Charters
 P.O. Box 617
 Munising, MI 49862
 (906) 387-3165 (Seasonal)

25 foot powerboat.
Carries up to 12 passengers.
Season: Memorial Day through September.
Carried approximately 500 divers in 1988.

C) Tomasi Tours, Inc. 455 East Ridge St. Marquette, MI 49855 (906) 225-0410

> Carries up to 24 passengers. Season: Memorial Day through September. Carried approximately 350 divers in 1988.

Grand Island Venture, 3 Devils Dive Charters and Tomasi Tours, Inc. operate out of Brown's Addition Marina, a private facility. Sea & Ski Scuba, Inc. operates this marina, located in west Munising near M-28.

Other charter services are available on weekends. Origin and licensing compliance of these charters are unknown. Three vessels were fined for operating illegal charters in 1988.

# 13) Recreational Harbors

A) Grand Marais: Sponsored by Department of Natural Resources.

B) Munising: Sponsored by Department of Natural Resources.

# 14) Marinas or Dock Sites

# A) Munising:

- City of Munising Dock (sponsored by Department of Natural Resources): Transient accommodations, electricity, restrooms, holding tank pump out.
- 2) Browns Addition: Small private marina with dockage for approximately 10 vessels.

#### B) Grand Marais:

Township Marina: Transient accommodations (dockage for approximately 8 vessels), gasoline and diesel fuel, water, electricity, holding tank pump out, harbormaster, shower facilities, refuse facilities.

# 15) Boat Launches

A) Anna River Mouth: One mile northeast of Munising. Administered by City of Munising. 62 parking spaces.

B) AuTrain Bay: Two miles west of AuTrain. Administered by U.S. Forest Service. 18 parking spaces.

C) Grand Marais Harbor: Village of Grand Marais. Administered by Burt Township. 20 parking spaces.

D) Munising Municipal Ramp: Administered by City of Munising. 71 parking spaces.

E) Sand Point: Administered by Pictured Rocks National Lakeshore.

# 16) <u>Hospitals</u>

A) Munising Memorial Hospital Munising, MI 49862 (906) 387-4110

Emergency care and patient stabilization for scuba diving accidents.

B) Marquette: A recompression chamber is proposed for installation.

# 17) Search and Rescue (SAR) and Medical Emergency Services

# A) Munising:

- 1) Sheriff's Department: All sheriff's deputies are required to complete EMT training. Most have scuba diving accident training. The ambulance service is county funded and housed at the sheriff's department. The ambulance service is staffed by sheriff's deputies and a few volunteers. The sheriff's department operates a 24-hour dispatch and monitors marine FM radio, channel 16.
- 2) U.S. Coast Guard Auxiliary (Munising): Auxiliary boats can be accessed for search and rescue operations on a limited basis.
- 3) Pictured Rocks National Lakeshore has a 21 foot Boston Whaler patrol boat available for emergencies upon request, during May 15 through September 30.

# B) Marquette:

 U.S. Coast Guard Station Marquette 400 Coast Guard Road Marquette, MI 49855 (906) 226-3312

SAR facility located approximately 35 water miles away from the western boundary of Alger Bottomland Preserve. Minimum response time to Alger Bottomland Preserve is approximately 3 hours. SAR vessels include:

44 foot motor lifeboat.
22 foot Boston Whaler.

# 18) <u>Dive Accident Evacuation Procedure</u>

Written in 1985. Lists four evacuation plans to recompression chambers:

Plan A: Ground transportation to Alpena.

Plan B: Ground transport to Marquette County Airport. Air

transportation to available chamber via local air ambulance.

Plan C: Ground transport to Flight for Life from Delta County Airport

(Escanaba) or Marquette County Airport.

Plan D: Ground transport to Delta County or Marquette County

Airport, for rendevous with a U.S. Coast Guard helicopter dispatched from U.S. Coast Guard Air Station Traverse City. USCG helicopter transport is also possible from Hanley Airport

near Wetmore.

Dive charter operators have knowledge of Diving Accident Network (DAN).

#### 19) Diving Accidents or Fatalities

Two fatalities since 1968 were recalled by interviewees. Specifics are unknown.

# 20) Law Enforcement Capabilities

# A) Munising:

1) Alger County Sheriff's Department Munising, MI 49862 (906) 387-4444

No funding is currently available for marine patrol, although a general willingness is shown to conduct law enforcement patrols in the preserve area. The sheriff's department does not own a patrol boat. Sheriff's department personnel cooperate with Michigan DNR conservation officers.

# 2) Michigan DNR Conservation Officers:

Contact: District Law Supervisor: (906) 786-2351 Officers: Two are stationed in the Munising area.

Boats: 20 foot outboard and 16 foot outboard located in Munising.

Patrols: Specific patrols are conducted for bottomland preserve

related violations. Officers also monitor preserve activity during routine patrols and respond to citizen

complaints.

#### 21) Law Enforcement Citations and Cases

No citations or cases noted for illegal removal of artifacts since 1985.

Three citations were issued for illegal diving charter boat operation during 1988.

# 22) <u>Visitor Information or Interpretive Centers</u>

- A) Alger Chamber of Commerce: Office/Information center in Munising.
- B) Pictured Rocks National Lakeshore:
  - Munising Information Center. Shared with Hiawatha National Forest in Munising.
  - Munising Falls Interpretive Center. In Pictured Rocks National Lakeshore near Munising.
  - Grand Sable Visitor Center. In Pictured Rocks National Lakeshore near Grand Marais (summer only).
- C) Hiawatha National Forest: Munising Information Center. Shared with Pictured Rocks National Lakeshore.

# 23) <u>Interpretive Programs on Great Lakes Resources</u>

- A) Pictured Rocks National Lakeshore (July 8 thru September 4, 1988) (various programs throughout week):
  - "Superior Lighthouses and Shipwrecks." A two-hour guided walk past shoreline shipwreck remains enroute to Au Sable Light Station.
  - "Layer Cakes and Pictured Rocks." Geologic story of the lakeshore escarpment presented at Miners Castle picnic area.
  - "Sand Point A Place in Time." A guided walk around a sandy point which juts out into Lake Superior. Discussion of cultural and natural history including shipwrecks and U.S. Life Saving Service.
  - "The Times They Are a Changin' Grand Marais Harbor Yesterday and Today." Guided walk starting at Grand Marais Maritime Museum.
  - "Indian Lore to Marshmallow S'mores." Discussion of interrelationships between people and the lakeshore environment.
- B) Hiawatha National Forest (July thru August, 1988) (Saturday evening programs):
  - Topics relating mainly to Upper Peninsula or Great Lakes region wildlife.

# 24) Museums

#### A) Pictured Rocks National Lakeshore:

Grand Marais Maritime Museum: Objective is to interpret shipwrecks within the immediate off-shore area of Pictured Rocks National Lakeshore. Museum displays shipwreck artifacts from vessels inside and outside of its water surface boundary area. Present policy is to retain only artifacts from shipwrecks under the National Lakeshore water surface boundary.

Future (long term) National Park Service plans call for the following museum development and interpretive emphases:

Au Sable Point Lighthouse: U.S. Lighthouse Service history.

Grand Marais Coast Guard Station (present maritime museum): commercial fishing, shipping, shipwreck and U.S. Lifesaving Service history.

Munising Coast Guard Station (present headquarters): Modern U.S. Coast Guard history.

B) Alger County Historical Society (Munising):

Alger County Historical Museum recently purchased Washington School. Plans are to include shipping and shipwreck history of Alger Bottomland Preserve.

C) Marquette Maritime Museum (Marquette):

Themes are maritime heritage and shipwrecks of the Marquette area and Lake Superior.

# 25) Other Area Recreational Attractions

A) Pictured Rocks National Lakeshore:

Outdoor recreation area with camping, hiking, swimming, fishing, hunting, boating, canoeing and interpretive opportunities.

B) Pictured Rocks Cruises, Inc. P.O. Box 355 Munising, MI 49862 (906) 387-2379

Commercial cruise boats available from Munising to view geological shoreline features of Pictured Rocks National Lakeshore.

C) Hiawatha National Forest:

Outdoor recreation area with camping, hiking, swimming, fishing, hunting, boating, canoeing and interpretive opportunities.

D) Lake Superior State Forest:

Outdoor recreation area with camping, hiking, swimming, fishing, canoeing and boating opportunities.

E) Escanaba River State Forest:

Outdoor recreation area with camping, hiking, swimming, fishing, canoeing and boating opportunities.

F) Wagner Falls State Park:

Scenic site with hiking, but no camping.

G) Laughing Whitefish State Park:

Scenic site with hiking, but no camping.

H) Outdoor Drama Historical Theater (proposed near Munising):

Reference:

Alger County. 1987. Outdoor drama feasibility study. University of North Carolina. Copy available at Alger County Economic Development Corporation, Munising.

# 26) Special Events and Festivals

June: Pictured Rocks Road Race, Munising.

July: Bayshore 4th of July Activities, Munising.

Real Life Medicine Show, Munising.

Art in the Park, Munising. Lions Carnival, Munising.

August: Grand Marais Art & Music Festival, Grand Marais.

Annual Gun Show, Munising.

# 27) Public Transportation Facilities

A) Bus Transportation:

Marquette: Greyhound Lines.

# B) Air Transportation:

Marquette County Airport Negaunee, MI (Approx. 50 miles from Munising) (906) 475-4651

Carriers:

American Eagle (Simmons) Northwest Airlink (Simmons) Mesaba Airlines (proposed)

# 28) <u>Visitor Overnight Accommodations</u>

# A) Alger County:

450 campsites in private, National Forest, National Park and State Forest campgrounds.

300 motel accomodations.

200 resort accomodations.

Source: Alger County Chamber of Commerce

# B) Pictured Rocks National Lakeshore:

3 campgrounds with 68 vehicle or tent sites between Munising and Grand Marais.

#### C) Hiawatha National Forest:

4 campgrounds with 166 trailer or tent sites within 15 miles of Munising.

# D) Michigan State Forests:

4 campgrounds with 81 trailer or tent sites within 16 miles of Grand Marais.

6 campgrounds with 68 trailer or tent sites within  $25\ \mathrm{miles}$  of Munising.

#### E) Muskallonge Lake State Park:

179 campsites within 20 miles of Grand Marais.

# F) Munising:

13 motels with 238 rooms. 104 cabins. Another 500 camps or cottages reported within reasonable driving time.

# Source:

Alger County. 1987. Outdoor drama feasibility study. University of North Carolina.

G) Local Government Parks:

Woodland Park (Grand Marais): 100 trailer or tent sites.

Munising Tourist Park (3 miles n.w. of Munising): 72 trailer or tent sites.

H) Private Campgrounds:

Munising Area: 2 campgrounds with 177 sites.

29) Restaurants and Nightclubs

Munising - 8 restaurants Grand Marais - 1 restaurant

- 30) Tourism and Economic Development Organizations.
  - A) Alger County Economic Development Corporation P.O. Box 405
    Munising, MI 49862
    (906) 387-2516
  - B) Alger County Chamber of Commerce Munising, MI 49862 (906) 387-2138
  - C) Alger County Cooperative Extension Service Munising, MI 49862 (906) 387-2530
  - D) Grand Marais Chamber of Commerce P.O. Box 139 Grand Marais, MI 49839 (906) 494-2612
  - E) Michigan Sea Grant Extension U.P. Extension Center 1030 Wright Street Marquette, MI 49855 (906) 228-4830
  - F) Upper Peninsula Travel and Recreation Association P.O. Box 400 Iron Mountain, MI 49801 (906) 774-5480

# 31) Waterfront Development Plans

Sundberg, Carlson and Associates, Inc. 1986. Bayshore master plan. City of Munising. Includes Munising marina feasibility study.

# 32) <u>Publications Describing Alger Bottomland Preserve</u>

# A) Publications:

- Alger Underwater Preserve Committee. 1985. Alger underwater preserve diver information survey results, expenditures, and secondary economic impacts. Alger Underwater Preserve Committee, Inc.
- Alger Underwater Preserve Committee. 1984. Alger underwater preserve diver information survey results, expenditures, and secondary economic impacts. Alger Underwater Preserve Committee, Inc.
- Hulse, C.A., 1981. A spatial analysis of Lake Superior shipwrecks: a study in the formative process of the archaeological record. PhD. dissertation. Michigan State University.
- Kinnunen, R.E., J.R. Lempke, and T.C. Sundstrom. 1987. Behavior patterns of divers visiting the Alger Bottomland Preserve. Michigan Sea Grant Extension, Michigan State University. MICHU-SG-87-505.
- Opheim, L.A., 1972. Twentieth century shipwrecks in Lake Superior. PhD. dissertation. St. Louis University.
- Stonehouse, F., 1980. Munising shipwrecks. Shipwrecks Unlimited, Marquette, MI.
- Stonehouse, F., 1973. Great wrecks of the great lake: A directory of shipwrecks of Lake Superior. Harboridge Press, Marquette, MI.
- Wolff, J.F., 1979. The shipwrecks of Lake Superior. Lake Superior Marine Museum Association, Duluth, MN.

#### B) Other References:

1) Diving Times Magazine 4424 North Woodward Royal Oak, MI 48072 (313) 549-0303

Publishes articles on Michigan bottomland preserves and preserve shipwrecks.

2) For general Lake Superior and Great Lakes shipwreck information sources, including shipwreck and casualty lists or wreck charts, consult the following publication:

Feltner, C.E., and J.B. Feltner. 1982. Great Lakes maritime history: bibliography and sources of information. Seajay Publications, Dearborn, MI.

# 33) Public Inquiries About Bottomland Preserve

Unknown

#### 34) Research Conducted on Underwater Resources

- A) National Park Service. 1988. Assessment of shipwrecks within Pictured Rocks National Lakeshore surface water boundaries and some Alger Bottomland Preserve sites. Report available in 1989.
- B) National Park Service. 1979. Historic Resource Study Pictured Rocks National Lakeshore. Chapter 5 covers shipping and shipwrecks. Copy of report located at Pictured Rocks National Lakeshore.

#### 35) <u>Dive</u> Clubs

None Organized.

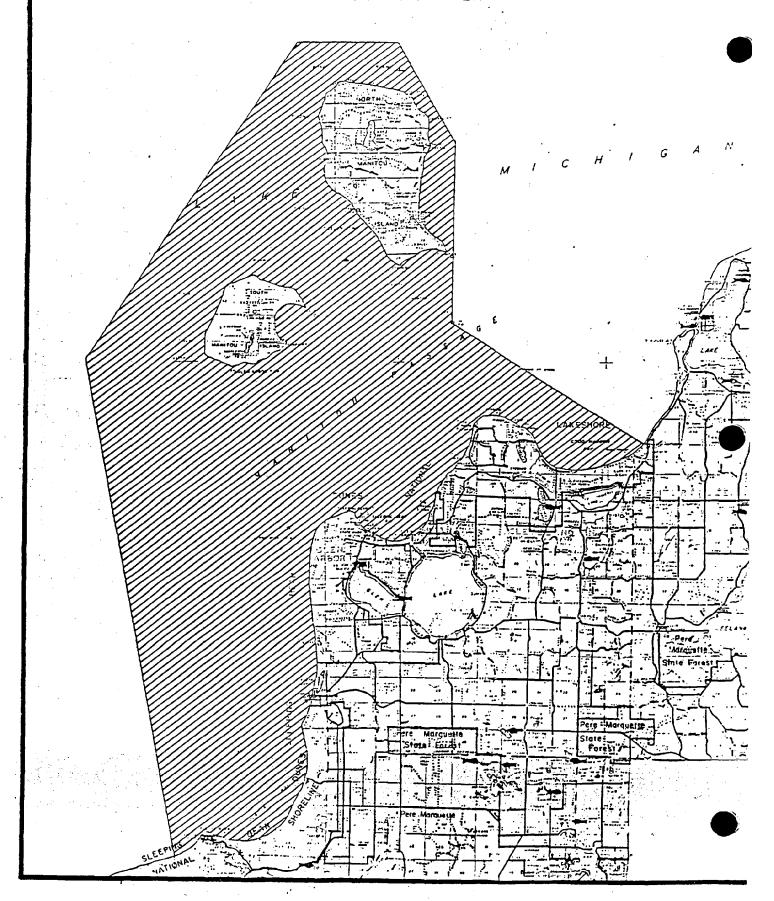
# 36) <u>Miscellaneous</u>

Most employment in Alger County is based on natural resources extraction, especially forest products. The two largest employers are Kimberly Clark Corporation and Cleveland Cliffs Iron Company, both wood products producers.

#### Source:

Sundberg, Carlson and Associates, Inc. 1986. Bayshore master plan. City of Munising.

# MANITOU PASSAGE GREAT LAKES STATE BOTTOMLAND PRESERVE 282 SQUARE MILES



# 1) Promotional Name/Address of Area

Manitou Passage Bottomland Preserve Manitou Bottomland Preserve Committee c/o Northwest Michigan Maritime Museum P.O. Box 389 Frankfort, MI 49635 (616) 352-7260

2) <u>Legal Description: Manitou Passage Great Lakes State Bottomland Preserve. Authorized 1988</u>.

An area of Lake Michigan bottomlands extending upward and including the water surface described as: Beginning at a point where the west line of township 27 north, range 15 west, Benzie County, intersects the ordinary high waterline (elevation 579.8 I.G.L.D.) of Lake Michigan (approximate latitude 44 degrees 43 minutes 09 seconds and longitude 86 degrees 10 minutes 54 seconds); thence northwesterly to a point having latitude 45 degrees 00 minutes and longitude 86 degrees 15 minutes; thence northeasterly to a point having latitude 45 degrees 11 minutes and longitude 86 degrees 05 minutes; thence due east to a point having latitude 45 degrees 11 minutes and longitude 86 degrees 00 minutes; thence southeasterly to a point having a latitude of 45 degrees 07 minutes 30 seconds and longitude 85 degrees 57 minutes; thence southerly to the North Manitou Shoal Light Horn (approximate latitude 45 degrees 01 minutes 15 seconds and longitude 85 degrees 57 minutes 25 seconds); thence southeasterly to where the north line of township 29 north, range 12 west, Leelanau County, intersects the ordinary high waterline of Lake Michigan (approximate latitude 44 degrees 57 minutes 11 seconds and longitude 85 degrees 48 minutes 14 seconds); thence westerly and southerly along the ordinary high waterline of Lake Michigan to the point of beginning, excluding the areas of North and South Manitou Islands above the ordinary high waterline of Lake Michigan, containing 282 square miles, more or less.

# 3) Known Dive Sites

| NAME   | LORAN COORDINATES OR MAXIMUM LATITUDE/LONGITUDE DEPTH       |
|--|---|
| CONGRESS                                     | 31834.3/48330.4 160 Ft                                      |
|  | 44 Deg. 59' 07" 15 Ft 86 Deg. 08' 09"                       |
| GENEVA                                       | 12 Ft   |
| Glen Haven Dock Wrecks                       | 44 Deg. 55' 27" 35 Ft 86 Deg. 01' 30"                       |
| H.D. MOORE                                   | 45 Deg. 02' 01" 25 Ft 86 Deg. 04' 45"                       |
| ONTAUK                                       | 45 Deg. 09' 58" 22 Ft<br>85 Deg. 59' 48"                    |
| North Manitou Island                         | 45 Deg. 02' 30" 20 Ft                                       |
| J. RALPH                                     | 86 Deg. 00' 00"<br>45 Deg. 01' 10" 40 Ft<br>86 Deg. 06' 00" |
|  | 31799.6/48386.8 10 Ft                                       |
|  | 31816.5/48400.0 15 Ft                                       |
| leeping Bear Point Wreck                     | 44 Deg. 53' 68" 15 Ft                                       |
| J. L. FROST                                  | 31859.1/48339.4 15 Ft                                       |
| ral Dock                                     | 44 Deg. 45' 50" 15 Ft 86 Deg. 04' 20"                       |
|  | 45 Deg. 01' 32" 45 Ft 86 Deg. 05' 00"                       |
| rescent City Dock Site                       | 45 Deg. 06' 57" 15 Ft                                       |
| mpire Dock                                   | 86 Deg. 03' 35"<br>44 Deg. 46' 25" 12 Ft<br>86 Deg. 04' 00" |
| len Haven Dock Site                          | 44 Deg. 55' 30" 15 Ft 86 Deg. 01' 30"                       |
|  | 45 Deg. 07' 15" 12 Ft<br>85 Deg. 58' 30"                    |
|  | 44 Deg. 43' 40" 10 Ft                                       |
| ort Onieda Dock Site                         | 44 Deg. 57' 10" 10 Ft<br>85 Deg. 56' 45"                    |
| tormer Dock Site                             | 45 Deg. 05' 00" 10 Ft<br>85 Deg. 58' 59"                    |
| South Manitou Island<br>Harbor Sand Drop-off | 45 Deg. 01' 58" 75 Ft                                       |

Source: Manitou Bottomland Preserve Committee 1988 Underwater Archeological Assessment.

# 4) Buoyed Dive Sites

Five sites are planned to be buoyed in 1989. Materials include non-metallic plastic foam core buoys with a short length of chain attached to deter theft, polypropylene descent/ascent lines and anchoring weights. Buoys will be maintained by Manitou Bottomland Preserve Committee.

# 5) Jurisdiction

The National Park Service possesses Lake Michigan water surface jurisdiction one quarter mile lakeward of Sleeping Bear Dunes National Lakeshore. Jurisdiction over this one quarter mile area is shared with the U.S. Coast Guard and U.S. Army Corps of Engineers. The State of Michigan retains concurrent jurisdiction for civil and criminal processes. The National Park Service may regulate all boating and scuba diving activities occurring on the navigable waters of Lake Michigan within National Park water surface boundaries. Almost all Lake Michigan shoreline surrounding Manitou Passage Bottomland Preserve is owned by the National Park Service.

The State of Michigan retains ownership of submerged Lake Michigan bottomlands and the related water column throughout Manitou Passage Bottomland Preserve. The State of Michigan has title to all abandoned shipwrecks embedded in submerged lands of Lake Michigan as well as geological, biological and other natural or cultural features. State title is defined as ownership under public trust. Regulation of Michigan bottomlands was transferred to the Department of Natural Resources by authority of Public Act 247 of 1955. The salvage of abandoned property of historical or recreational value on Great Lakes bottomlands is regulated by Public Act 452 of 1988. This act also provides for the designation and regulation of Great Lakes bottomland preserves. It replaces Public Act 184 of 1980.

#### References:

- U.S. Congress. 1988. Abandoned shipwreck act of 1987. Public law 100-298.
- U.S. Department of the Interior. 1987. Solicitor opinion, Rocky Mountain Region, National Park Service. January 26.
- U.S. Department of the Interior. 1979. Solicitor opinion, Denver Region, National Park Service. December 20.
- U.S. Department of the Interior. 1979. Solicitor opinion, Denver Region, National Park Service. September 24.
- Michigan Legislature. 1988. Underwater salvage and preserve act. Public act 452 of 1988.

Michigan Legislature. 1980. Underwater salvage act. Public act 184.

Michigan Legislature. 1955. Great Lakes submerged lands act. Public act 247.

# 6) Area Governmental Administrative Offices

#### A) Federal Government:

Sleeping Bear Dunes National Lakeshore P.O. Box 277 Empire, MI 49630 (616) 326-5134

National Park Service. Resources management policy is preservation. Recreational use is allowed as long as it does not degrade involved resources beyond some administratively determined level. Congress established Sleeping Bear Dunes National Lakeshore on October 21, 1970 to preserve "outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena . . . for the benefit, inspiration, education, recreation, and enjoyment of the public . . . In preserving the lakeshore and stabilizing its development, substantial reliance shall be placed on cooperation between Federal, State, and local governments to apply sound principles of land use planning and zoning." (Public Law 91-479, 84 Stat. 1075). Management objectives include "[monitoring] of surface archeological sites and underwater archeological sites to prevent deterioration and/or loss of these resources." Visitation was over 1.3 million in 1988.

# Further References:

National Park Service. 1979. Sleeping Bear Dunes National Lakeshore general management plan.

National Park Service. 1988. Sleeping Bear Dunes National Lakeshore resource management plan.

National Park Service. 1985. Sleeping Bear Dunes National Lakeshore statement for management.

#### B) State Government:

Michigan Department of Natural Resources District Office 8015 Mackinaw Trail Cadillac, MI 49601 (616) 775-9727

# C) County Government:

Local government with responsibilities defined by state government and county residents. Most of Manitou Passage Bottomland Preserve is located offshore of Leelanau County with a southern portion offshore of Benzie County. All Lake Michigan shoreline is owned by Sleeping Bear Dunes National Lakeshore with exception of beaches near the villages of Empire and Glen Arbor, and small private inholdings. County offices are located as follows.

Leelanau County Clerk P.O. Box 467 Leland, MI 49654 (616) 256-9824 Leelanau County Board of Commissioners P.O. Box 577 Leland, MI 49654

Benzie County Government Center 448 Court Place Beulah, MI 49617 (616) 882-9671

# 7) Scuba Diving Registration Policies and Programs

No policies or programs in past or present.

8) <u>Manitou Passage Bottomland Preserve Management or Promotional Committees.</u>

Manitou Bottomland Preserve Committee was formed in June 1986 as a committee of the Northwest Michigan Maritime Museum. The museum is a non profit organization dedicated to the preservation and interpretation of Great Lakes maritime heritage.

Manitou Bottomland Preserve Committee c/o Northern Michigan Maritime Museum P.O. Box 389
Frankfort, MI 49635
(616)352-7260

Mission: To provide a management plan and implement programs and policies which will document, interpret and preserve the submerged resources within the confines of the Manitou Passage Bottomland Preserve.

# 9) Promotional Efforts

A) Member of Michigan Bottomland Preserves Council since 1989. Will participate with other Michigan bottomland preserves in state, regional and national promotional efforts.

- B) An informational brochure describing Manitou Passage Bottomland Preserve and sport diving will be available in 1989 through the Manitou Bottomland Preserve Committee.
- C) Manitou Bottomland Preserve Committee had an information booth at "Ford Seahorses Great Lakes Shipwreck Festival" at Dearborn in 1987. The committee plans additional promotional efforts at dive shows and film festivals. Informational panels describing Manitou Passage Bottomland Preserve were created for display at promotional events.
- D) The proposed Manitou Passage Bottomland Preserve was featured in the July 1987 issue of <u>Lakeland Boating</u>.
- E) Otherwise, information describing Manitou Passage Bottomland Preserve and visitor use activities has been predominantly disseminated though Manitou Bottomland Preserve Committee and Northwest Michigan Maritime Museum. This has been accomplished through newsletters, local newspaper articles, audio-visual presentations in preserve area communities and word-of-mouth.

# 10) Special Projects or Events

A) Coastal Zone Management Grant (1988)
Michigan Department of Natural Resources
Land & Water Management Division

Recipient: Manitou Bottomland Preserve Committee Sponsored by Village of Empire

Project Objectives for Manitou Passage Bottomland Preserve:

Phase I: Locate known shipwreck and other dive sites; photograph sites; develop, print and circulate an informational brochure; develop and circulate an audio-visual program; provide instruction and training for National Park Service personnel in preserve resources, regulations, safety/emergency procedures and interpretation; develop and implement interpretive programs, tours and displays.

Phase II: Provide amateur archeological training workshops for sport divers; placement of marker/mooring buoys on five shipwreck sites; place informational signs at boat launching sites.

Phase III: Conduct an underwater archeological assessment; develop a "new find" policy and plan.

An underwater archeological assessment workshop was conducted in June 1988 at Northwest Michigan Maritime Museum for sport divers. Other objectives are planned for completion in 1988-89.

B) Coast Watch Program (1982-1987) Northwest Michigan Maritime Museum

Coastal residents and local sport divers reported beach or near-shore wreckage from sunken vessels to Northwest Michigan Maritime Museum. Museum personnel would photograph and document the wreckage.

# 11) Retail Diving Shops and Air Compressor Services

Scuba North 13380 West Bay Shore Drive Traverse City, MI 49684 (616) 947-2520

Offers shipwreck and other diving charters, diving trips, air fills, scuba instruction, scuba equipment rental, retail sales, service and repairs.

## 12) Diving Charter Services

A) Vessel Name: SOLACE Captain Jack Spencer Scuba North 13380 West Bay Shore Drive Traverse City, MI 49684 (616) 947-2520

26 foot fiberglass powerboat.
Carries up to 6 passengers.
Will charter from Leland or Glen Arbor.
Season: May - October.
Carried approximately 40 divers in 1988.

B) Inland Seas Marine P.O. Box 87 Frankfort, MI 49635 (616) 352-6106

Vessel Name:CRESCENT CITYVessel Name:TCHKIDONCaptain Jed JaworskiCaptain Jed Jaworski25 foot steel powerboat.25 foot powerboat.Carries up to 6 passengers.Carries up to 6 passengers.

Will charter from Leland, Glen Arbor, Empire or Frankfort. Season: May - November. Carried approximately 20 divers in 1988. C) DOUBLE R
Captain Rick Bailey
P.O. Box 108
Empire, MI 49630
(616) 326-5445

25 foot powerboat.
Carries up to 6 passengers.
Will charter from Glen Arbor, Frankfort, Leland and Empire.
Season: May - October.
No diving passengers carried in 1988.

D) HIGH ROLLER
Captain John P. Voss
70 S. Long Lake Rd.
Traverse City, MI 49684
(616) 943-9158
(616) 275-6226

25 foot powerboat. Carries up to 6 passengers. Will charter from Frankfort or Leland. Season: May - October.

# 13) Recreational Harbors

- A) Leland: Sponsored by Michigan Department of Natural Resources.
- B) Frankfort: Sponsored by Michigan Department of Natural Resources.
- C) South Manitou Island: National Park Service.

# 14) Marinas or Dock Sites

## A) Leland:

- 1) Leland Township Marina (Sponsored by Michigan DNR): Seasonal dockage restricted to recreational vessels. Provides transient accommodations, gasoline and diesel fuel, water, electricity, restrooms, shower facilities, harbormaster, holding tank pump out and VHF-FM radio. Phone number: (616) 256-9132.
- 2) Private Docks:

Carlson Fisheries Dock

Manitou Transit Dock

# B) Frankfort:

- Borwell Yacht Basin (City of Frankfort Marina): 1) Sponsored by Michigan DNR. Seasonal dockage restricted to recreational vessels. Provides transient accommodations, gasoline and diesel fuel, public telephones, water, electricity, restrooms, shower facilities, harbormaster, holding tank pump out and VHF-FM radio. Phone number: (616) 352-9051.
- Private Marinas: 2)

East Shore Marina

Mitchell Marina

#### C) Elberta:

- 1) Elberta Village Marina
- 2) Private Marinas:

Betsie Bay Marina, Inc.

Elberta Charter Boat Marina: 20 sport fishing charters available.

## 15) Boat Launches

A) Leelanau County:

Leland Ramp:

Administered by Leland Township.

44 parking spaces.

Glen Arbor Boat Launch:

Administered by Glen Arbor Township.

Empire Boat Launch:

Administered by Village of Empire.

B) Benzie County:

Frankfort Municipal Ramp:

Administered by City of Frankfort.

115 parking spaces.

Platte River Mouth Boat Launch: Administered by Benzie County.

Small boats. Seasonal.

## 16) Hospitals

A) Munson Medical Center 1105 Sixth Street Traverse City, MI 49684 (616) 922-9000

24-hour physician staffed emergency room services.

B) Traverse City Osteopathic Hospital 550 Munson Avenue Traverse City, MI 49684 (616) 922-8400

24-hour physician staffed emergency room services.

C) Paul Oliver Memorial Hospital 224 Park Frankfort, MI 49635 (616) 352-9621

U.S. Coast Guard heliport nearby.

D) Leelanau Memorial Hospital High Street Northport, MI 49670 (616) 386-5101

## 17) Search & Rescue and Emergency Medical Services

- A) Search & Rescue (SAR):
  - U.S. Coast Guard Air Station Traverse City Traverse City, MI 49684 (616) 922-8214

Conducts air rescue and emergency evacuation operations. Familiar with scuba diving emergency care. Will transport sport divers to a recompression chamber if no commercial air service is available. Three SAR helicopters are available.

2) U.S.Coast Guard Station Frankfort P.O. Box 192 Frankfort, MI 49635 (616) 352-4242

Search & Rescue Station. Area of responsibility includes most of Manitou Passage Bottomland Preserve. Coast Guard boat response from Frankfort to the preserve would be approximately 2-3 hours. U.S. Coast Guard Air Station Traverse City could provide the shortest SAR response time.

SAR vessels available:

One 44 foot SAR vessel. Two 22 foot utility boats.

3) Sleeping Bear Dunes National Lakeshore National Park Service P.O. Box 277 Empire, MI 49630 (616) 326-5134

Operates a 28 foot aluminum utility boat out of Leland. One 22 foot aluminum work boat is stationed at South Manitou Island. Another 22 foot aluminum work boat is stationed at North Manitou Island. These vessels are available for SAR operations by contacting the National Park Service.

4) Leelanau County Sheriff 201 Chandler Street Leland, MI 49654 (616) 256-9829

Seasonal Marine Safety officers are on staff during summer. No routine patrols are conducted on Lake Michigan, although officers will respond to emergencies as needed. Officers operate two 20 foot outboards.

5) Benzie County Sheriff P.O. Box 116 Beulah, MI 49617 (616) 882-4484

Marine Safety officers conduct patrols on Lake Michigan as needed. They will respond to emergencies in the southern portion of the preserve. Launch facilities at Frankfort are used. Sometimes officers will launch at Platte River mouth. Officers operate a 20 foot Boston Whaler.

- B) Emergency Medical Services:
  - 1) Leelanau County Sheriff:

Maintains a 24-hour dispatch for ambulance services in Empire, Glen Arbor, Cedar and Leland. Does <u>not</u> monitor marine FM radio channel 16.

2) Benzie County Sheriff:

Maintains a 24-hour dispatch for local ambulance services.

## 18) Dive Accident Emergency Procedures

No procedures have been formally developed and publicized. A meeting was held in June 1988 at U.S.C.G. Air Station Traverse City to discuss dive accident emergencies. It was attended by representatives from U.S. Coast Guard, National Park Service, Michigan Department of Natural Resources and Leelanau County Sheriff's Department. Consensus was that diving related emergency telephone calls should be first placed with the Leelanau County Sheriff's Department dispatch. On-water marine FM radio emergency calls should be directed to U.S. Coast Guard Station Frankfort on channel 16. Leelanau County Sheriff's Department and the U.S. Coast Guard can then coordinate diver emergency care and evacuation. If private-commercial emergency air and/or ground transport is unavailable, U.S. Coast Guard Air Station Traverse City may respond. A preserve brochure planned for 1989 will list dive accident emergency procedures.

## 19) Diving Accidents or Fatalities

None recalled by interviewees.

#### 20) Law Enforcement Capabilities

A) Leelanau County Sheriff (616) 256-9829

No routine law enforcement patrols on Lake Michigan. (See section 17 for further details).

B) Benzie County Sheriff (616) 882-4484

No law enforcement patrols are conducted for bottomland preserve violations. (See section 17 for further details).

C) Michigan DNR Conservation Officers:

Contact: District Law Supervisor: (616) 775-9727

Officers: 5 are available for Manitou Passage Bottomland

Preserve.

Boats: 20 foot Boston Whaler located in Traverse City.

17 foot Boston Whaler located in Traverse City.

21 foot Sea Craft located in Manistee. 20 foot outboard located in Manistee.

Patrols: Will monitor diving activity during routine patrols.

Has completed only complaint investigations of

bottomland preserve violations to-date.

# 21) Law Enforcement Cases and Citations

None recalled by DNR District Law Supervisor since 1985.

# 22) <u>Visitor Information or Interpretive Centers</u>

A) Visitor Center Sleeping Bear Dunes National Lakeshore P.O. Box 277 Empire, MI 49630 (616) 326-5134

Open daily all year. The center offers natural and cultural resources exhibits, a slide program and book sales. Interpretive themes include Great Lakes shipping, shipwrecks and lighthouses. A fresnel lens from a lighthouse is displayed.

A small visitor center with interpretive displays is also maintained on South Manitou Island. Exhibits emphasize South Manitou Island cultural history. Open during the summer visitor season.

- B) Leelanau County Chamber of Commerce P.O. Box 627 407 South Main Street Leland, MI 49654 (616) 256-9895
- C) Glen Lake-Sleeping Bear Chamber of Commerce Information Bureau Glen Arbor, MI 49636 (616) 334-3238
- D) Benzie County Chamber of Commerce 826 Michigan Avenue Benzonia, MI 49616 (616) 882-5801 or 882-5802
- E) Traverse City Area Chamber of Commerce 202 East Grandview Parkway Traverse City, MI 49684 (616) 947-5075

## 23) Interpretive Programs on Great Lakes Resources

A) Sleeping Bear Dunes National Lakeshore:

Interpretive activities and materials are provided "to foster public awareness and understanding of the geological and ecological processes that have shaped the Lakeshore's natural resources and an

understanding of people's historic relationship with this environment and to enhance the enjoyment and recreational opportunities consistent with maximum protection of these resources." "Because Lake Michigan is so prominent in the Lakeshore and had so great an influence on transportation through the area and the settlement of North Michigan, the region's maritime history and early settlements are recognized as major interpretive themes."

#### Reference:

National Park Service. 1985. Sleeping Bear Dunes National Lakeshore statement for management.

Interpretive programming includes the following:

Visitor Center: Audio-visual programs, interpretive exhibits and educational sales materials are available. Open daily all year.

Campground Amphitheaters: Interpretive slide programs are presented by Park Rangers at Platte River and D.H. Day campgrounds during the summer visitor season. Topics include Great Lakes natural and cultural resources.

Sleeping Bear Point Coast Guard Station Maritime Museum: Visitors participate in a cultural demonstration of the historic Life-Saving Station beach apparatus (breeches buoy). This apparatus was used in rescue of near-shore shipwreck survivors. Visitors may also join guided interpretive walks through the station boathouse and quarters. Interpretive presentations are provided during the summer visitor season.

South Manitou Island: A National Park Service guided interpretive walk is available through the South Manitou Island Lighthouse. Topics include Great Lakes shipping and shipwrecks. A guided auto tour of South Manitou Island is conducted by Manitou Island Transit employees in coordination with cruise boat schedules. Tours focus on either human or natural history. These presentations are provided during the summer visitor season.

Other Guided Walks: Guided interpretive walks which emphasize natural resources themes are available at other locations around Sleeping Bear Dunes National Lakeshore. Brochures are available at the Sleeping Bear Dunes National Lakeshore Visitor Center which describe interpretive schedules and topics.

Other Interpretive Materials: Brochures, trail leaflets and self-guiding trails are provided for park visitors. Brochure topics include geology, wildlife, maritime history and South Manitou Island. A variety of interpretive signing and wayside exhibits are provided throughout Sleeping Bear Dunes National Lakeshore covering natural and cultural resources topics. An overlook trail and interpretive sign are located near shipwreck FRANCISCO MORAZAN on South Manitou Island.

#### 24) Museums

A) Sleeping Bear Point Coast Guard Station Maritime Museum Sleeping Bear Dunes National Lakeshore

Museum themes are Manitou Passage shipping, shipwrecks and activities of the United States Life Saving Service and U.S. Coast Guard. Exhibits include surfboats, beach apparatus, shipwreck artifacts, furnishings of keeper's and crew's quarters. Exhibits are housed in a restored U.S. Life-Saving Service station and boathouse. An oral history listening room is provided. The museum is open on a daily basis during the summer visitor season and on weekends during spring and fall. Visitation was estimated at 59,700 in 1986.

B) Glen Haven Village Sleeping Bear Dunes National Lakeshore

The village area is being considered for interpretive development by the National Park Service. A historic fruit cannery building currently houses a number of small boats and may be adapted as a small boat museum which also interprets commercial fishing. A Great Lakes fish tug is located on cannery grounds. Remains from a historic dock site are located near the village and receives an undetermined amount of sport diving activity.

Further Reference:

National Park Service. 1987. Draft development concept plan, interpretive prospectus and environmental assessment for Glen Haven area. Sleeping Bear Dunes National Lakeshore.

C) Leelanau County Historical Museum P.O. Box 246
Leland, MI 49654
(616) 256-7475

Includes one display on shipping/shipwreck history.

D) Empire Area Museum Empire, MI 49630

Primarily household and farming artifacts.

E) Northwest Michigan Maritime Museum P.O. Box 389
Frankfort, MI 49635
(616) 352-7260

A nonprofit organization with the purpose of sharing Frankfort's and Northwest Michigan's maritime past and present. Museum themes include Great Lakes and local shipping, shipwrecks, commercial fishing and small boat use. Interpretation is provided through exhibits, community workshops and events, films, slide presentations

and educational sales materials. A number of shipwreck artifacts and small boats are displayed.

- F) Benzie Area Historical Museum Benzonia, MI 49616 (616) 882-5539
- G) Other Museums:

Other museums emphasizing non-maritime themes can be found in the Grand Traverse area and Traverse City.

## 25) Other Recreational Attractions

A) Sleeping Bear National Lakeshore P.O. Box 277 Empire, MI 49630 (616) 326-5134

National Park area emphasizing preservation of natural and cultural features, and outdoor recreation. Sleeping Bear National Lakeshore owns almost all shoreline surrounding Manitou Passage Bottomland Preserve. Large sand dunes and miles of sand beaches are a prime attraction. Visitation exceeded 1.3 million in 1988.

B) State Forests:

Pere Marquette State Forest: Within Benzie, Grand Traverse and Leelanau counties. Forest and water based recreation activities.

C) State Parks:

Leelanau State Park (approximately 20 miles north of Leland): Camping, picnicking, swimming, hunting, fishing and hiking. Historic Grand Traverse Lighthouse with a small museum. Lake Michigan beach.

Traverse City State Park (approximately 25 miles from Leland): Camping, picnicking, swimming and fishing. Grand Traverse Bay beach.

Interlochen State Park (approximately 42 miles from Leland): Camping, picnicking, swimming and fishing. Adjoins Interlochen National Music Camp.

- D) Other Attractions:
  - 1) Leelanau County:
    - A) Fishtown: An historic commercial fishing village located near the Leland Township Marina in Leland. Fishtown is listed as a National Historic Site. Fishtown now houses a number of art & crafts, gift and specialty stores.

- B) Resorts: The Homestead and Sugar Loaf resort offer private recreation opportunities.
- C) Vineyards, wineries and orchards are found throughout Leelanau County.
- 2) Benzie County:
  - A) City of Milwaukee P.O. Box 1591 Frankfort, MI 49635

Plans have been proposed to adapt historic car ferry S.S. CITY OF MILWAUKEE into a maritime museum located at the Frankfort waterfront.

B) Platte River Anadromous State Fish Hatchery Honor, MI 49640

Michigan's largest and most modern fish hatchery. Production of steelhead trout, coho salmon and chinook salmon. An interpretive center and tour of the hatchery are available for visitors.

- C) Betsie River State Game Refuge: Located near Elberta and Frankfort.
- D) Point Betsie Lighthouse: Located near Frankfort.
- 3) Grand Traverse County:
  - A) Interlochen Center for the Arts: Includes the Interlochen National Music Camp and Interlochen Arts Academy. Approx. 20 miles south of Traverse City.
  - B) Old Mission Peninsula: Scenic drive including beaches, Old Mission Lighthouse and a winery. North of Traverse City.
  - C) Maritime Heritage Alliance P.O. Box 1108 Traverse City, MI 49685 (616) 941-0850

The Maritime Heritage Alliance is a nonprofit organization, "working to share and preserve our maritime past and present. Our Alliance sees that any marine related information or artifacts pertaining to this region, remain here, and are made available for public use or display . . . Our long term objectives are to operate a permanent museum in the Traverse area, and to develop a collection of the fine replicas of boats; sail, steam and the smaller rowing boats that were historically significant to the states adjoining the Great Lakes, particularly its northern waters." A past project resulted in construction of mackinaw boat GRACIE L. Currently,

visitors may observe the construction of schooner MADELINE on the grounds of the Great Lakes Maritime Academy in Traverse City.

D) Traverse Tall Ship Co. 13390 West Bay Shore Dr. Traverse City, MI 49684 (616) 941-2000

Sailing charters are available aboard the 105 foot schooner MALABAR. Includes day sails, two and three day outings and sunset sails.

- E) Traverse City Opera House The City Opera House Heritage Committee 112 1/2 East Front St. Traverse City, MI 49685 (616) 941-0850
- 4) Other Recreational Activities:

Leelanau, Benzie and Grand Traverse Counties provide numerous recreational activities not listed above. Visitors may shop at a large variety of gift, antique, arts & crafts, or specialty shops and art galleries. Abundant outdoor recreation opportunities include golf, hang gliding, balloon rides, canoeing, fishing, boating, hiking and swimming.

## 26) Special Events and Festivals

- A) Traverse City sponsors the National Cherry Festival which takes place in July. Numerous special events and festivals are hosted by villages and cities within Leelanau, Benzie and Grand Traverse Counties during the summer visitor season. Contact appropriate chamber of commerce offices for specific information.
- B) Prism Publications produces a newspaper and magazine which provides details on visitor activities, entertainment, attractions, lodging, restaurants and services. The address is:

Prism Publications 121 South Union St. Traverse City, MI 49684 (616) 941-8174

Other visitor information magazines or guides are published by:

Preview Community Weekly P.O. Box 1167 Traverse City, MI 49684 (616) 946-7650 Traverse Communication Group, Inc. P.O. Box 265
Traverse City, MI 49685
(616) 947-1310

## 27) Public Transportation Facilities

A) Air Transportation:

Cherry Capital Airport
Airport Access Road
Traverse City, MI 49684
(616) 947-2250
Carriers:
American Eagle (Simmons)
Northwest Airlink (Simmons)
Midway Connection (Midstate)

B) Bus Transportation:

Traverse City: North Star Lines.

Beulah or Benzonia: North Star Lines.

- C) Ferry Boat Transportation:
  - 1) Leland:

Manitou Island Transit P.O. Box 591 Leland, MI 49654 (616) 256-9061 or 271-4217

Visitor boat transportation to South and North Manitou Islands of Sleeping Bear Dunes National Lakeshore. Operates May-October for South Manitou Island and June-December for North Manitou Island. Contact company for schedules.

# 28) <u>Visitor Overnight Accommodations</u>

- A) Campgrounds:
  - 1) Private Campgrounds:

Leelanau County: 302 sites. Benzie County: 305 sites. Grand Traverse County: 638 sites.

2) Pere Marquette State Forest Campgrounds:

Benzie County: 95 sites.

Grand Traverse County

(within 15 miles of Traverse City): 131 sites.

## 3) State Parks:

Leelanau State Park: 50 sites. Interlochen State Park: 550 sites. Traverse City State Park: 330 sites.

B) Motels, Hotels, Cottages, Resorts etc.:

Abundant overnight accommodations are found within Leelanau, Benzie and Grand Traverse Counties. Most lodging units are located near Traverse City, which is approximately 25 miles from Leland. Reservations at these establishments are recommended prior to the summer season due to heavy visitation of area attractions. Contact appropriate chamber of commerce offices for further information.

## 29) Restaurants and Lounges

Numerous restaurants and lounges are found within Leelanau, Benzie and Grand Traverse Counties. Contact appropriate chamber of commerce offices for further information.

# 30) Tourism and Economic Development Organizations

- A) Economic Development Commission Leelanau County Board of Commissioners P.O. Box 577 Leland, MI 49654 (616) 256-9711
- B) Benzie County Economic Development Corporation 448 Court Place Beulah, MI 49617 (616) 882-5216
- C) Northwest Michigan Resource Conservation and Development Area 3674 North U.S. 31 South Traverse City, MI 49684 (616) 946-6817
- D) Michigan Sea Grant Cooperative Extension Governmental Center 400 Boardman Avenue P.O. Box 552 Traverse City, MI 49684-2542 (616) 922-4620

- E) Grand Traverse Convention and Visitors Bureau 900 East Front Street
  Suite 100
  Traverse City, MI 49684
  (616) 947-1120
- F) West Michigan Tourist Association Hospitality House 136 Fulton St. East Grand Rapids, MI 49503 (616) 456-8557
- G) Chamber of Commerce Offices: (See section 22)

## 31) Waterfront Development Plans

A) Sleeping Bear Dunes National Lakeshore: "[Recreational] harbors exist at Leland and Frankfort. Because no harbor exists between these locations, occasionally a proposal is made to build a harbor in the Lakeshore, Glen Haven or Empire. The Lakeshore completed a three year Docking Facility Feasibility Study in January 1985 and announced the selection of the 'no action' alternative . . . The Village of Empire in 1985 considered building a harbor in South Bar Lake but decided against it due to the cost involved."

#### Reference:

National Park Service. 1985. Sleeping Bear Dunes National Lakeshore statement for management.

- B) Contact City of Frankfort, Village of Empire, Village of Glen Arbor and Village of Leland for availability of other waterfront development plans.
- 32) Public Inquiries About Manitou Passage Bottomland Preserve

Public inquiries have mainly been directed to Scuba North Inc. (dive shop in Traverse City), Northwest Michigan Maritime Museum in Frankfort and area charter boat operators. Northwest Michigan Maritime Museum will begin recording inquiries in 1989.

# 33) <u>Publications Describing Manitou Passage Bottomland Preserve</u>

#### A) Publications:

- Anderson, C. 1979. Isle of view. JB Publications, Manistee, MI.
- Fredrickson, A.C., and L.F. Fredrickson. Date unknown. Treasure chart of lost ships and cargoes in the Frankfort area . . .
- Hollister, F.F. 1968. Shipwrecks of the Manitou Passage. Telescope 17(September - October):151-159.
- Harold, S.V. 1984. Shipwrecks of Sleeping Bear. Grand Traverse Pioneer & Historical Society, Traverse City, MI.
- Weeks, G. 1988. Sleeping Bear, its lore, legends and people.

  Cottage Book Shop & Historical Society of Michigan, Glen Arbor.
- B) Other Materials and References:
  - 1) Brauer Productions 402 Cass Traverse City, MI 49684 (616) 941-0850

A video production entitled, "The Wreck and Rescue of the Schooner J.H. HARTZELL" (1988) is available for purchase. The video portrays rescue of shipwreck survivors by U.S. Life Saving Service members using a lyle gun, breeches buoy and life cart. Other productions are available for purchase that involve Great Lakes themes, including "Great Lakes Schooners, Early Shipping on the Great Lakes," "Steamers and Freighters, A Century and a Half of Great Lakes Shipping" and "Creatures in the Great Lakes."

2) Diving Times Magazine 4424 North Woodward Royal Oak, MI 48072 (313) 549-0303

Publishes articles on Michigan bottomland preserves and preserve shipwrecks.

- 3) For general Lake Michigan and Great Lakes shipwreck information sources, including shipwreck and casualty lists or wreck charts, consult the following publication:
  - Feltner, C.E., and J.B. Feltner. 1982. Great Lakes maritime history: bibliography and sources of information. Seajay Publications, Dearborn, MI.

#### 34) Research Conducted on Underwater Resources

Manitou Passage Underwater Archeological Assessment (1988):

The assessment was coordinated by the Manitou Bottomland Preserve Committee and used volunteer sport divers. It received financial support from the Michigan Coastal Zone Management Program. Technical assistance was provided by Michigan Sea Grant Extension, National Park Service, Northwest Michigan Maritime Museum and Lake Michigan Maritime Museum.

The assessment involved archival research of Manitou Passage shipwrecks. Known or suspected sites were located, illustrated, photo and video documented. Sites studied included shipwrecks and other underwater cultural resources, such as dock sites. A report will be published in 1989.

## 35) Dive Clubs

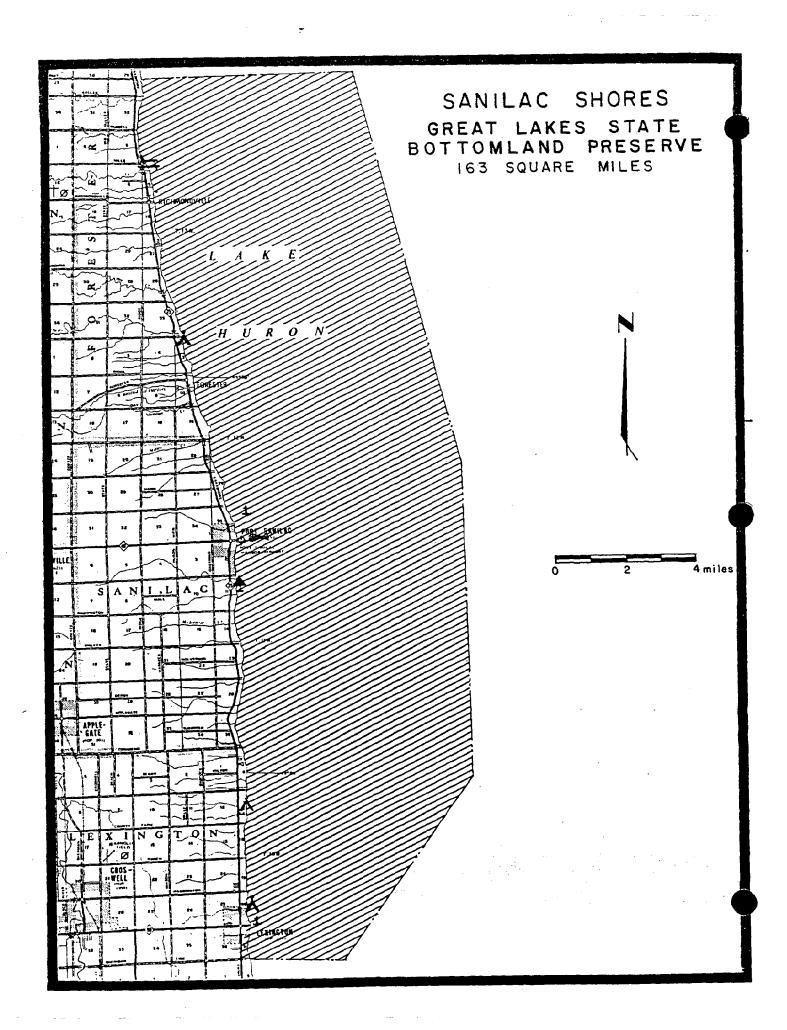
No active area dive clubs.

## 36) Miscellaneous

Manitou Passage Bottomland Preserve and Sleeping Bear Dunes National Lakeshore are "part of the six-county Grand Traverse bay region - an area of diverse recreation resources attracting increasing numbers of residents, and winter and summer tourists. Traverse City, lying 20 miles from the Lakeshore and [preserve], has a population of approximately 16,000, and is the hub of this region. The Grand Traverse Bay region is part of a macroregion of northwoods lake country . . . having outstanding recreation potential."

#### Reference:

National Park Service. 1985. Sleeping Bear Dunes National Lakeshore statement for management.



#### SANILAC SHORES BOTTOMLAND PRESERVE

# 1) Promotional Name/Address of Area

Sanilac Shores Underwater Preserve P.O. Box 47 Port Sanilac, MI 48469 (313) 359-8660

# 2) <u>Legal Description: Sanilac Shores Great Lakes State Bottomland</u> Preserve. Authorized 1988.

An area of Lake Huron bottomlands extending upward and including the water surface described as: Beginning at a point where the east and west 1/4 line of section 29, T.14N., R.16E., Sanilac County, Michigan, intersects the ordinary high water mark of Lake Huron, thence easterly to Loran-C coordinates 8970-X-30760, 8970-Y-49400; thence southerly to Loran-C coordinates 8970-X-30760, 8970-Y-49480; thence southerly to Loran-C coordinates 8970-X-30780, 8970-Y-49540, thence southwesterly to Loran-C coordinates 8970-X-30830, 8970-Y-49576; thence westerly to where the south line of section 31, T.10N., R.17E., Sanilac County, Michigan, intersects the ordinary high water mark of Lake Huron, thence northerly along the ordinary high water mark of Lake Huron to the point of beginning at the east and west 1/4 line of section 29, T.14N., R.16E., containing 163 square miles more or less. Loran-C coordinates were taken from National Ocean Survey nautical chart "Port Huron to Pte. Aux Barques" (No. 14862) 25th Edition, May 4, 1987.

## 3) Known Dive Sites

| NAME               | LORAN COORDINATES | MAXIMUM DEPTH |
|--------------------|-------------------|---------------|
| COL. A.B. WILLIAMS | 30779.1/49407.4   | 84 Ft.        |
| F.B.GARDNER        | 30802.5/49446.8   | 55 Ft.        |
| CHARLES STREET     | 30818.3/49413.3   | 15 Ft.        |
| NORTH STAR         | 30787.0/49508.2   | 100 Ft.       |
| REGINA             | 30801.5/49535.0   | 82 Ft.        |
| ELIZA STRONG       | 30847.0/49570.6   | 28 Ft.        |
| RICHMOND KATE      | •                 | Beach         |
| SPORT              | 30825.1/49569.2   | 50 Ft.        |
| SWEETHEART         | 30834.1/49671.8 * | 20 Ft.        |
| CITY OF GENEOA     | 30805.1/49624.9 * | 75 Ft.        |
| CHARLES S. PRICE   | 30799.3/49622.7 * | 70 Ft.        |

\* outside of preserve boundaries.

Sources: Waterworks Sport Shop, Lexington, MI.

Sanilac Economic Growth Corporation, Sandusky, MI.

Lakeshore Charters, Lexington, MI.

#### 4) Buoyed Dive Sites

All known sites buoyed in 1988. Moorings used polypropylene line connected to plastic bottles (buoys).

Port Sanilac Harbor Commission donated funds to Bottomtimers Scuba Club of Sandusky, MI for shipwreck moorings in 1987. Bottomtimers Scuba Club currently maintains shipwreck moorings.

## 5) <u>Jurisdiction</u>

The State of Michigan retains ownership of Lake Huron water surface, water column and bottomlands throughout Sanilac Shores Bottomland Preserve. Jurisdiction is shared with the U.S. Coast Guard and U.S. Army Corps of Engineers on some matters. The State of Michigan has title to all abandoned shipwrecks embedded in submerged lands of Lake Huron as well as geological, biological and other natural and cultural features. State title is defined as ownership under public trust. Regulation of Michigan bottomlands was transferred to the Department of Natural Resources by authority of Public Act 247 of 1955. The salvage of abandoned property of historical or recreational value on Great Lakes bottomlands is regulated by Public Act 452 of 1988. This act also provides for the designation and regulation of Great Lakes bottomland preserves. It replaces Public Act 184 of 1980.

# References:

U.S. Congress. 1988. Abandoned shipwreck act of 1987. Public law 100-298.

Michigan Legislature. 1988. Underwater salvage and preserve act. Public act 452.

Michigan Legislature. 1980. Underwater salvage act. Public act 184.

Michigan Legislature. 1955. Great Lakes submerged lands act. Public act 247.

## 6) Area Governmental Administrative Offices

## A) State Government:

Department of Natural Resources District Office 501 Hemlock St. Clare, MI 48617 (517) 386-7991

## B) Sanilac County Government:

Local government with responsibilities defined by state government and county residents. Offices in Sandusky, which is 15 miles from Port Sanilac and 26 miles from Lexington.

## C) Municipal Government:

Port Sanilac Village 56 North Ridge Port Sanilac, Mi 48469 (313) 622-9963

Village of Lexington 7227 Huron St. Lexington, MI 48450 (313) 359-8631

# 7) Scuba Diving Registration Policies and Programs

No policies or programs in past or present.

# 8) <u>Sanilac Shores Bottomland Preserve Management or Promotional</u> <u>Committees</u>

An ad hoc citizens group was briefly formed in order to nominate the area as a bottomland preserve through Public Act 184. Sanilac Shores Underwater Preserve Committee was formed in December 1988.

# 9) Promotional Efforts

A) Knowledge of Sanilac Shores Bottomland Preserve has been disseminated mainly by word of mouth. Salvage efforts on REGINA cargo through state permit have directly and indirectly provided the preserve area with a large amount of state, regional and national publicity.

B) Sanilac Shores Bottomland Preserve is shown on a tourism brochure map of Sanilac County provided by Sanilac Economic Growth Corporation of Sandusky, MI. The brochure lists county facilities and attractions. General shipwreck locations with loran coordinates are given on the map. A brief written account states, "No anchors please - mooring lines are provided and for information call Sanilac E.G.C. at (313) 648-4311 or (800) 802-2683."

## 10) Special Projects or Events

Commercial Salvage Operations on REGINA during 1987-1988:

Commercial salvage of REGINA cargo was conducted under state permit, as authorized by Public Act 184 of 1980. The permit was granted to Wayne Brusate of Marysville, Michigan prior to designation of Sanilac Shores Bottomland Preserve. Wayne Brusate supervised recovery and documentation operations. Financial backing for these operations were provided by Freedom Marine Ltd. of Vancover, British Columbia. Freedom Marine Ltd. is allowed to sell a percentage of artifacts, as specified by the state permit. A report will be produced which documents vessel history and salvage operations.

## 11) Retail Diving Shops and Air Compressor Services

Four Fathoms Diving, Inc. 75 E. Argyle St. Sandusky, MI 48471 (313) 648-4893

Retail sales, air compressor services and instruction available.

#### 12) Diving Charter Service

#### A) Lexington:

Vessel Name: INTREPID Captain William Robinette 28869 Bunert Warren, MI 48093 (313) 774-0640

28 foot Delta powerboat. Carries up to 12 passengers. Operates out of Lexington [Commercial] Marina. Carried approximately 500 divers in 1988.

## B) Port Sanilac:

Vessel Name: MISS PORT SANILAC Captain Harry Hawkins Blue Water Marine Services, Inc. 11 North Lake Street P.O. Box 124 Port Sanilac, MI 48469 (313) 622-9910

45 foot steel powerboat.
Carries up to 34 passengers.
Season: June - October.
Operates out of Port Sanilac Village Dock.
Carried approximately 585 divers in 1988.

Vessel Name: SAND DOLLAR Captain Jim Stayer Lakeshore Charters 4658 South Lakeshore Lexington, MI 48450 (313) 359-8660

28 foot Cherokee powerboat.
Carries up to 15 passengers.
Season: April - October.
Operates out of Lexington and Port Sanilac.
Carried approximately 100 + divers in 1988.

## 13) Recreational Harbors

- A) Lexington: Sponsored by Michigan Department of Natural Resources.
- B) Port Sanilac: Sponsored by Michigan Department of Natural Resources.

  It was the first State Waterways Commission
  Harbor-of-Refuge.

## 14) Marinas or Dock Sites

# A) Lexington:

- 1) Department of Natural Resources Marina: Transient accommodations, gasoline and diesel fuel, water, electricity, holding tank pump out, harbormaster, VHF-FM radio.
- 2) Commercial Marina: Seasonal dockage.

#### B) Port Sanilac:

- 1) Port Sanilac Harbor Commission Marina (Village of Port Sanilac): Transient accommodations, gasoline and diesel fuel, water, electricity, restrooms, shower facilities, harbormaster, haul out facilities, holding tank pump out, launch ramp, night security, courtesy land transport, VHF-FM radio.
- 2) Port Sanilac Marina (Commercial): Retail sales, seasonal dockage.

# 15) Boat Launches

- A) Sanilac State Park: Forestville. 41 parking spaces.
- B) Lexington Public Access Site: Lexington harbor. 100 parking spaces.
- C) Port Sanilac Village Ramp: Port Sanilac harbor. 22 parking spaces.

## 16) Hospitals

A) Harbor Beach Community Hospital 210 South 1st. St. Harbor Beach, MI 48441 (517) 479-3201

Emergency care and patient stabilization for scuba diving accidents. Has an emergency room procedure guide for treatment of air embolism and decompression sickness. Also has a list of recompression chambers and phone number to Diving Accident Network (DAN). No active continuing education program for scuba diving related injuries/illness.

- B) McKenzie Memorial Hospital 120 Delaware St. Sandusky, MI 48471 (313) 648-3770
- C) Port Huron General Hospital 1001 Kearney St. Port Huron, MI 48060 (313) 987-5000

# 17) Search and Rescue and Medical Emergency Services

#### A) Harbor Beach:

U.S. Coast Guard Station Harbor Beach Harbor Beach, MI 48441 (517) 479-3285

Search and Rescue (SAR) and law enforcement responsibilities. Up-to-date on scuba diving emergency care and transport procedures. Interfaces with U.S.Coast Guard Air Station Traverse City. SAR vessels available:

- 41 foot utility boat (available spring thru summer).
- 22 foot Boston Whaler.

#### B) Sandusky:

Sanilac County Sheriff's Department 65 N. Elk Sandusky, MI 48471 (313) 648-2000

Maintains a 24-hour dispatch for ambulance services in Lexington and Port Sanilac. Has 3 boats available for marine safety patrols and responses in Sanilac Shores Bottomland Preserve. These include:

- 18 foot Boston Whaler powerboat.
- 21 foot fiberglass powerboat.
- 28 foot fiberglass Sea Ray powerboat.

## 18) Dive Accident Evacuation Procedures

U.S. Coast Guard Station Harbor Beach is up-to-date on scuba diving emergency care and transport procedures.

No standard dive accident evacuation procedures have been written and disseminated at a local level.

## 19) Diving Accidents or Fatalities

Air Embolism: REGINA. May 29, 1988. One individual transported to Bronson Methodist Hospital recompression chamber in Kalamazoo. Treated and released without further symptoms.

Decompression Sickness: REGINA. 1988.

# 20) <u>Law Enforcement Capabilities</u>

## A) Sanilac County Sheriff's Department (Sandusky):

Has 3 boats available for marine law enforcement. Conducted approximately 16 weekend patrols within Sanilac Shores preserve area during 1988. Good rapport and cooperation with Department of Natural Resources conservation officers.

# B) Michigan DNR Conservation Officers:

Contact: District Law Supervisor: (517) 386-7991

Officers: 2 are stationed in Sanilac County

Boats: 21 foot Boston Whaler moored in Lexington

Patrols: Routine marine safety patrols monitor bottomland preserve

activity. Special patrols are conducted within Sanilac

Shores Bottomland Preserve upon citizen complaint.

## 21) Law Enforcement Cases and Citations

No citations or cases noted.

## 22) <u>Visitor Information or Interpretive Centers</u>

## A) Lexington:

Greater Lexington Chamber of Commerce: No office, but provides a small brochure of local facilities and events. Brochures distributed at village offices and businesses.

## B) Port Sanilac:

Greater Port Sanilac Business Association: No office, but provides a small brochure of local facilities and events. Brochures distributed at village hall and businesses.

## 23) Interpretive Programs on Great Lakes Resources

No advertised programming noted.

Sanilac Historical Museum provides limited interpretion of Great Lakes resources during guided tours of facilities.

Michigan Historic Site sign entitled "Great Storm of 1913" is located at a small park overlooking Lake Huron, near Port Sanilac.

# 24) Museums

A) Sanilac Historical Museum 228 South Ridge Port Sanilac, MI 48469

Victorian mansion donated by Stanley G. Harrison, a former Great Lakes and sea captain. Features original home furnishings, dairy museum, pioneer barn, 1882 settler's log cabin. Marine artifacts from Great Lakes shipwrecks are exibited in one room. Artifacts come from shipwrecks within and outside of Sanilac Shores Bottomland Preserve, including REGINA. Also a collection of navigation instruments and fishing industry artifacts. A library is being planned which will include marine history. Guided tours are available. Open from mid-June to Labor Day. Maintained by Sanilac County Historical Society, a non-profit organization.

B) Freedom Marine Limited
Vancouver, British Columbia

This commercial salvage company displayed REGINA artifacts removed during diving operations. Temporary public viewing was provided in a private building near the village marina in Port Sanilac during summer 1988. Visitors could also purchase available artifacts. It is unknown whether display will continue in the future.

C) Museum of Arts and History 1115 Sixth St. Port Huron, MI 48060

Artifact displays of Great Lakes ships and shipwrecks.

#### 25) Other Recreational Attractions

A) State Parks:

Sanilac Historic Site (Near Argyle): Historic petroglyphs. Under development.

Lakeport State Park (Between Lexington and Port Huron): Camping, swimming, fishing and hiking. Located on Lake Huron beach.

B) Other Attractions or Activities:

Port Sanilac Lighthouse (1886) (Port Sanilac): Under private ownership. Limited public tours.

Barn Theater (Port Sanilac): Stage shows and plays. Open July through early September. Port Sanilac Arts Council.

Three Sanilac County Parks are located on or near Lake Huron: Activities available include camping, picnicking, swimming, hiking and organized sports.

Golf courses, fishing, family farm experiences and antique/arts & crafts stores are also found in or near Lexington or Port Sanilac.

# 26) Special Events and Festivals

June:

Lexington Arts & Crafts Show

Croswell Pioneer Days

July:

Port Sanilac Renaissance Fair

Port Sanilac Arts & Crafts Fair

August:

Lexington Sesquicentennial Race Weekend

(Sailboat Race).

Lexington Harbor Festival.

## 27) Public Transportation Facilities

## A) Air Transportation:

Detroit Metropolitan Wayne County Airport Detroit, MI 48242

(313) 942-3550

Carriers:

Twenty major airlines and commuters (approximately 120 miles from Port Sanilac).

Tri-City International Airport (Saginaw)

Freeland, MI 48623

(517) 695-5555

Carriers:

American Eagle (Simmons)

Northwest Airlines and Airlink

United Airlines

(approximately 70 miles from Port Sanilac).

## B) Bus and Rail Transportation:

Port Huron (approximately 32 miles from Port Sanilac):

Intercity Bus Service: American Trails

Rail Passenger Service: Amtrak.

# 28) <u>Visitor Overnight Accommodations</u>

## A) Campgrounds:

Private Campgrounds:

133 sites.

County Campgrounds:

163 sites.

Lakeport State Park:

10 miles north of Port Huron. 315 sites.

## B) Motels, Cabins and Resorts:

Limited motel and resort accommodations are found in Lexington and Port Sanilac. Additional accommodations are located in Croswell and Sandusky.

# 29) Restaurants and Nightclubs

Limited restaurant facilities are found in Lexington and Port Sanilac. Additional facilities are located in Croswell and Sandusky.

# 30) Tourism and Economic Development Organizations

Sanilac Economic Growth Corporation Sandusky, MI 48471

(313) 648-4311 (800) 802-2683 The Arts Council P.O. Box 164

Port Sanilac, MI 48469

Greater Port Sanilac Business Association

P.O. Box 402

Port Sanilac, MI 48469

Greater Lexington Chamber of Commerce Lexington, MI 48450

Port Sanilac Harbor Commission

7376 Main Street

Port Sanilac, MI 48469

(313) 622-8818

Michigan Sea Grant Extension Cooperative Extension Service County Building, 11th Floor Mount Clemens, MI 48043 (313) 469-5180

East Michigan Tourist Association One Wenonah Park Bay City, MI 48706 (517) 895-8823

# 31) Waterfront Development Plans

Contact Lexington and Port Sanilac village offices.

Port Sanilac: Plans to expand village marina by 44 slips.

# 32) Public Inquiries About Bottomland Preserve

Port Sanilac Village Office: Receives inquiries on scuba diving and shipwrecks. No statistics compiled. Directs non-divers to Sanilac County Historical Museum and divers to Blue Water Marine Services, Inc. of Port Sanilac.

# 33) Publications Describing Sanilac Shores Bottomland Preserve

Larson, P., and P. Schmitt. 1988. REGINA yields her secrets. Great Lakes Travel & Living 3(8):18-22.

# Other References:

1) Diving Times Magazine 4424 North Woodward Royal Oak, MI 48072 (313) 549-0303

Publishes articles on Michigan bottomland preserves and preserve shipwrecks.

2) For general Lake Huron and Great Lakes shipwreck information sources, including shipwreck and casualty lists or wreck charts, consult the following publication:

Feltner, C.E., and J.B. Feltner. 1982. Great Lakes maritime history: bibliography and sources of information. Seajay Publications, Dearborn, MI.

## 34) Research Conducted on Underwater Resources

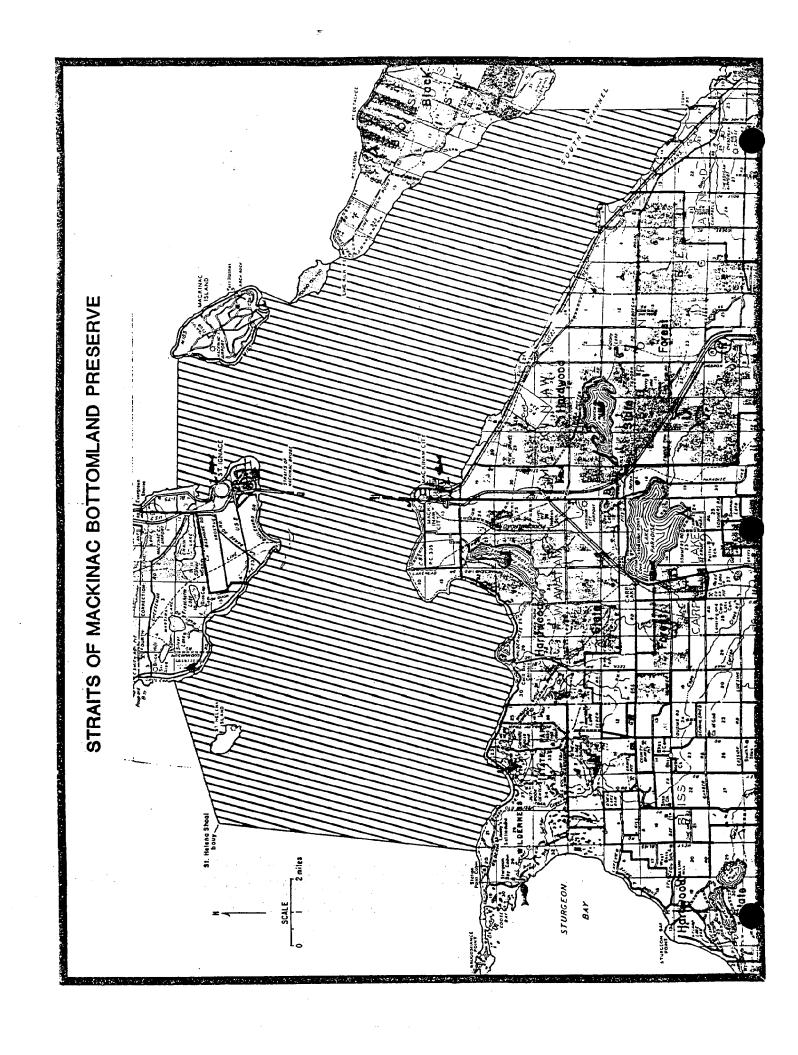
None Noted.

# 35) Dive\_Clubs

Bottomtimers Scuba Club (Sandusky): 20 members in 1988.

#### 36) Miscellaneous

Sanilac County's economy is predominantly agriculturally based. Tourism and recreation development is a relatively new industry.



#### 1) Promotional Name/Address of Area

Straits of Mackinac Underwater Preserve c/o St. Ignace Area Chamber of Commerce 11 South State Street St. Ignace, MI 49781 (906) 643-8717

2) <u>Legal Description: Straits of Mackinac Great Lakes State Bottomland Preserve. Authorized 1983.</u>

That area of bottomlands of the Straits of Mackinac which connect Lake Michigan and Lake Huron, extending upward and including the surface of the water with a western boundary beginning at the longitude 84 degrees 56 minutes 22 seconds W on the south shore, an official NOAA triangulation point located in Emmet County about 1/2 mile east of station point cabin on NOAA chart 14881, extending northward to St. Helena shoal buoy, 84 degrees 55 minutes 21 seconds W, and then generally northeastward to the north shore at a point where the dividing line between sections 5 and 8, T40N, R4W, of Mackinac County intersects the ordinary high-water mark.

The eastern boundary shall be a line running directly north and south at longitude 84 degrees 30 minutes W between Bois Blanc Island and the southern peninsula (Cheboygan County). The northern boundary shall begin at the place where the western boundary strikes the northern peninsula and extend generally eastward along the ordinary high-water mark to a point north of St. Ignace where the dividing line between sections 6 and 7, T40N, R3W, of Mackinac County intersect the ordinary high-water mark, approximately 45 degrees 52 minutes 54 seconds N latitude, and then directly true eastward to Mackinac Island. The boundary then moves generally south and eastward along the ordinary high-water mark of the south side of Mackinac Island until it reaches the southern tip of the east breakwall extending outward from Mission point on Mackinac Island.

The northern boundary then extends in a southwesterly direction from the tip of the breakwall to the abandoned lighthouse on the west end of Round Island and then along the ordinary high-water mark of the western shore of Round Island and then along the ordinary high-water mark of the southern shore of Round Island to the point of land at the southeastern tip of Round Island. The northern boundary extends from this point across to Lime Kiln Point on Bois Blanc Island and then along the ordinary high-water mark of the southern shore until it intersects the eastern boundary at 84 degrees 30 minutes W longitude. The southern boundary shall start at the intersection of the western boundary with the southern peninsula, 84 degrees 56 minutes 22 seconds W longitude, and extends generally eastward along the ordinary high-water mark to a point where the eastern boundary intersects the southern peninsula, 84 degrees 30 minutes

W longitude, Cheboygan, Emmet and Mackinac Counties, Michigan, which area contains 148 square miles, more or less.

## 3) Known Dive Sites

| NAME              | LORAN COORDINATES | MAXIMUM DEPTH |
|-------------------|-------------------|---------------|
| CEDARVILLE        | 31210.7/48130.9   | 110 Ft.       |
| COL. ELLSWORTH    | 31317.4/48067.7 * | 85 Ft.        |
| CUYAHOGA          | 31390.5/48090.0 * | 125 Ft.       |
| EBER WARD         | 31253.7/48097.0   | 145 Ft.       |
| HENRY CLAY        | 31180.6/48195.3 * | 80 Ft.        |
| MAITLAND          | 31273.4/48093.0   | 85 Ft.        |
| MINNEAPOLIS       | 31226.7/48111.5   | 120 Ft.       |
| M. STALKER        | 31213.9/48126.0   | 90 Ft.        |
| NORTHWEST         | 31270.4/48102.4   | 75 Ft.        |
| RICHARD WINSLOW   | 31356.7/48026.4 * | 25 Ft.        |
| SANDUSKY          | 31262.0/48100.8   | 90 Ft.        |
| WILLIAM H. BARNUM | 31205.4/48158.3   | 75 Ft.        |
| Dump Barge        | 31256.1/48074.6   | 40 Ft.        |

<sup>\*</sup> outside preserve boundary.

## 4) Buoyed Dive Sites

Six sites buoyed in 1988: WILLIAM H. BARNUM, CEDARVILLE, MAITLAND, SANDUSKY, NORTHWEST and Dump Barge.

Mooring materials include 3/4" polypropylene line connected to plastic barrel buoys. Barrels are white with a blue stripe to designate a mooring.

# 5) Jurisdiction

The State of Michigan retains ownership of Lake Michigan and Lake Huron water surface, water column and bottomlands throughout Straits of Mackinac Bottomland Preserve. Jurisdiction is shared with the U.S. Coast Guard and U.S. Army Corps of Engineers on some matters. The State of Michigan has title to all abandoned shipwrecks embedded in submerged lands of Lake Michigan and Lake Huron as well as geological, biological and other natural and cultural features. State title is defined as ownership under public trust. Regulation of Michigan bottomlands was transferred to the Department of Natural Resources by authority of Public Act 247 of 1955. The salvage of abandoned property of historical or recreational value on

Great Lakes bottomlands is regulated by Public Act 452 of 1988. This act also provides for the designation and regulation of Great Lakes bottomland preserves. It replaces Public Act 184 of 1980.

#### References:

U.S. Congress. 1988. Abandoned shipwreck act of 1987. Public law 100-298.

Michigan Legislature. 1988. Underwater salvage and preserve act. Public act 452.

Michigan Legislature, 1980. Underwater salvage act. Public act 184.

Michigan Legislature. 1955. Great Lakes submerged lands act. Public act 247.

#### 6) Area Governmental Administrative Offices

#### A) State Government:

Department of Natural Resources District Office P.O. Box 445 Newberry, MI 49868 (906) 293-5131 Department of Natural Resources District Office P.O. Box 667 1732 W. M-32 Gaylord, MI 49735 (517) 732-3541

## B) County Government:

Local government with responsibilities defined by state government and county residents. Portions of Straits of Mackinac Bottomland Preserve are located in Mackinac, Emmet and Cheyboygan counties. Offices are located as follows.

Mackinac County Courthouse 100 Marley Street St. Ignace, MI 49781 Clerk: (906) 643-7300

Cheboygan County 870 South Main Cheboygan, MI 49721 Clerk: (616) 627-8808

Emmet County 200 Division Petoskey, MI 49770 Clerk: (616) 348-1744

#### C) Municipal Government:

City of St. Ignace 396 North State St. Ignace, MI 49781 Manager: (906) 643-9671

Village of Mackinaw City 102 South Huron Mackinaw City, MI 49701 Village Hall: (616) 436-5351

#### 7) Scuba Diving Registration Policies and Programs

No policies or programs in past or present.

# 8) <u>Straits of Mackinac Bottomland Preserve Management or Promotional Committees</u>

Straits Underwater Preserve Committee formed in 1986. Purposes of the Committee are:

- A) To promote, support and develop the Straits Underwater Preserve.
- B) To receive and administer funds and properties of all kinds for the above purpose.
- C) To promote for education and historical purposes, the Straits Underwater Preserve.

## 9) Promotional Efforts

- A) Member of Michigan Bottomland Preserves Council. Straits of Mackinac Bottomland Preserve is listed with four other preserves on the council brochure, available since 1988 for regional and national distribution. Council promotion of Straits of Mackinac Bottomland Preserve and other preserves includes a traveling display available for dive shows, film festivals, business conventions etc. and advertising in <u>Underwater USA</u> magazine, during 1988-1989.
- B) 1987 poster contest: Open to residents of Mackinac, Emmet and Cheboygan counties. A poster depicting the Straits of Mackinac Underwater Preserve was chosen by the Straits Underwater Preserve Committee for promotional purposes.

- C) Straits of Mackinac Bottomland Preserve brochures:
  - 1) A brochure entitled, "Dive the Shipwrecks of the Straits Area Preserve" was developed and produced through Straits Underwater Preserve Committee in 1988. The color brochure provides a small map, diving site descriptions, and a diver emergency action plan.
  - 2) A brochure was recently produced by Straits Scuba Center and Thunder Bay Divers of Alpena, MI. The brochure provides a small map, diving site descriptions and charter information for Straits of Mackinac and Thunder Bay Bottomland Preserves.
- D) Straits Underwater Preserve Committee members have staffed promotional booths at "Our World Underwater" in Chicago, "Divers Showcase" in Lansing, "Ford Seahorses Great Lakes Shipwreck Festival" in Dearborn and "Bay Area Divers Film Festival" in Sandusky, Ohio.
- E) Straits of Mackinac Bottomland Preserve or Straits area scuba diving was mentioned in the St. Ignace Area Chamber of Commerce Directory; St. Ignace Area Motel Guide; Straits Area Travelers Guide and Cheyboygan County/Straits of Mackinac Area/40-Mile Inland Waterway Route Visitors Map during 1988.

#### 10) Special Projects or Events

Grant Application by Straits Underwater Preserve Committee Michigan Department of Commerce Travel Bureau Special Program Grants FY 1987/88

Proposed project objectives:

- 1) Placement of a mooring buoy system at fourteen shipwreck sites.
- 2) Placement of three underwater preserve interpretive signs at Great Lakes public access sites available to divers.
- 3) Waterfront display of large artifacts related to shipwrecks.
- 4) Preserve promotional activities (advertising and dive show attendance).

Status of proposal is unknown.

## 11) Retail Diving Shops and Air Compressor Services

Straits Scuba Center 587 North State St. St. Ignace, MI 49781 (906) 643-7009

Shipwreck diving charters, dockside air station, equipment rental, scuba instruction and retail sales & service of equipment/accessories.

## 12) <u>Diving Charter Service</u>

A) Vessel Name: STRAITS DIVER Captain Jim Ryerse Straits Scuba Center 587 North State St. St. Ignace, MI 49781 (906) 643-7009

32 foot steel powerboat.
Carries up to 16 passengers.
Season: June-September.
Operates out of Star Line Dock in St. Ignace.
Carried approximately 413 divers in 1988.

B) Vessel Name: GAMBIT Captain Kent Huber T.B.A., Inc. 3033 North Glenway Dr. Bay City, MI 48706 (517) 631-0033

> 42 foot Cabin Cruiser. Operates out of Cheboygan, Mackinaw City and Mackinac Island.

#### 13) Recreational Harbors

A) St. Ignace: Sponsored by Department of Natural Resources (DNR).

B) Mackinaw City: Sponsored by DNR.

C) Mackinaw Island: Sponsored by DNR.

D) Bois Blanc: Sponsored by DNR. Approximately 5 miles from

eastern boundary of preserve.

E) Cheboygan: Sponsored by DNR. Approximately 5 miles from

eastern boundary of preserve.

## 14) Marinas or Dock Sites

- A) St. Ignace Department of Natural Resources (DNR) Marina: Transient accommodations, gasoline, water, electricity, restrooms, shower facilities, harbormaster, holding tank pump out, VHF-FM radio.
- B) Village of Mackinaw City Marina: Transient accommodations, gasoline and diesel fuel, water, electricity, restrooms, shower facilities, harbormaster, holding tank pump out, haul out facilities, VHF-FM radio.
- C) Mackinac Island DNR Marina: Transient accommodations, gasoline and diesel fuel, water, electricity, restrooms, harbormaster, holding tank pump out, VHF-FM radio.
- D) Bois Blanc Township Marina: Transient accommodations and electricity.
- E) Cheboygan County Marina: Fuel, restrooms, pump out and harbor master.
- F) City of Cheboygan Marina: Transient accommodations, gasoline and diesel fuel, telephone, water, electricity, restrooms, haul out facilities, holding tank pump out.
- G) Private docks are associated with Mackinac Island ferrys. Docks are located in St. Ignace and Mackinaw City. Commercial ferrys include:

Mackinac Island Passenger Service, Inc. Star Line 590 North State Street St. Ignace, MI 49781

Arnold Transit Co. P.O. Box 220 Mackinac Island, MI 49757

Shepler's P.O. Box 250 Mackinaw City, MI 49701

#### 15) Boat Launches

- A) St. Ignace Municipal Marina: Administered by City of St. Ignace.
  35 parking spaces.
- B) St. Ignace City Park Boat Launch.
- C) Mackinaw City Municipal Marina: Administered by Village of Mackinaw City. 54 parking spaces.

## 16) <u>Hospitals</u>

Mackinac Straits Hospital and Health Center 220 Burdette St. Ignace, MI 49781 (906) 643-8585

Community Memorial Hospital 748 South Main Cheyboygan, MI 49721 (616) 627-5601

#### 17) Search & Rescue (SAR) and Medical Emergency Services

#### A) Search & Rescue:

U.S. Coast Guard Station St. Ignace 1075 Huron St. Ignace, MI 49781 (906) 643-9191

Search and rescue station which maintains an operations plan for scuba diving emergencies. Coordinates operations with U.S. Coast Guard Air Station Traverse City if helicopter transport to a recompression chamber is necessary. The following SAR vessels are available:

44 foot motor lifeboat.41 foot utility boat.

22 foot Boston Whaler.

## B) Medical Emergency Services:

St. Ignace Ambulance Service 100 South Marley St. Ignace, MI 49781 (906) 643-8811

Dispatch through Mackinac County Sheriff's Department.

## 18) <u>Dive Accident Evacuation Procedures</u>

No standard dive accident evacuation procedures have been written and disseminated at the local level. Recompression chamber treatment is available in Alpena, MI by ground transport. Alpena is approximately 100 miles from St. Ignace. Air transport to recompression chambers in Kalamazoo, MI, Milwaukee, WI and Minneapolis, MN provides alternatives.

## 19) Diving Accidents or Fatalities

One fatality in 1988. One fatality in 1985.

#### 20) Law Enforcement Capabilities

#### A) Sheriff's Departments:

1) Mackinac County Sheriff Court House St. Ignace, MI (906) 643-7325

Maintains a 24-hour dispatch for law enforcement and medical emergencies. The Marine Safety Division conducts approx. one patrol per day in the Straits of Mackinac area for general marine safety and law enforcement objectives. No patrols have been conducted specifically to monitor bottomland preserve violations. Two marine safety officers are available and operate a 21 foot Boston Whaler.

- 2) Cheboygan County Sheriff Cheboygan County Building Cheboygan, MI 49721 (616) 627-3155
- 3) Emmet County Sheriff 450 Bay Petoskey, MI 49770 (616) 347-2032

## B) Michigan DNR Conservation Officers:

1) District 4 (Upper Peninsula):

Contact: District Law Supervisor: (906) 293-5131.

Officers: 2-3 are available for Straits of Mackinac area.

Boats: 21 foot Sea Craft.

18 foot Lund.

17 foot Sea Nymph.

17 foot inboard.

Patrols: Has conducted patrols specifically for violations of

bottomland preserve regulations. Also conducts patrols on a routine basis and after citizen

complaints.

## 2) District 5 (Lower Peninsula):

Contact: District Law Supervisor: (517) 732-3541.

Officers: Available from Cheboygan.

Boats: 18 foot outboard in Cheboygan.

Patrols: Monitors bottomland preserve activity during routine

patrols. Conducts specific patrols upon citizen

complaint.

## C) State Police:

St. Ignace Post: (906) 643-8383

Cheboygan Post: (616) 627-9973

#### 21) Law Enforcement Cases and Citations

None recalled by DNR District Law Supervisors since 1985.

## 22) <u>Visitor Information or Interpretive Centers</u>

## A) St. Ignace:

1) St. Ignace Area Chamber of Commerce 11 South State Street St. Ignace, MI 49781 (906) 643-8717

Brochures available on Straits of Mackinac Bottomland Preserve and available visitor services.

2) Michigan Department of Transportation Travel Information Center St. Ignace, MI 49781

General visitor information available.

#### B) Mackinaw City:

1) Greater Mackinaw City Chamber of Commerce P.O. Box 856 South Huron Ave Mackinaw City, MI 49701 (616) 436-5574

General visitor information available.

2) Mackinaw Area Tourist Bureau P.O. Box 658
Mackinaw City, MI 49701
(616) 436-5664

Michigan Department of Transportation Travel Information Center: General visitor information available.

3) Colonial Michilimackinac Historic Park:

Orientation Center: General information and sales counter. Only 2 publications dealing with Great Lakes maritime history. Also 4 prints available depicting Great Lakes vessels GRIFFON, NANCY, NIAGRA and sloop WELCOME.

#### 23) Interpretive Programs on Great Lakes Resources

- A) No advertised programming noted.
- B) Interpretive Signing:
  - Mackinaw City mini-park next to Mackinac Maritime Park: Interpretive sign near beach shows Straits of Mackinac Bottomland Preserve and provides information about preserve shipwrecks.
  - 2) Alexander Henry Park in Mackinaw City: Historic sites interpretive sign shows Straits of Mackinac Bottomland Preserve and provides information about preserve shipwrecks. Other subjects include Great Lakes geology, voyageurs, Alexander Henry and fur trade, and sloop WELCOME.
  - 3) Huron Boardwalk in St. Ignace: An interpretive sign along the boardwalk provides scuba diving information about the preserve.

## 24) Museums

#### A) St. Ignace:

 Great Lakes Shipwreck Museum and Mall Star Lines Main Dock St. Ignace, MI 49781

Exhibits and artifacts from Great Lakes shipwrecks are displayed. Features shipwrecks within Wisconsin Great Lakes waters. Private museum with an entrance fee.

2) St. Ignace Chamber of Commerce: A few large shipwreck artifacts are displayed outside the Chamber of Commerce building.

#### B) Mackinaw City:

1) Mackinac Maritime Park 302 West Sinclair St. Mackinaw City, MI 49701 (616) 436-5563

Part of Colonial Michilimackinac Historic Park. The Old Mackinac Point Lighthouse serves as an interpretive center. Exhibits provide information on Great Lakes/local vessels and shipping history. Great Lakes small boats (including a Mackinaw boat replica) and shipwreck artifacts are displayed on park grounds. Artifacts include booms, anchors, buoys, rudders and bells with no obvious conservation treatments completed. Some artifacts were interpreted with signing.

- 2) Colonial Michilimackinac Historic Park provides some interpretive exhibits which describe early sailing vessels servicing the fort.
- 3) Sloop WELCOME: This sailing vessel replica was originally built in 1775. It is moored at the Mackinaw City Municipal Marina and open for visitation from June 15 to Labor Day. Interpretation is provided by costumed tour guides. Operated by:

Mackinac Island State Park Commission Mackinac Island, MI 49757 (906) 847-3328

C) Cheboygan:

Historical Museum of Cheboygan County 404 Huron St. Cheyboygan, MI 49721 (616) 627-2694

## 25) Other Recreational Attractions

A) National Forests:

Hiawatha National Forest: Mackinac County.

B) State Forests:

Lake Superior State Forest: Mackinac County.

Mackinaw State Forest: Cheboygan and Emmet Counties.

C) State Parks:

Father Marquette State Park (St. Ignace): Interpretive center and picnic area.

- Straits State Park (St. Ignace): Camping and picnic area overlooking Mackinac Bridge.
- Mackinac Island State Park: Interpretive center, picnic area and hiking. State Park includes Fort Mackinac 1780-1895, which provides interpretive exhibits, guided tours, crafts, music, cannon and musket firings. A wide variety of private accommodations are available ranging from guest rooms, to bed & breakfast establishments and luxurious hotels. Other services and activities include restaurants, taverns, gift shops, fudge shops, horseback riding, bicycle rentals and fishing charters. Mackinac Island State Park is a major national recreational attraction.
- Colonial Michilimackinac Historic Park (Mackinaw City):
  Reconstructed fort that served the straits area from
  1715-1781. Includes an interpretive center, living history
  programs, crafts, on-site archeological excavation, and other
  cultural demonstration activites. Mackinac Maritime Park is
  included in the park complex. Operated by:

Mackinac Island State Park Commission Mackinac Island, MI 49757 (906) 847-3328.

- Mill Creek State Park (near Mackinaw City): Interpretive center, picnic area and hiking. Replica 1790 water-powered sawmill and dam from northern Michigan's first industrial complex. Craft demonstrations, guided tours, living history and archeology in progress.
- Cheboygan State Park (Cheboygan): Camping, picnicking, swimming, hiking, hunting and fishing.
- Wilderness State Park (approximately 17 miles from St. Ignace): Camping, swimming, hunting, fishing, hiking and picnic area.
- D) Other Attractions or Activities:
  - Marquette Mission Park and Museum of Ojibwa Culture (St. Ignace): Interpretation of French and Woodland Indian life at the St. Ignatius Mission.
  - Fort de Baude Museum (St. Ignace): Interpretation of early French and Indian period.
  - Huron Boardwalk (St. Ignace): Open air exhibits along the St. Ignace waterfront.
  - Mackinac Bridge and Bridge Museum (Mackinaw City): World's longest total suspension bridge connecting Michigan's lower and upper peninsula.

The Opera House (Cheboygan): Live performances in a renovated Victorian theater.

Other visitor activities and attractions in Mackinaw City and St. Ignace include: fudge, gift, antique, arts & crafts and variety shops; city parks; swimming; fishing charters; miniature golf; evening boat cruises; and (2) nine-hole golf courses.

Attractions within a one hour drive from Mackinaw City and St. Ignace: Soo Locks at Sault Ste. Marie; Les Cheneaux Islands near Cedarville; Drummond Island; Cut River Gorge, Brevoort Lake and sand beaches along U.S 2; Tahquamenon Falls State Park and Aloha State Park. Activities available in the surrounding recreational areas include hiking, canoeing, sightseeing, boating, swimming and bicycling.

#### 26) Special Events and Festivals

May:

Mackinaw City:

Fort Michilimackinac Pageant.

June:

Mackinaw City:

Fudge Festival; Kite Festival.

Mackinac Island:

Arts Festival; Lilac Festival.

St. Ignace:

Straits Area Antique Auto Show

July:

Mackinaw City:

Independence Day Waterfront Events and

Fireworks; Voyageurs & Fur Traders Rendezvous;

Art Fair.

Mackinac Island:

Chicago to Mackinac Island Yacht Race; Port

Huron to Mackinac Island Yacht Race.

St. Ignace:

4th of July Celebration.

Cheyboygan:

Wanigan Festival.

Bliss:

Bliss Music Festival.

August:

Mackinaw City:

Antique Show; Art Show; Ironworkers Festival.

Hessel:

Les Cheneaux Antique Boat Show.

Cheboygan:

Northern Michigan Fair.

#### September:

St. Ignace &

Mackinaw City: Labor Day Mackinac Bridge Walk.

Mackinac Island: Mackinac Island Road Race.

St. Ignace:

Straits of Mackinac Fishing Festival; Arts & Crafts Dockside; Traditional Indian Pow-Wow.

#### 27) Public Transportation Facilities

- A) Air Transportion:
  - 1) Emmet County Airport
    Pellston, MI 49769
    (616) 539-8441
    (Approximately 25 miles from St. Ignace)
    Carriers:
    American Eagle (Simmons)
    Northwest Airlink (Simmons)
    Michigan Airways
  - 2) Chippewa County International Airport Kincheloe, MI 49788 (906) 495-5656 (Approximately 35 miles from St. Ignace) Carrier: Northwest Airlines (Simmons)
  - 3) Mackinac Island Airport Mackinac Island, MI 49757 (906) 847-3231 Carrier: Michigan Airways
  - 4) Mackinac County Airport St. Ignace, MI 49781
- B) Bus Transportation:

St. Ignace: Greyhound; North Star Lines.

Mackinaw City: Greyhound; North Star Lines.

C) Ferry Transportation to Mackinac Island:

St. Ignace: Arnold Boat Lines; Shepler Boat Lines; Star Line.

Mackinaw City: Arnold Boat Lines; Shepler Boat Lines; Star Line.

## 28) <u>Visitor Overnight Accommodations</u>

## A) Campgrounds:

1) Private Campgrounds:

St. Ignace: 563 sites. Mackinaw City: 910 sites. Cheboygan: 120 sites.

2) State Forest Campgrounds:

68 sites within 25 miles of St. Ignace.

3) State Park Campgrounds:

606 sites within 20 miles of St. Ignace.

4) National Forest Campgrounds:

168 sites within 20 miles of St. Ignace.

B) Motels, Hotels, Cottages and Lodges:

St. Ignace Area: 36 establishments.

Mackinaw City Area: 57 establishments.

Mackinac Island: 24 establishments.

## 29) Restaurants and Nightclubs

St. Ignace Area: 15 establishments.

Mackinaw City Area: 23 establishments.

Mackinac Island: 40 establishments.

## 30) Tourism and Economic Development Organizations

A) St. Ignace Area Chamber of Commerce 11 South State Street St. Ignace, MI 49781 (906) 643-8717

B) St. Ignace Area Tourist Association P.O. Box 57 St. Ignace, MI 49781 (906) 643-6950

- C) Michigan's Eastern Upper Peninsula Tourist Association 100 Marley County Court House St. Ignace, MI 49781 (906) 643-7343
- D) Mackinac County Cooperative Extension Service 100 Marley County Court House St. Ignace, MI 49781 (906) 643-7307
- E) Mackinac County Economic Development Corporation County Court House St. Ignace, MI 49781 (906) 643-7340
- F) Greater Mackinaw City Chamber of Commerce 706 South Huron P.O. Box 856 Mackinaw City, MI 49701
- G) Mackinaw Area Tourist Bureau 706 South Huron P.O. Box 856 Mackinaw City, MI 49701
- H) Upper Peninsula Travel and Recreation Association P.O. Box 400 Iron Mountain, MI 49801 (906) 774-5480
- I) East Michigan Tourist Association One Wenonah Park Bay City, MI 48706 (517) 895-8823
- J) West Michigan Tourist Association 136 Fulton Street East Grand Rapids, MI 49503 (616) 456-8557
- K) Michigan Sea Grant Extension U.P. Extension Center 1030 Wright Street Marquette, MI 49855 (906) 228-4830

## 31) Waterfront Development Plans

Plans available at City of St. Ignace and Village of Mackinaw City offices.

## 32) Public Inquiries About Bottomland Preserves

Unknown. Contact St. Ignace Area Chamber of Commerce.

#### 33) Publications Describing Straits of Mackinac Bottomland Preserve

#### A) Publications:

Knes, M. 1986. The wreck of the Eber Ward. Michigan Magazine. Detroit News. April 20.

For general Lake Michigan, Lake Huron and Great Lakes shipwreck information sources, including shipwreck and casualty lists or wreck charts, consult the following publication:

Feltner, C.E., and J.B. Feltner. 1982. Great Lakes maritime history: bibliography and sources of information. Seajay Publications, Dearborn, MI.

## B) Other References:

1) Sea Fans Video Magazine 7800 East Lliff Ave., Suite E Denver, CO 80231

A video production was completed in 1988 for retail sales. It documents shipwrecks within Straits of Mackinac Bottomland Preserve and two other preserves.

2) Diving Times Magazine 4424 North Woodward Royal Oak, MI 48072 (313) 549-0303

Publishes articles on Michigan bottomland preserves and preserve shipwrecks.

## 34) Research Conducted

35) Dive Clubs

None Noted.

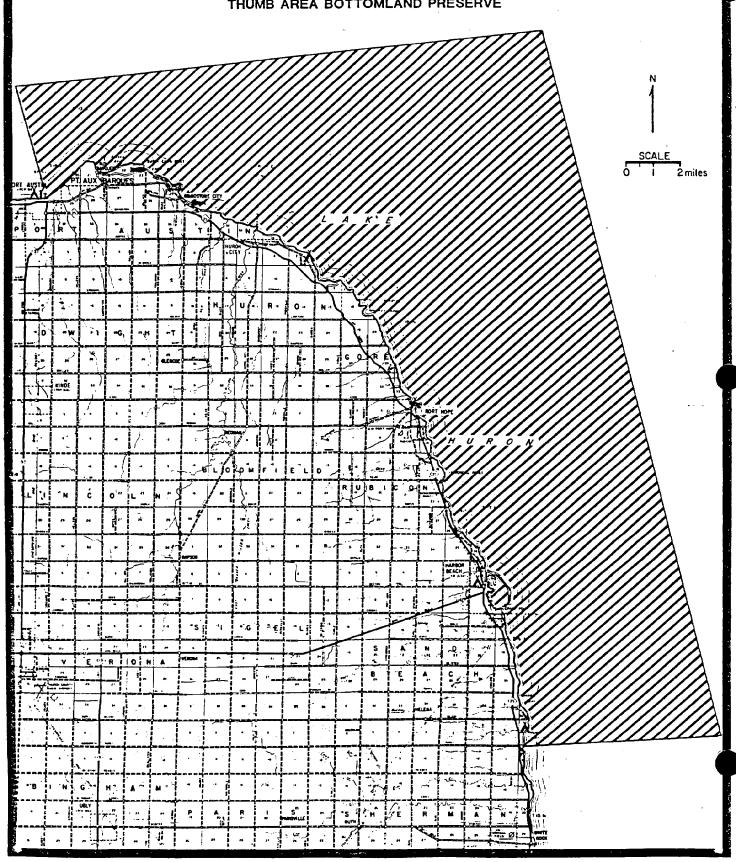
No active dive clubs in area.

#### 36) Miscellaneous

The Straits of Mackinac area's (including St. Ignace, Mackinaw City and Mackinac Island) largest industry is tourism. Excellent support facilities, services and recreational activities exist for non-divers accompanying visiting divers.

## HURON COUNTY BOTTOMLAND PRESERVE

THUMB AREA BOTTOMLAND PRESERVE



## 1) Promotional Name/Address of Area

Thumb Area Bottomland Preserve Lighthouse County Park 7320 Lighthouse Rd. Port Hope, MI 49468 (517) 428-4749

# 2) <u>Legal Description: Thumb Area Great Lakes State Bottomland Preserve.</u> Authorized 1985.

That area of bottomlands of Lake Huron, extending upward and including the surface of the water with a western boundary beginning at the light on the end of the breakwater in Port Austin, thence extending northerly along Loran-C coordinate 8970-X-30910; thence easterly along Loran-C coordinate 8970-Y-49150; thence southerly along Loran-C coordinate 8970-X-30730; thence westerly along Loran-C coordinate 8970-Y-49335.5 to the south boundary of Wagener County Park, thence northerly and westerly along the ordinary high-water mark to the point of beginning, which area contains 276 square miles, more or less.

#### 3) Known Dive Sites

| IAME          | LORAN COORDINATES         | MAXIMUM DEPTH |
|---------------|---------------------------|---------------|
| LBANY         | 30775.5/49174.2           | 137 Ft.       |
| CHICKAMAUGA   | 30785.1/49292.7           | 35 Ft.        |
| UNDERBURG     | 30740.9/49257.5           | 155 Ft.       |
| NTERPRISE     | 30779.8/49145.5           | 182 Ft.       |
| LENORCHY      | 30750.4/49314.2           | 120 Ft.       |
| OVERNOR SMITH | 30763.9/49141.3           | 184 Ft.       |
| ON CHIEF      | 30779.0/49172.0           | 135 Ft.       |
| COB BERTSCHY  | 30861.7/49181.4           | 10 Ft.        |
| IILADELPHIA   | 30786.2/49183.7           | 126 Ft.       |
| JNTER SAVIDGE | (Newly discovered)        |               |
| aves          | Edge of reef near         | <del></del>   |
|               | Port Austin Lighthouse    | 15 Ft.        |
| indstones     | Near Grindstone City Pier | 15 Ft.        |

#### 4) Buoyed Dive Sites

Sport divers have placed lines and markers on some shipwreck sites. There is no formal or coordinated program to buoy dive sites.

#### 5) Jurisdiction

The State of Michigan retains ownership of Lake Huron water surface, water column and bottomlands throughout Thumb Area Bottomland Preserve. Jurisdiction is shared with the U.S. Coast Guard and U.S. Army Corps of Engineers on some matters. The State of Michigan has title to all abandoned shipwrecks embedded in submerged lands of Lake Huron as well as geological, biological and other natural and cultural features. State title is defined as ownership under public trust. Regulation of Michigan bottomlands was transferred to the Department of Natural Resources by authority of Public Act 247 of 1955. The salvage of abandoned property of historical or recreational value on Great Lakes bottomlands is regulated by Public Act 452 of 1988. This act also delineates the designation and regulation of Great Lakes bottomland preserves. It replaces Public Act 184 of 1980.

#### References:

U.S. Congress. 1988. Abandoned shipwreck act of 1987. Public law 100-298.

Michigan Legislature. 1988. Underwater salvage and preserve act. Public act 452.

Michigan Legislature. 1980. Underwater salvage act. Public act 184.

Michigan Legislature. 1955. Great Lakes submerged lands act. Public act 247.

#### 6) Area Governmental Administrative Offices

## A) State Government:

Department of Natural Resources District Office 501 Hemlock St. Clare, MI 48617 (517) 386-7991

#### B) Huron County Government:

Local government with responsibilities defined by state government and county residents. Offices in Bad Axe, which is 17 miles from Port Austin and 18 miles from Harbor Beach.

#### C) Municipal Government:

Village of Port Austin 17 West State Street P.O. Box 336 Port Austin, MI 48467 (517)738-5199

City of Harbor Beach 149 North First St. Harbor Beach, MI 48441 (517) 479-3363

#### 7) Scuba Diving Registration Policies and Programs

No policies or programs in past or present.

## 8) Thumb Area Bottomland Preserve Management or Promotional Committees

An ad hoc committee was formed in order to nominate the area as a bottomland preserve through Public Act 184. After authorization the group dissolved. Currently, there is no active private committee dealing specifically with the Thumb Area Bottomland Preserve.

Huron County Board of Commissioners assigned responsibility for Thumb Area Bottomland Preserve to the County Road Commission. The Road Commission then delegated responsibilities to Huron County Parks, which is managed under the Road Commission. Huron County Parks has promoted the preserve area, but has not attempted any active management programs. Information requests are referred to the Lighthouse County Park Manager in Port Hope.

Huron County Parks
417 South Hanselman
Bad Axe, MI 48413
(517) 269-6404
Contact: Steven P. Romzek

## 9) <u>Promotional Efforts</u>

A) Member of Michigan Bottomland Preserves Council: Thumb Area Bottomland Preserve is listed with four other preserves on the council brochure available for regional and national distribution. Council promotion of Thumb Area Bottomland Preserve and other preserves also includes a traveling display available for dive shows; film festivals, business conventions etc., and advertising in Underwater USA magazine, during 1988-1989.

- B) Thumb Area Great Lakes State Bottomland Preserve brochure: A promotional brochure was developed in 1986 by Huron County Parks specifically for the preserve area.
- C) In addition, Thumb Area Bottomland Preserve is listed in the following promotional materials:
  - 1) Huron County official road map distributed by the Huron County Road Commission. Includes a small map and listing of dive sites, boat launching sites, non-diver/diver attractions and campgrounds.
  - 2) Huron County Economic Development Corporation brochure entitled, "Huron, my huron . . . Come to the thumb." Includes a small map and separate information sheet on the preserve area outlining dive sites, boat launching sites, campgrounds, non-diver/diver attractions and emergency procedures. Other visitor information is provided. Published in 1988. Brochures are mailed out to individuals requesting scuba diving information from the Michigan Travel Bureau in Lansing. Travel Bureau information request printouts are coded for scuba and have been obtained by Huron County EDC.
  - 3) Thumb Broadcasting Inc. Vacation Guide: Includes a small map, dive sites and emergency action plan, as well as a variety of other visitor information.

#### 10) Special Projects or Events

None

#### 11) Retail Diving Shops and Air Compressor Services

Thumb Explorer Dive Shop Port Austin, MI (517) 738-5256

Provides rentals, airfills, retail sales and service. Scuba training is available through shop instructor(s). Maintains only weekend shop hours during the diving season. Airfills can be purchased after noon on weekdays. No charter vessels are available through the dive shop.

#### 12) Diving Charter Services

A) No full-time diving charter vessels are available from Port Austin, Grindstone City or Harbor Beach.

Many sport fishing charter vessels operate out of Grindstone City and Harbor Beach. These operators concentrate on sport fishing customers. Trout, salmon and perch are preferred catches. It is doubtful that divers charter these sport fishing vessels.

B) Thumb Marine Charters
Division of Thumb Marine, Inc.
28 Railroad Street
Port Austin, MI 48467
(517) 738-5271

This business provides general charter and marine salvage services. Currently uses MISS PORT AUSTIN, a 35 foot steel vessel, for perch' fishing charters. Some interest was expressed in providing future diving charters.

#### 13) Recreational Harbors

- A) Harbor Beach: Sponsored by Department of Natural Resources.
- B) Port Austin: Sponsored by Department of Natural Resources.
- C) Grindstone City: Small private harbor with narrow entrance.

#### 14) Marinas or Dock Sites

#### A) Harbor Beach:

- City of Harbor Beach Marina (Sponsored by DNR): Transient accommodations, gasoline/diesel, water, electricity, restrooms, shower facilities, harbormaster, holding tank pump out. Limited seasonal dockage.
- 2) Off Shore Marine Inc. 5 Lytle Avenue Harbor Beach, MI 48441

Commercial Marina: Store, boat sales, fishing tackle, marine electronics, charters, seasonal dockage and other services. No interest in scuba diving charters. Concentrates on sport fisher's needs. Sport fishing charter vessels available.

#### B) Port Austin:

Department of Natural Resources Marina: Transient accommodations, gasoline, water, electricity, restrooms, shower facilities, harbormaster, haul out facilities, holding tank pump out and VHF-FM radio

#### C) Grindstone City:

Commercial Marina: Store, fuel, fishing tackle, restrooms, boat launch, transient and seasonal dock space. Sport fishing charter vessels available.

#### 15) Boat Launches

A) Wagener County Park: Operated by County. Located south of

Harbor Beach.

B) Harbor Beach Ramp: Operated by City of Harbor Beach.

166 parking spaces.

C) Off Shore Marine, Inc.: Private launch in Harbor Beach.

D) Stafford County Park: Operated by County near Port Hope.

78 parking spaces.

E) Lighthouse County Park: Operated by County between Port Hope and

Port Austin.

F) Grindstone City: Operated by Michigan DNR in Grindstone City.

44 parking spaces. Private launch also

available.

G) Port Austin: Operated by Michigan DNR in Port Austin.

114 parking spaces.

#### 16) <u>Hospitals</u>

A) Harbor Beach Community Hospital 210 South 1st St. Harbor Beach, MI 48441 (517)479-3201

Has an emergency room procedure guide for treatment of air embolism and decompression sickness. Also has a list of recompression chambers and phone number to Diving Accident Network (DAN). No active continuing education program for scuba diving related injuries/illness.

B) Port Austin Area Medical Clinic 8731 Independence Port Austin, MI 48467 (517) 738-5191

Limited emergency care.

- C) Huron Memorial Hospital 1100 South Van Dyke Bad Axe, MI 48413
- D) Bay Medical Center Emergency Department Bay City, MI 48710 (517) 894-3111

#### 17) Search and Rescue and Medical Emergency Services

#### A) Harbor Beach:

 U.S. Coast Guard Station Harbor Beach Harbor Beach, MI 48441 (517) 479-3285

Search & Rescue (SAR) and law enforcement responsibilities. Up-to-date on scuba diving emergency care and transport procedures. Interfaces with U.S. Coast Guard Air Station Traverse City. Cooperates with Michigan State Police and DNR conservation officers. SAR vessels available:

- 41 foot utility boat (available spring thru summer) 22 foot Boston Whaler
- 2) Volunteer Ambulance Service.

Dispatched through Sheriff's Department in Bad Axe. No department training courses involving scuba diving accidents/illness has taken place within the past two years or more. Has not responded to any diving emergencies in past two years or more.

#### B) Port Austin:

- 1) U.S.C.G. Auxiliary Station.
- 2) Volunteer Ambulance Service.

Dispatched through Sheriff's Department in Bad Axe.

#### C) Bad Axe:

Sheriff's Department: Operates 24-hour dispatch. Many sheriff's deputies are EMTs, but this is not required.

#### 18) <u>Dive Accident Evacuation Procedures</u>

A dive accident training seminar was conducted in cooperation with Michigan Sea Grant in 1985 and attended by area EMTs, hospital emergency room personnel, charter boat captains and sheriff's deputies. This seminar led to development of a diver emergency action plan. Since that time, no local training in diving accident treatment has been conducted.

In case of an emergency, contact Huron County Sheriff's Department via marine radio VHF/FM, channel 16 or 69. Proceed to evacuation point after receiving instructions. Huron County Sheriff's Department will coordinate emergency responses. Patient will be transported to a local hospital and transferred to the Alpena General Hospital recompression chamber if necessary. The diver emergency action plan is listed in preserve brochures and other recreational information sources available to the public.

#### 19) Diving Accidents or Fatalities

Huron County Sheriff: No scuba diving accidents reported in Thumb Area Bottomland Preserve to date.

## 20) Law Enforcement Capabilities

#### A) Bad Axe:

Huron County Sheriff's Department. 120 South Heisterman Bad Axe, MI 48413 (517) 269-6421

Operates 24-hour dispatch. Monitors marine FM radio channel 16. Has two full-time marine safety officers plus part-time personnel when needed. Full-time marine safety officers are familiar with state shipwreck legislation and bottomland preserve law enforcement responsibilities. Patrols emphasize marine safety, not shipwreck protection. Most marine safety patrols taking place in the bottomland preserve are conducted near Grindstone City because of pleasure boat popularity. Few special patrols are conducted to monitor sport diving use. Overall marine safety patrol emphasis is on the Saginaw Bay side of Huron County. Six officers are currently on a search & recovery dive unit. Patrol boats available:

27 foot Boston Whaler.

14 foot Boston Whaler.

24 foot Sportcraft.

Helicopter on pontoons.

21 foot Penn Yann.

#### B) Harbor Beach:

U.S. Coast Guard Station Harbor Beach: Can detain vessels with shipwreck artifacts aboard. Has customs/immigration responsibilities. Cooperates with sheriff's departments, Michigan State Police and DNR conservation officers.

C) Michigan DNR Conservation Officers:

Contact: District Law Supervisor: (517) 386-7991

Officers: 2 are stationed in Huron County.
Boats: 19 foot Mako located in Bad Axe.

21 foot Boston Whaler located in Port Austin.

Patrols: Routine marine safety patrols monitor bottomland preserve

activity. Special patrols are conducted within Thumb Area

Bottomland Preserve upon citizen complaint.

#### 21) Law Enforcement Citations and Cases

No citations or cases noted.

#### 22) Visitor Information or Interpretive Centers

A) Greater Port Austin Area Chamber of Commerce P.O. Box 274 Port Austin, MI 48467 (517) 738-7600

Office in Port Austin.

B) Lighthouse County Park 7400 Lakeshore Road Port Hope, MI 48468 (517) 428-4749

Point Aux Barques Lighthouse Museum/Interpretive Center: Provides a fact sheet on bottomland preserve shipwrecks with loran coordinates. A 30 minute "orientation" video showing preserve shipwrecks can be viewed upon request. The underwater video was taken and edited by a Huron County Parks volunteer diver. Visitors may also view historic vessel/shipwreck photographs, limited interpretive displays, non-interpreted shipwreck artifacts and a large map of the bottomland preserve.

#### 23) <u>Interpretive Programs on Great Lakes Resources</u>

Lighthouse County Park: "Orientation" video as described in 22.

Otherwise, no formal interpretive programs such as formal slide presentations or guided walks.

No interpretive signing devoted to Great Lakes resources was found near or in the bottomland preserve area.

#### 24) Museums

A) Grice House Museum Harbor Beach, MI (517) 479-6093

Shipwreck artifacts from PHILADELPHIA, REGINA and other vessels are displayed in one small room. Some descriptive information is provided with the artifacts. An anchor from IRON CHIEF is displayed on the museum grounds. Other attractions include a lighthouse prism, tools and household furnishings. Open Memorial Day weekend through end of September.

B) Lighthouse County Museum Port Hope, MI (517) 428-4749

Shipwreck artifacts from Thumb Area Bottomland Preserve and DANIEL MORRELL. Most artifacts are not contained within display cases. Other artifacts are located on museum grounds. Many of the shipwreck materials were either found on local beaches or donated by sport divers. The museum does not have an accession or artifact conservation program. Open Memorial Day through Labor Day.

C) Pioneer Huron City Museums 7930 Huron City Road Port Austin, MI 48467 (517) 428-4123

Located midway between Port Austin and Port Hope. Nine major buildings display artifacts from rural American life between 1850 and 1900. Includes the Point Aux Barques Life Saving Station, which was moved from its original building site near Point Aux Barques Lighthouse (Lighthouse County Park). Museum displays include U.S. Life Saving Service materials and one room of shipwreck artifacts. Interpretive tours are available for the public. Open July 1 to September 30.

#### 25) Other Recreational Attractions

A) State Parks:

Port Crescent State Park (5 miles SW of Port Austin): Lake Huron beach access for swimming and fishing. Hiking opportunities

in surrounding woods.

Albert E. Sleeper State Park (15 miles SW of Port Austin): Lake Huron beach access for swimming and fishing. Hiking opportunities in surrounding woods.

Sanilac Historic Site (near Argyle): Historic petroglyphs. Under development.

#### B) Huron County Parks:

Four Huron County parks are located on Lake Huron, bordering Thumb Area Bottomland Preserve. Three additional Huron County parks are within 15 miles of Port Austin. These parks provide a variety of recreational opportunities.

#### C) Other Attractions or Activities:

Grindstone City: This village was a leading producer of grindstones during the mid-1800s and offers a small museum, quarry fields and other historic remains.

Great Lakes charter fishing is an important recreational activity available at Harbor Beach, Grindstone City and Port Austin. Shopping at antique/arts & crafts stores, miniature golf and horseback riding are other activities found near these villages. Port Austin has a small performing arts theater with summer productions. A public golf course is located in Bad Axe.

#### 26) Special Events and Festivals

July: 4th of July Festivals at Port Austin and Port Hope Great Lakes Cruising Club (Harbor Beach)

Wayfarer Sailing Meet (Harbor Beach)

Late July - Early August: Port Austin Jamboree

August: U.S. Coast Guard Day (Harbor Beach)

#### 27) Public Transportation Facilities

## A) Air Transportation:

Tri-City International Airport (Saginaw)
Freeland, MI 48623
(517) 695-5555
American Eagle (Simmons)

Northwest Airlines and Airlink
United Airlines
(approximately 80 miles from Port Austin)

B) Rail Transportation:

Lapeer: Amtrak. (approximately 90 miles from Port Austin)

Flint: Amtrak. (approximately 110 miles from Port Austin)

C) Bus Transportation:

Bay City: Greyhound Lines, Michigan Trailways, Indian Trails and

Brooks Charters & Tours.

(approximately 90 miles from Harbor Beach and 80 miles

from Port Austin)

Local bus service is available within Huron County, including stops at Port Austin and Harbor Beach.

#### 28) <u>Visitor Overnight Accommodations</u>

A) Campgrounds:

Private Campgrounds: 204 sites. County Campgrounds: 246 sites.

Port Crescent State Park: 181 sites. Albert E. Sleeper State Park: 280 sites.

- B) Motels, Cottages and Bed & Breakfast Establishments:
  - 1) Port Austin:

18 Motels and Cottage Establishments: Over 301 Beds.

3 Bed & Breakfast: Over 12 Beds.

- 2) Port Hope:
  - 2 Motels or Cottage Establishments: 27 Beds.
- 3) Harbor Beach:

3 Motels or Cottage Establishments: Over 43 Beds.

1 Bed & Breakfast: 8 Beds.

- 4) Bad Axe:
  - 4 Motels or Cottage Establishments: 149 Beds.

## 29) Restaurants and Nightclubs

Port Austin: 15 Restaurants.
Grindstone City: 1 Restaurant.
Port Hope: 2 Restaurants.
Harbor Beach: 9 Restaurants.
Bad Axe: 17 Restaurants.

#### 30) Tourism and Economic Development Organizations

- A) Huron County Economic Development Corporation Huron County Building Bad Axe, MI 48413 (517) 269-6431
- B) Greater Port Austin Area Chamber of Commerce P.O. Box 274
  Port Austin, MI 48467
  (517) 738-7600
  Office in Port Austin.
- C) East Michigan Tourist Association One Wenonah Park Bay City, MI 48706 (517) 895-8823
- D) Michigan Sea Grant Extension Cooperative Extension Service County Building, 11th Floor Mount Clemens, MI 48043 (313) 469-5180

## 31) Waterfront Development Plans

Harbor Beach: Harbor-of-Refuge currently under repairs/renovation.

Port Austin: Newly developed harbor-of-refuge and marina. Development nearly complete.

## 32) Public Inquiries About Bottomland Preserve

Few inquires noted by local businesspeople and other interviewees.

Three interviewees mentioned public "interest" in snorkeling to view fish or shallow shipwreck sites.

#### 33) Publications Describing Thumb Area Bottomland Preserve

#### General References:

A) Diving Times Magazine 4424 North Woodward Royal Oak, MI 48072 (313) 549-0303

Publishes articles on Michigan bottomland preserves and preserve shipwrecks.

B) For general Lake Huron and Great Lakes shipwreck information sources, including shipwreck and casualty lists or wreck charts, consult the following publication:

Feltner, C.E., and J.B. Feltner. 1982. Great Lakes Maritime History: Bibliography and Sources of Information. Seajay Publications, Dearborn, MI.

## 34) Research Conducted on Underwater Resources

A side-scan sonar search for shipwrecks was conducted in 1985 by:

Hydrographic Survey Company 1830 N. Narragansett Ave. Chicago, IL 60639 (312) 637-3535

The survey was conducted on bottomlands 50-70 feet deep, within Thumb Area Bottomland Preserve. No shipwrecks were located. Funding was provided by the Michigan Bureau of History and Huron County Road Commission. Side-scan readouts are stored with Michigan Bureau of History.

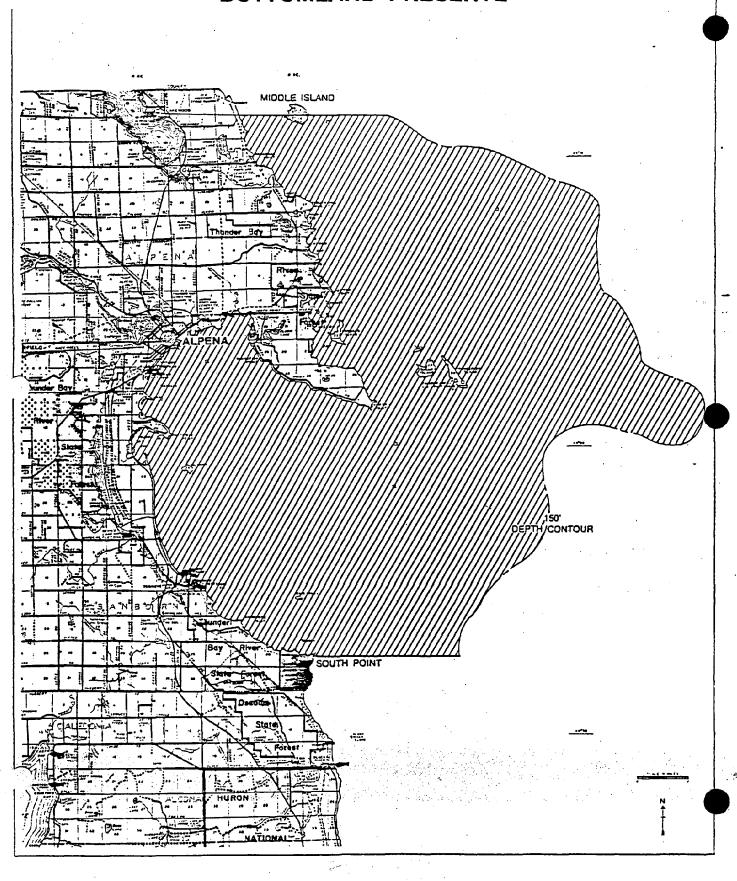
#### 35) <u>Dive Clubs</u>

No active dive clubs in area.

#### 36) <u>Miscellaneous</u>

Huron County's economy is predominantly agriculturally based. Tourism and recreation development is a relatively new industry. Port Austin has attractive and diversified tourism and recreation support services near the Thumb Area Bottomland Preserve.

## THUNDER BAY BOTTOMLAND PRESERVE



## 1) Promotional Name Used For Area

Thunder Bay Underwater Preserve c/o Alpena Area Chamber of Commerce P.O. Box 65 Alpena, MI 49707 (517) 354-4181

# 2) <u>Legal Description: Thunder Bay Great Lakes State Bottomland</u> <u>Preserve. Authorized 1981</u>.

That area of Lake Huron bottomlands, extending upward and including the surface of the water, within the latitudes 44 degrees 52 minutes 50 seconds (South Point) and 45 degrees 11 minutes 24 seconds (Middle Island) and lying between the ordinary high shoreline and the 150-foot depth contour based on the ordinary high-water level, Alpena county, Michigan; which area contains 288 square miles, more or less.

## 3) Known Dive Sites

| NAME                          | LORAN COORDINATES             | MAXIMUM DEPTH |
|-------------------------------|-------------------------------|---------------|
| D.R. HANNA                    |                               | 135 Ft.       |
| E.B. ALLEN                    | 30811.6/48693.1               | 110 Ft.       |
| GRECIAN                       | 30832.7/48713.3               | 105 Ft.       |
| LUCINDA VAN VALKENBURG        | 30807.3/48672.9               | 70 Ft.        |
| MONOHANSETT                   | 30822.6/48681.4               | 20 Ft.        |
| MONTANA                       | 30855.9/48699.9               | 70 Ft.        |
| NEW ORLEANS                   | •                             | 145 Ft.       |
| NORDMEER                      | 30790.7/48634.7               | 40 Ft.        |
| OSCAR T. FLINT                | 30879.8/48671.9               | 33 Ft.        |
| P.H. BIRCKHEAD                | 30908.2/48651.4               | 12 Ft.        |
| PORTSMOUTH                    | 30847.6/48588.2               | 15 Ft.        |
| WILLIAM P. REND               | 30891.0/48649.5               | 20 Ft.        |
| W.P. THEW                     | 30802.7/48679.6               | 90 Ft.        |
| Schooner (pr. NELLIE GARDNER) | ·                             | 18 Ft.        |
| Deck Barge (pr. SCANLON)      | 30870.2/48669.1               |               |
| Wood Schooner Barge           | 30865.0/48680.8               | 50 Ft.        |
| Deck Barge                    | One Mile North of North Point |               |
| Barge                         | Southwest of North Point      | <del></del>   |
| Unknown Schooner              | Near P.H. BIRCKHEAD           |               |
| Unknown Schooner              | Near WILLIAM P. REND          |               |
| Unknown Schooner              | Southwest of NORDMEER         |               |

| Harbor Tug                     | ear Alpena Wa |       |  |  |        |
|--------------------------------|---------------|-------|--|--|--------|
| Diver Memorial Site            | ear Sulphur I | sland |  |  | 12 Ft. |
| Middle Island Limestone Walls  | nd Formations |       |  |  | 70 Ft. |
| Thunder Bay Island Limestone V | lls           |       |  |  | 70 Ft. |
| Sulphur Island Limestone Reefs |               |       |  |  | 25 Ft. |
| Misery Bay Sinkholes           |               |       |  |  | 90 Ft. |
| •                              |               |       |  |  |        |

#### Vessels Near Thunder Bay Bottomland Preserve:

ISAAC M. SCOTT

NORMAN

MONROVIA

CORNELIA B. WINDIATE

PEWABIC

VIATOR

#### Sources:

Thunder Bay Divers, Alpena, MI.

Feltner, C.E., and S.J. Stock. 1983. Shipwrecks of Thunder Bay, part I and II. Seajay Publications, Dearborn, MI.

#### 4) Buoyed Dive Sites

14 sites were buoyed in 1988. 5 sites have two buoys: GRECIAN, OSCAR T. FLINT, WILLIAM P. REND, MONTANA, and Wood Schooner Barge.

Mooring materials include 3/8" galvanized chain and 3/4" polypropylene line connected to 55 gallon plastic foam filled barrels. Connections are made with swivels and shackles.

#### 5) Jurisdiction

The State of Michigan retains ownership of Lake Huron water surface, water column and bottomlands throughout Thunder Bay Bottomland Preserve. Jurisdiction is shared with the U.S. Coast Guard and U.S. Army Corps of Engineers on some matters. The State of Michigan has title to all abandoned shipwrecks embedded in submerged lands of Lake Huron as well as geological, biological and other natural and cultural features. State title is defined as ownership under public trust. Regulation of Michigan bottomlands was transferred to the Department of Natural Resources by authority of Public Act 247 of 1955. The salvage of abandoned property of historical or recreational value on Great Lakes bottomlands is regulated by Public Act 452 of 1988. This act also provides for the designation and regulation of Great Lakes bottomland preserves. It replaces Public Act 184 of 1980.

## References:

U.S. Congress. 1988. Abandoned shipwreck act of 1987. Public law 100-298.

Michigan Legislature. 1988. Underwater salvage and preserve act. Public act 452.

Michigan Legislature. 1980. Underwater salvage act. Public act 184.

Michigan Legislature. 1955. Great Lakes submerged lands act. Public act 247.

#### 6) Area Governmental Administrative Offices

#### A) State Government:

Department of Natural Resources District Office P.O. Box 667 1732 West M-32 Gaylord, MI 49735 (517) 732-3541

#### B) County Government:

Local government with responsibilities defined by state government and county residents. Offices are located in Alpena.

Alpena County 720 Chisholm Alpena, MI 49707 (517) 356-0115

# C) City Government:

City of Alpena City Hall Alpena, MI 49707 (517) 354-2196

## 7) Scuba Diving Registration Policies and Programs

No policies or programs implemented in past or present.

## 8) Thunder Bay Bottomland Preserve Management or Promotional Committees

Thunder Bay Underwater Preserve Committee was formed in 1980. Since 1982, the committee has worked under the Alpena Area Chamber of Commerce.

The Thunder Bay Underwater Preserve Committee was organized for the purpose of monitoring Thunder Bay area bottomlands and improving diving in the Great Lakes region. During the past six years, the committee has accomplished the following:

- A) Developed a marketing plan to promote diving within Thunder Bay Bottomland Preserve. Includes provision of diving brochures and participation in dive shows or festivals throughout the Midwest.
- B) Established dive site moorings for safe access to shipwrecks by visiting divers.
- C) Developed a slide-film presentation about the preserve to educate local community members, tourist service organizations and visiting divers or non-divers.
- D) Participated in successful efforts to locate a multi-place recompression chamber at Alpena General Hospital.
- E) Pursued establishment of a maritime museum near the Alpena waterfront.
- F) Developed other promotional activities for the preserve area.

#### 9) Promotional Efforts

- A) Member of Michigan Bottomland Preserves Council: Thunder Bay Bottomland Preserve is listed with four other preserves on the council brochure, available since 1988 for regional and national distribution. Council promotion of Thunder Bay Bottomland Preserve and other preserves includes a traveling display available for dive shows, film festivals, business conventions etc., and advertising in Underwater USA magazine during 1988-1989.
- B) Michigan Brown Trout Festival, Alpena July 16 through July 24, 1988 The festival provided limited promotion of Thunder Bay Bottomland Preserve and sport diving.
- C) Thunder Bay Underwater Preserve Dive Flag Poster Initiated in 1986 Poster was available to Alpena businesses and sport divers for display and promotion purposes.

- D) Thunder Bay Underwater Preserve Committee members have staffed promotional booths at "Our World Underwater" in Chicago, "Underwater Canada" in Toronto, "Ford Sea Horses Great Lakes Shipwreck Festival" in Dearborn, "Divers Showcase" in Lansing, "Beneath the Seas" in White Plains, NY and the Diving Equipment Manufacturers Assoc. (DEMA) trade show. The committee has attended such shows since 1984.
- E) Three different diving brochures have been produced since 1984 which describe Thunder Bay Bottomland Preserve. Brochure titles include "Diving Adventures, Alpena, Michigan," "Dive, Dive, Dive the Shipwrecks of Thunder Bay, Alpena, Michigan," and "Thunder Bay Wreck Diving Charters." These brochures were provided by The Convention & Visitors Bureau, Alpena Area Chamber of Commerce and Thunder Bay Divers, respectively. Topics included shipwreck site descriptions, Alpena area activities, history, emergency telephone numbers, diver emergency action plan, dive shop location and charter information.
- F) Thunder Bay Bottomland Preserve or Alpena area scuba diving was mentioned in the following tourist information publications.
  - 1) <u>Discover Thunder Bay Country</u>. Published by <u>Alpena News</u>.
  - 2) Alpena Area Chamber of Commerce <u>Business Directory</u>.
  - 3) <u>Alpena, Michigan, A warm and friendly port</u>. Published by Alpena Area Chamber of Commerce.
  - 4) Alpena County Map. Published by Alpena Area Chamber of Commerce.

Topics or information included shipping/shipwreck history, descriptions of shipwrecks, maps with shipwreck locations, underwater preserve committee activities, safe diving practices, diving accident emergency procedures and recompression chamber treatment.

#### 10) Special Projects or Events

Thunder Bay Underwater Preserve Committee has applied for the following grants to promote, interpret and develop the preserve area:

- A) Michigan Department of Commerce Travel Bureau Grant Program: FY 1987 - 1988 Proposal Objectives:
  - 1) Placement of a mooring buoy system at fourteen dive sites.
  - 2) Placement of interpretive signs at three public access sites along Lake Huron.
  - 3) Display large shipwreck artifacts on public waterfront property.
  - 4) Participate in promotional activities at several dive shows or festivals and advertise in two diving magazines. Stimulate articles about the preserve in other publications. Produce a brochure describing Thunder Bay Bottomland Preserve.

No grant funding received to-date.

B) Northeast Michigan Community Foundation January 29, 1987 Proposal Objective:

Development of buoy and anchoring systems for 12 shipwrecks in Thunder Bay Bottomland Preserve. Funds received.

C) Michigan Dive Festival, Alpena June 27 - 28, 1987

Activities included a dive accident management seminar, dive charter, Michigan underwater preserve travelogues, new equipment show, film festival, photography seminar, Great Lakes shipwreck photo contest, hospital recompression chamber tour, nautical museum exhibit and motel showcase. Grant for festival obtained from Michigan Sesquicentennial Foundation.

## Other Projects:

A) National Marine Sanctuary (NMS) Nomination National Oceanic and Atmospheric Administration (NOAA)

Efforts to promote Thunder Bay as a potential NMS site began in May 1982 through the Alpena County Planning Commission and Michigan State University Cooperative Extension Service. Although Thunder Bay was included on a NOAA site evaluation list for further consideration as a NMS, such designation was not supported by the State of Michigan.

#### 11) Retail Diving Shops and Air Compressor Services

A) Thunder Bay Divers 1105 Partridge Point Marina Alpena, MI 49707 (517) 356-9336 Mailing Address: 1157 Hinckley Alpena, MI 49707

Shipwreck diving charters, dockside air station, PADI scuba diving instruction, scuba equipment sales and service, rental of scuba equipment.

B) Summit Sports 224 East Chisholm Alpena, MI 49707 (517) 356-1182

Air station, scuba equipment sales and service, rental of scuba equipment.

C) K & B Scuba 2670 US 23 South Alpena, MI 49707 (517) 354-8394

Air station, scuba equipment sales and service, scuba diving instruction, rental of scuba equipment.

## 12) <u>Diving Charter Services</u>

Thunder Bay Divers 1105 Partridge Point Marina Alpena, MI 49707 (517) 356-9336 Mailing Address: 1157 Hinckley Alpena, MI 49707

Charter Vessels:

THUNDER BAY DIVER Captains Bill and Ruthann Beck 54 foot steel powerboat. Carries up to 30 passengers.

PLEASURE DIVER
Captains Bill and Ruthann Beck
46 foot steel powerboat.
Carries up to 30 passengers.

SURFACE INTRAVAL Captains Bill and Ruthann Beck 25 foot Bertram. Carries up to 4 passengers.

Length of operating season: May through October. Maximum of approximately 20 weekends.

Carried approximately 900 divers in 1988 with the above vessels.

## 13) Recreational Harbors

- A) Alpena: Sponsored by Department of Natural Resources.
- B) Presque Isle: Approximately 8 miles from the northern boundary of the preserve.

## 14) Marinas or Dock Sites

A) Alpena Municipal Marina Small Boat Harbor Alpena, MI 49707 Concession: Arnold Boat Works
400 E. Chisholm
Alpena, MI 49707
(517) 356-0551

Marina sponsored by Department of Natural Resources. Services include: transient accommodations, gasoline and diesel fuel, water, electricity, restrooms, shower facilities, harbormaster, holding tank pump out, haul out facilities, VHF-FM radio.

B) Partridge Point Marina 1105 North Partridge Point Road Alpena, MI 49707

Private Marina: Dockage accommodations available by day, week, month or season; boat launching sites; haul out facilities; inside/outside boat storage; gas and diesel fuel; boat repair capabilities; restrooms and showers; scuba diving and sport fishing charters; picnic area and clubhouse; condominium homes.

C) Presque Isle Marina Presque Isle Harbor (approximately 25 miles north of Alpena). (Under development by Michigan Department of Natural Resources).

#### 15) Boat Launches

- A) Alpena Municipal Marina: Administered by City of Alpena. 126 parking spaces.
- B) Riverfront Park (Alpena): Administered by City of Alpena.
- C) Partridge Point Marina (Alpena): Private marina and launch.
- D) Rockport (10 miles north of Alpena): Administered by Michigan DNR. 70 parking spaces.
- E) Ossineke State Forest Campground (approximately 10 miles south of Alpena): Administered by Michigan DNR Forest Management Division. 6 parking spaces.

#### 16) Hospitals

Alpena General Hospital 1501 West Chisholm St. Alpena, MI 49707 (517) 356-7390

Fully staffed, 24 hour on-call emergency room familiar with scuba diving accident care. Operates a multi-place, double lock recompression chamber capable of treatment to 165 feet of pressure. Physicians and technicians trained in hyperbaric medicine and recompression chamber operation are on staff. Alpena General Hospital is affiliated with the national Diving Accident Network (DAN).

## 17) Search & Rescue and Medical Emergency Services

- A) Search & Rescue (SAR):
  - 1) U.S. Coast Guard Station Tawas City Tawas City, MI 48764 (517) 362-4428

Search and rescue station with an approximate six hour minimum response time to Thunder Bay Bottomland Preserve. The following SAR vessels are available:

44 foot motor lifeboat. 22 foot Boston Whaler.

U.S. Coast Guard Station Alpena Alpena, MI 49707 (517) 356-1656

A U.S. Coast Guard employee coordinates SAR with the Alpena U.S. Coast Guard Auxiliary unit. Only private vessels are available for operations.

3) Alpena County Sheriff 320 Johnson St. Alpena, MI 49707 (517) 354-4128

Maintains a 24-hour dispatch and monitors marine FM radio channel 16. Marine safety functions include patrol with a 25 foot powerboat. Eight divers are currently available for search and recovery operations.

## B) Medical Emergency Services:

Alpena Ambulance Service 430 Helen Alpena, MI 49707 (517) 354-5412

Alpena County Sheriff's Department provides dispatch for ambulance services. Alpena Ambulance Service EMTs have received training in scuba diving emergency care.

#### 18) <u>Dive Accident Evacuation Procedures</u>

Diver emergency procedures were written in a past Chamber of Commerce scuba diving brochure. Emergency telephone numbers were listed in the past Convention & Visitors Bureau diving brochure. Brochures presently distributed by Thunder Bay Divers do not contain diving emergency procedures, although charter boat operators are very familiar with this subject. New brochures will include emergency procedures.

Divers visiting Thunder Bay Bottomland Preserve during 1988 were informed of diving emergency procedures through <u>Discover Thunder Bay Country</u> magazine (May-June, 1988) or at area air stations. Alpena General Hospital provides a brochure describing diving emergencies and recompression chamber treatment.

Emergency Procedures include the following:

- 1) Contact Alpena County Sheriff's Department or Tawas Coast Guard on marine radio VHF/FM channel 16.
- 2) Alpena County Sheriff's Department will coordinate an evacuation point onshore at which to dock the involved boat(s).
- 3) Generally, an ambulance with trained emergency medical personnel will meet the involved individuals and transport to Alpena General Hospital. Recompression chamber treatment is available at this hospital.

## 19) Diving Accidents or Fatalities

Two decompression sickness cases were recalled by interviewees since 1984.

## 20) Law Enforcement Capabilities

A) Alpena County Sheriff (517) 354-4128

Capabilities listed under SAR services. Alpena County Sheriff is not specifically funded for bottomland preserve law enforcement, but cooperates with other state law enforcement officers.

B) Michigan DNR Conservation Officers:

Contact: District Law Supervisor: (517) 732-3541

Officers: 2 are stationed in Alpena.

Boats: 20 foot outboard located in Alpena.

21 foot outboard located in Rogers City.

Patrols: Has conducted patrols specifically for violations of

bottomland preserve regulations. Also conducts patrols on

a routine basis and after citizen complaints.

C) Michigan State Police 2160 South State Alpena, MI 49707 (517) 354-4101

21) Law Enforcement Cases and Citations

None Recalled.

22) <u>Visitor Information or Interpretive Centers</u>

Alpena Area Chamber of Commerce P.O. Box 65 Alpena, MI 49707 (517) 354-4181

Office located at U.S. 23 North and Johnson Street.

- 23) <u>Interpretive Programs on Great Lakes Resources</u>
  - A) No advertised programming noted during 1988.

B) Interpretive Signing:

Information Kiosk near Alpena Municipal Marina.

Kiosk near Alpena Small Boat Harbor and municipal marina provides information on Thunder Bay Bottomland Preserve and area shipwrecks.

## 24) Museums

A) Jesse Besser Museum 491 Johnson Street Alpena, MI 49707 (517) 356-2207

Interprets northern Michigan and Great Lakes science, art, history and technology. Shipping/shipwreck exhibits include one ship model, copper ingots from PEWABIC and a wood stock anchor displayed on museum grounds. Nautical sales items feature books, maps and art.

B) Old Presque Isle Lighthouse and Museum 5295 Grand Lake Road Presque Isle, MI 49777 (517) 595-2787

Located 23 miles north of Alpena. Features a 3425 lb. bronze bell, antiques and nautical artifacts. Open May 15-October 15.

C) Presque Isle County Historical Museum 106 South 2nd Street Rogers City, MI 49779 (517) 734-4121

Located 40 miles north of Alpena.

#### 25) Other Recreational Attractions

- A) Michigan Islands National Wildlife Area and Refuge: Within Thunder Bay Bottomland Preserve boundaries.
- B) State Forests:

Mackinaw State Forest: Alpena County and surrounding counties. Forest and water based recreational activities.

C) State Parks:

Newaygo State Park (approximately 20 miles south of Alpena): Wild area; under development.

P.H. Hoeft State Park (approximately 45 miles north of Alpena): Camping, hunting, fishing, picnicing, swimming and hiking.

Clear Lake State Park (approximately 55 miles west of Alpena): Camping, picnicing, hunting, fishing, swimming, boating and hiking.

D) Alpena County Parks:

5 parks providing forest and water based recreational activities.

E) Other Attractions and Activities:

Alpena Wildlife Sanctuary: Located on Sportsmen's Island in Thunder Bay River.

Limestone Quarries: Located at Alpena, Rockport, Presque Isle and Rogers City.

Besser Natural Area: Near Presque Isle.

Dinosaur Gardens Prehistorical Zoo: Near Ossineke, 10 miles south of Alpena.

Additional attractions and activities in or near Alpena include Thunder Bay Theater, Jesse Besser Planetarium, golf, charter fishing, hiking, swimming, visiting city parks and shopping at antique/arts & crafts/gift shops.

#### 26) Special Events and Festivals

June:

Alpena: Thunder Bay Canoe Race Festival.

July:

Alpena: July 4th Parade, Bar-B-Que & Strawberry Dessert;

Brown Trout Festival; MORC Sailboat Race; Alpena Hang Gliding Expo; Thunder Bay Arts Show; Annual Amateur

Rodeo.

Rogers City: 4th of July Festival; Salmon Tournament.

Presque Isle: 4th of July Celebration.

August:

Alpena: Alpena County Fair; Ramblin' Rods Car Show; Annual

Antique Tractor & Steam Engine Show.

Rogers City: Nautical City Festival.

Presque Isle: Grand Lake Arts & Crafts Show.

Ossineke: Ossineke Old Fashion Days.

# 27) <u>Public Transportation Facilities</u>

A) Air Transportation:

Phelps-Collins Airport
Airport Road
Alpena, MI 49707
(517) 354-2907
Carrier:
Northwest Airlink (Simmons)

B) Bus Transportation:

Alpena: Greyhound.

## 28) <u>Visitor Overnight Accommodations</u>

- A) Campgrounds:
  - 1) Private Campgrounds:
    - 3 facilities within 15 miles of Alpena.
  - 2) State Forest Campgrounds:

52 sites within 12 miles of Alpena.

3) State Park Campgrounds:

P.H. Hoeft State Park (45 miles north of Alpena): 144 sites.

Clear Lake State Park (55 miles west of Alpena): 200 sites.

B) Motels, Cottages and Resorts:

Alpena area: 32 establishments listed with Alpena Area Chamber of Commerce.

#### 29) Restaurants and Lounges

Alpena area: 31 establishments.

## 30) Tourism and Economic Development Organizations

A) Alpena Area Chamber of Commerce P.O. Box 65 Alpena, MI 49707 (517) 354-4181

Divisions include Visitor Development (Convention and Visitors Bureau; Thunder Bay Underwater Preserve Committee); Governmental Affairs; Public Relations and Marketing; Community Development; Chamber Services/Publications; and Economic Development (Greater Alpena Growth Alliance; Waterfront Development Council; Small Business Council).

Organizational mission is to act as an energizing and vitalizing force in the Alpena area. Its goal is to unite all forms of individual, commercial and industrial businesses in the Alpena area for the promotion of business or civic interests.

- B) East Michigan Tourist Association One Wenonah Park Bay City, MI 48706 (517) 895-8823
- C) Michigan Sea Grant Extension Cooperative Extension Service P.O. Box 599 Tawas City, MI 48764 (517) 362-3449

#### 31) Waterfront Development Plans

A) Coastal Land Use and Design Plan September 1982 Prepared for City of Alpena

Provides a coastal profile; inventory and analysis of waterfront; and coastal area development plan. The plan acknowledges that, "Thunder Bay Underwater Preserve holds the potential for being a major tourist attraction . . . It is estimated that expenditures from divers alone amount to nearly a million dollars for the local economy each year. Facilities to accommodate tourists and divers will be needed. Charter boats, dive equipment shops, offices, and information centers would be required." Bay View Park is recommended for development of a multi-purpose building that "could display nautical exhibits about the Thunder Bay Underwater Preserve. Charter boat information concerning the preserve could also be obtained at the building." A historical ship docked on the waterfront is suggested as a visitor attraction. Management recommendations: Thunder Bay Underwater Preserve should be actively promoted as the area's major tourist

attraction. Facilities for divers and tourists should be developed at Bay View Park.

B) Master Plan for Parks and Outdoor Recreation 1983 Update City of Alpena

The plan acknowledges that "[Thunder Bay Underwater Preserve] offers a unique form of recreation and is of statewide significance. The [preserve] has potential as a major tourist orientated recreational resource . . [it] could in the long term increase Alpena's attractiveness as a destination for tourists. This may have a significant effect on the types of facilities provided in the city. Therefore, the City should cooperate and be involved in any planning program regarding Thunder Bay Underwater Preserve."

A multi-purpose building is recommended for Bay View Park to provide a dive center and display exhibits about Thunder Bay Underwater Preserve. "Charter boat information and information concerning the preserve could also be obtained at the building." Interpretive displays are also suggested for Blair Street Park. "Designation and promotion of Thunder Bay Underwater Preserve as a major recreational area could have a significant effect on the City's park facilities, especially Bay View Park and the Small Boat Harbor. Therefore, it is recommended that the City cooperate and be closely involved in any studies or planning programs concerning [the preserve]."

#### 32) Public Inquiries About Thunder Bay Bottomland Preserve

Approximately 3,500 inquiries through Alpena Area Chamber of Commerce during 1988.

## 33) Publications Describing Thunder Bay Bottomland Preserve

## A) Publications:

- Busch, G.J. 1975. Lake Huron's death ship [PEWABIC]. Busch Oceanographic Equipment Co., Saginaw, MI.
- Feltner, C.E., and S.J. Stock. 1983. Shipwrecks of Thunder Bay. Seajay Publications, Dearborn, MI.
- Michigan Sea Grant Extension. 1985. Thunder Bay Underwater Preserve diver survey results. Michigan State University, E. Lansing.
- Peterson, J.P., and T.C. Sundstrom. 1987. A profile of 1986 diver activity in the Thunder Bay Bottomland Preserve.
  MICHU-SG-87-07. Michigan Sea Grant Extension, Michigan State University, E. Lansing.

- Stonehouse, F. 1986. A short guide to the shipwrecks of Thunder Bay. B & L Watery World, Alpena.
- Warner, T.D., and D.F. Holecek. 1975. The Thunder Bay shipwreck survey study report. Recreation Research and Planning Unit, Department of Park & Recreation Resources, Michigan State University, E. Lansing.

#### B) Other References:

1) Sea Fans Video Magazine 7800 East Lliff Ave., Suite E Denver, CO 80231

A video production was completed in 1988 for retail sales. It documents shipwrecks within Thunder Bay Bottomland Preserve and two other preserves.

2) Diving Times Magazine 4424 North Woodward Royal Oak, MI 48072 (313) 549-0303

Publishes articles on Michigan bottomland preserves and preserve shipwrecks.

- 3) For general Lake Huron and Great Lakes shipwreck information sources, including shipwreck and casualty lists or wreck charts, consult the following publication:
  - Feltner, C.E., and J.B. Feltner. 1982. Great Lakes maritime history: bibliography and sources of information. Seajay Publications, Dearborn, MI.

## 34) Research Conducted on Underwater Resources

Thunder Bay Shipwreck Survey Recreation Research and Planning Unit Department of Park & Recreation Resources Michigan State University June 1975

The survey involved an underwater inventory of seventeen Lake Huron shipwrecks located off Alpena County. The location of nine other sites were established but not visited. A study report was produced in 1975 and is available from Department of Park & Recreation Resources, Michigan State University. Project objectives included the following:

- A) Accumulate data on location of shipwrecks; general condition of wrecks; and diving conditions at shipwreck sites.
- B) Delineate proposed water-based preserve boundaries.
- C) Assess underwater geological sites and area fish species.

#### 35) Dive Clubs

Thunder Bay Dive Club P.O. Box 844 Alpena, MI 49707

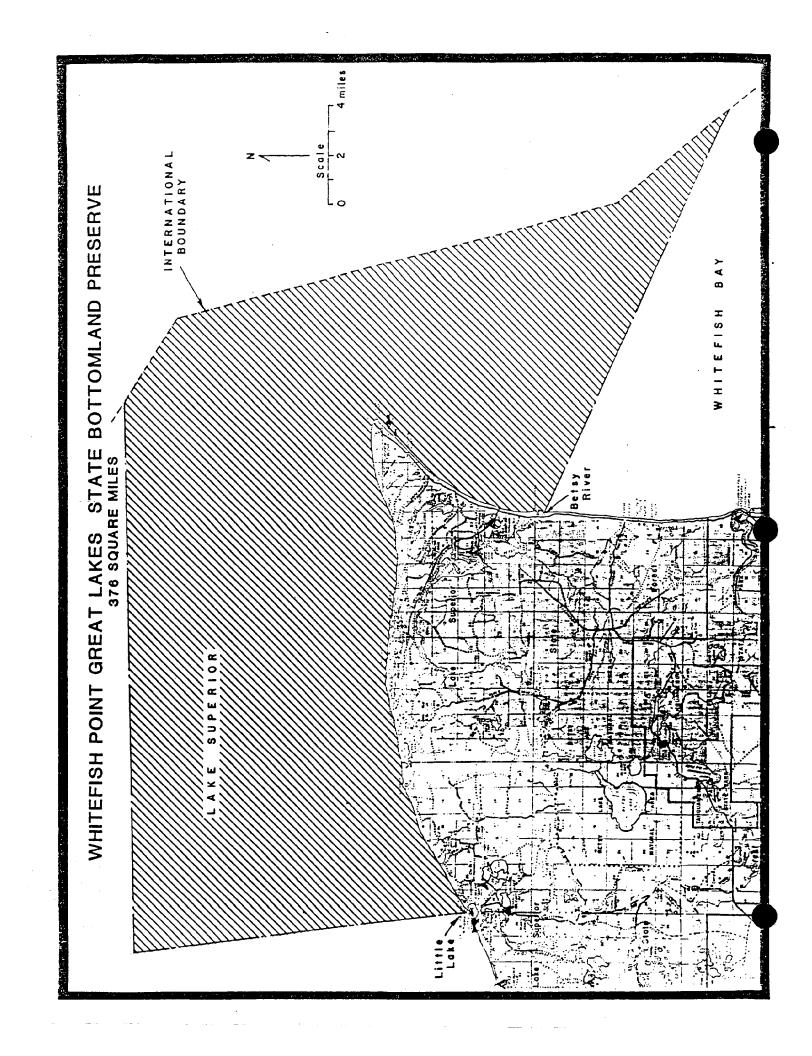
Approximately 75 members. Activities include preparing interpretive panels for the Small Boat Harbor information kiosk; installation, maintenance and removal of shipwreck buoys; diving and social functions.

#### 36) Miscellaneous

"The City of Alpena is an industrial city with a 1980 census population of 12,214 . . . The most important natural resources of the Alpena area are the limestone and shale formations, forests, and the waters of Lake Huron and more specifically, the occurrence of these forms in close proximity to one another. Huron-Portland Cement, a division of National Gypsum Company, Abitibi-Price Corporation, Besser Company, Thunder Bay Manufacturing, and Fletcher Paper Company are the City's major employers. The industrial payroll also includes several smaller manufacturers." Numerous forest and water based recreational activities are available in Alpena County.

#### Source:

City of Alpena. 1983. Master plan for parks and outdoor recreation.



#### WHITEFISH POINT BOTTOMLAND PRESERVE

#### 1) Promotional Name/Address of Area

Whitefish Point Underwater Preserve c/o Paradise Chamber of Commerce P.O. Box 82 Paradise, MI 49768

2) <u>Legal Description: Whitefish Point Great Lakes State Bottomland Preserve.</u> Authorized 1987.

An area of Lake Superior bottomlands extending upward and including the water surface described as: beginning at the mouth of the outlet of Little Lake in section 24, township 50 north, range 9 west, Luce County, Michigan; thence northerly to Loran-C coordinates 8970-Y-47450, 8970-X-31230; thence easterly to a point where Loran-C coordinate line 8970-Y-47530 intersects the international boundary between Canada and the United States; thence southeasterly along the international boundary to a point having a latitude 46 degrees. 53 minutes, 20.668 seconds and longitude of 84 degrees, 51 minutes, 35.830 seconds; thence continuing southeasterly along the international boundary to a point having latitude 46 degrees, 38 minutes, 4.030 seconds and longitude 84 degrees, 45 minutes, 45.512 seconds; thence continuing along the international boundary to its intersection with Loran-C coordinate line 8970-Y-47740; thence northwesterly to the mouth of the Betsy River in section 2, township 49 north, range 6 west, Chippewa County, Michigan; thence northerly and westerly along the ordinary high-water mark of Lake Superior to the point of beginning at the mouth of the outlet of Little Lake, containing 376 square miles more or less.

# 3) Known Dive Sites

| NAME            | LORAN COORDINATES | MAXIMUM DEPTH |
|-----------------|-------------------|---------------|
| COMET           |                   | 240 Ft.       |
| EUREKA          | 31181.2/47527.4   | 50 Ft.        |
| INDIANA         | 31215.1/47520.3   | 115 Ft.       |
| JOHN B. COWLE   | 31124.9/47579.0   | 220 Ft.       |
| JOHN MITCHELL   | 31153.7/47545.6   | 155 Ft.       |
| JOHN M. OSBORNE | 31149.5/47528.5   | 170 Ft.       |
| MIZTEC          | 31156.9/47561.2   | 50 Ft.        |
| M.M. DRAKE      | 31167.6/47568.9   | 50 Ft.        |
| MYRON           | 31142.5/47566.2   | 50 Ft.        |

| Unknown (pr. NESHOTO) | 31181.2/47527.4   | 15 Ft.  |
|-----------------------|-------------------|---------|
| NIAGARA               | 31168.3/47543.9   | 110 Ft. |
| PANTHER               | 31105.8/47685.9   | 105 Ft. |
| SAGAMORE              | 31072.9/47771.9 * | 70 Ft.  |
| SAMUEL MATHER         | 31086.7/47734.8   | 180 Ft. |
| SUPERIOR CITY         |                   | 270 Ft. |
| VIENNA                | 31135.9/47610.4   | 145 Ft. |
| ZILLAH                |                   | 255 Ft. |
|                       |                   |         |

<sup>\*</sup> outside of preserve boundary.

## 4) Buoyed Dive Sites

None

#### 5) Jurisdiction

The State of Michigan retains ownership of Lake Superior water surface, water column and bottomlands throughout Whitefish Point Bottomland Preserve. Jurisdiction is shared with the U.S. Coast Guard and U.S. Army Corps of Engineers on some matters. The State of Michigan has title to all abandoned shipwrecks embedded in submerged lands of Lake Superior as well as geological, biological and other natural and cultural features. State title is defined as ownership under public trust. Regulation of Michigan bottomlands was transferred to the Department of Natural Resources by authority of Public Act 247 of 1955. The salvage of abandoned property of historical or recreational value on Great Lakes bottomlands is regulated by Public Act 452 of 1988. This act also provides for the designation and regulation of Great Lakes bottomland preserves. It replaces Public Act 184 of 1980.

U.S. Congress. 1988. Abandoned shipwreck act of 1987. Public law 100-298.

Michigan Legislature. 1988. Underwater salvage and preserve act. Public act 452.

Michigan Legislature. 1980. Underwater salvage act. Public act 184.

Michigan Legislature, 1955. Great Lakes submerged lands act. Public act 247.

## 6) Area Governmental Administrative Offices

#### A) State Government:

Department of Natural Resources District Office P.O. Box 445 Newberry, MI 49868 (906) 293-5131

#### B) County Government:

Local government with responsibilities defined by state government and county residents. Offices are located in Sault Ste. Marie, which is 60 miles from Paradise and 71 miles from Whitefish Point.

Chippewa County Sault Ste. Marie, MI 49783 Clerk: (906) 635-6300

#### C) Local Government:

Whitefish Township Paradise, MI 49768

## 7) Scuba Diving Registration Policies and Programs

A mandatory diver registration/orientation program was recommended on an annual basis in "Management Guidelines For the Proposed Whitefish Point Underwater Preserve," prepared by the Whitefish Point Underwater Proposal Committee in 1986. Management objectives were safety, interpretation/education, compliance with regulations, retrieval of demographics/recreational use information and assessment of user fees.

No scuba diving registration/orientation program is currently operational.

# 8) <u>Whitefish Point Bottomland Preserve Management or Promotional</u> Committees

Whitefish Point Underwater Preserve Committee was formed in 1985 to promote and coordinate designation of Whitefish Point Bottomland Preserve. The non-incorporated committee prepared a "Preliminary Evaluation of the Proposed Whitefish Point Underwater Preserve" for state government review under P.A. 184 of 1980. The report provided the following:

- 1) Listing and brief discussion of shipwreck resources;
- 2) Discussion of recreational use and significance;
- 3) Scuba diving feasibility and quality;
- 4) Public support groups and concerns;
- 5) Economic impact information;
- 6) Management potential;
- 7) Proximity to major population/urban areas;
- 8) Complimentary onshore recreational facilities;
- 9) Management recommendations;
- 10) Diver emergency action plan.

The committee also submitted "Management Guidelines for the Proposed Whitefish Point Underwater Preserve." This document outlined plans for the following.

- 1) Registration and orientation;
- Zonal management of preserve resources;
- 3) Safety management of users, including buoy systems, modification of shipwrecks and emergency medical plans;
- 4) Interpretation as a management tool (i.e. museum displays, interpretive and research programs);
- 5) Formation of a Whitefish Point Underwater Preserve Management Committee with authority and responsibility for overall preserve management.

The Whitefish Point Underwater Preserve Committee continues to function as a private coordinating group with goals of preserve area protection, management, promotion and development. Committee members are predominantly businesspeople with no delegated state authority to pursue these goals. The committee maintained approximately 8-10 members in 1988.

## 9) <u>Promotional Efforts</u>

- A) Member of Michigan Bottomland Preserves Council: Whitefish Point Bottomland Preserve is listed with four other preserves on the council brochure, available since 1988 for regional and national distribution. Council promotion of Whitefish Point Bottomland Preserve and other preserves includes a traveling display available for dive shows, film festivals, business conventions etc., and advertising in <u>Underwater USA</u> magazine, during 1988-89.
- B) Whitefish Point Bottomland Preserve is mentioned in displays and literature found at The Great Lakes Shipwreck Historical Museum at Whitefish Point, MI. The museum had approximately 42,000 visitors in 1988.
- C) Whitefish Point Bottomland Preserve articles are written in <u>Tahquamenon and Paradise Resort News</u>, published by Paradise Area Chamber of Commerce.

- D) Otherwise, preserve area promotion is primarily "word-of-mouth" by recreational divers and area businesspeople. A limited number of newspapers and periodicals have highlighted the preserve, including Michigan DNR Natural Resources Register.
- 10) Special Projects or Events

None.

# 11) Retail Diving Shops and Air Compressor Services

A) Dyatomics Scuba Center, Inc. 113 1/2 E. Truman Newberry, MI 49868 (906) 293-8060 50 miles from Whitefish Point.

Complete PADI certified scuba instruction, scuba diving travel/resort arrangements, air fills, new and used equipment sales, equipment rental and service. Approximately 20% of Dyatomics airfills are for Whitefish Point Bottomland Preserve. Whitefish Point divers predominantly visit the shop during weekends.

B) Superior Scuba
Owner: Larry Spencer
120 Ann Street West
Sault Ste. Marie, MI 49783
(906) 632-1332
632-4512 (After March 1, 1989).

Provides air fills, retail sales, equipment rental and scuba instruction. Plans to run diving charters to Whitefish Point Bottomland Preserve in 1989.

C) Chippewa Landing Marina Bay Mills Pt. Rd. Rt. 1, Box 259 Brimley, MI 49715 (906) 248-5278

Provides scuba cylinder air fills.

D) Canadian Dive Shops:

Aqua Tech Sault Scuba Center Sault Ste. Marie, Ontario Sault Ste. Marie, Ontario

## 12) Diving Charter Services

A) Venture North
P.O. Box 244
Brimley, MI 49715
(906) 248-5437
248-5278

Vessel Name: BAYWOLF
Captain Tom Bathey.
30 foot steel diesel inboard.
Operates out of Brimley.
Carries up to 9 passengers.
Season: May - November.
Carried approximately 100 divers for approximately 500 diver days in 1988.

B) Dennis Dougherty 1931 Riverside Dr. Sault Ste. Marie, MI 49783 (906) 632-6490

Vessel Name: NEVILLE
Captain Dennis Dougherty.
50 foot steel diesel inboard.
Operates out of Sault Ste. Marie.
Carries up to 6 passengers.
Season: June - August.
Carried approximately 60-80 divers in 1987-88.
Plans to carry 100+ divers in 1989.

C) Note: A number of other charters are available, but origin and licensing compliance are unknown. Interviewees stated that some of these charters are unlicensed.

# 13) Recreational Harbors

Whitefish Point: Sponsored by Department of Natural Resources.

#### 14) Marinas or Dock Sites

- A) Whitefish Point DNR Marina: Transient accommodations, gasoline, water, restrooms.
- B) Little Lake DNR Marina: Transient accommodations, telephone, gasoline, water, electricity, harbormaster, restrooms, holding tank pump out. (Approximately 5 miles from western edge of preserve).

## 15) Boat Launches

- A) Whitefish Point Harbor: Administered by Michigan DNR at Whitefish Point Harbor of Refuge. 29 parking spaces.
- B) Little Lake Harbor: Administered by Michigan DNR at Little Lake Harbor of Refuge. Approximately 5 miles from western edge of preserve area. 10 parking spaces.
- C) Tahquamenon Bay Ramp: Administered by Tahquamenon Falls State Park. Located 6 miles south of Paradise. 13 parking spaces.
- D) Ramps in Brimley State Park and Bay Mills are over 20 water miles from southern edge of preserve area.

#### 16) Hospitals

A) War Memorial Hospital Sault Ste. Marie, MI 49783 (906) 635-4460

Available for stabilization of diving accident patients prior to transport to available recompression chamber. Approximately 75 miles from Whitefish Point Harbor-of-Refuge.

B) Helen Newberry Joy Hospital Newberry, MI 49868 (906) 293-5181

Approximately 50 miles from Whitefish Point Harbor-of-Refuge.

## 17) Search and Rescue and Medical Emergency Services

- A) Search & Rescue (SAR):
  - U.S. Coast Guard Station Sault Ste. Marie 337 Water St. Sault Ste. Marie, MI 49783-9501 (906) 635-3273

Minimum response time of approximately one hour to Whitefish Point Bottomland Preserve. Vessels available for SAR operations:

41 foot utility boat 2 U.S. Coast Guard cutters for heavy rescue 2) U.S. Coast Guard Auxiliary: Flotilla 1609 of Paradise.
Private auxiliary vessels launch from Whitefish Point Harbor of Refuge or Tahquamenon River mouth.

## B) Emergency Medical Services:

Marie.

- Paradise Volunteer Fire Department and Ambulance Service:
   One ambulance and approximately seven EMTs. Can be dispatched through Chippewa County Sheriff's Department in Sault Ste.
- 2) Dive Accident Management Seminar: Conducted in May 1985 by Michigan Sea Grant Program at Sault Ste. Marie for divers, charter boat operators, EMTs and hospital emergency room personnel.

## 18) <u>Dive\_Accident Evacuation Procedures</u>

Developed by Whitefish Point Underwater Preserve Committee in 1985. Provides three plans.

- 1) Ground transportation from War Memorial Hospital in Sault Ste.
  Marie to Alpena General Hospital recompression chamber.
- 2) Ground transportation from Sault Ste. Marie to Chippewa County International Airport near Kinross (approximately 62 miles from Paradise). Air transport via Flight for Life from Milwaukee to recompression chamber.
- 3) Ground transportation from Sault Ste. Marie to Chippewa County International Airport near Kinross. Transport to recompression chamber via U.S. Coast Guard helicopter dispatched from U.S.C.G. Air Station Traverse City.

## 19) Diving Accidents or Fatalities

Unknown.

# 20) Law Enforcement Capabilities

A) Chippewa County Sheriff 331 Court St. Sault Ste. Marie, MI 49783 (906) 635-6355

Maintains a 24-hour dispatch, but does <u>not</u> monitor marine FM radio. Operates a 23 foot I/O powerboat during occassional patrols in Whitefish Point Bottomland Preserve. Patrols are initiated by citizen complaint or emergency need.

B) Chippewa County Sheriff's Deputy Paradise, MI

Does not have a boat capable of Lake Superior patrols.

C) Michigan DNR Conservation Officers:

Contact: District Law Supervisor: (906) 293-5131

Officers: 2-3 are available for Whitefish Point Bottomland

Preserve.

Boats: 21 foot Boston Whaler outboard.

(2) 16 foot outboards.

Patrols: Conducts patrols on a routine basis and after citizen

complaints.

D) Michigan State Police Newberry, MI 49868 (906) 293-5151

21) Law Enforcement Cases and Citations

None recalled by DNR District Law Supervisor since fall 1987.

- 22) <u>Visitor Information or Interpretive Centers</u>
  - A) Paradise Area Chamber of Commerce P.O. Box 82 Paradise, MI 49768

Has a small information building in Paradise.

B) The Great Lakes Shipwreck Historical Museum Whitefish Point

The museum is located at the U.S. Coast Guard Lighthouse Station. Attractions include a Shipwreck Video Theater. Visitors may view underwater film and videos of shipwrecks within the preserve area. Features contain segments of historical films and provide current interpretive information. Museum plans include development of an interpretive center and cultural demonstration activities with U.S. Coast Guard and Great Lakes maritime themes.

# 23) Interpretive Programs on Great Lakes Resources

See 22 above. The Great Lakes Shipwreck Historical Museum also provides interpretive signing on the museum grounds describing shipwreck artifacts and Great Lakes maritime heritage.

#### 24) Museums

A) The Great Lakes Shipwreck Historical Museum Whitefish Point

Operated By: Great Lakes Shipwreck Historical Society Inc. 111 Ashmun Sault Ste. Marie, MI 49783 (906) 635-1742

Offers an extensive collection of shipwreck artifacts from Whitefish Point Bottomland Preserve. Exhibits were designed by James J. Kelly of Milwaukee Public Museum. Artifacts are conserved and placed in excellent quality displays. An artifact accessioning program was begun in 1988. Specific exhibits include: A 2nd Order Fresnel Lens; Exploration of the Inland Seas; Shipwreck Coast; INVINCIBLE; INDEPENDENCE; Hard Hat Diving Apparatus; Journey Back in Time; NIAGARA; COMET; JOHN M. OSBORN; VIENNA; SAMUEL MATHER; SAGAMORE; SUPERIOR CITY; JOHN B. COWLE; and EDMUND FITZGERALD. Visitation reached approximately 42,000 in 1988. Some large shipwreck artifacts are displayed on museum grounds. Retail services include a museum store and snack shop. Artifacts are not for sale. The museum is a private, non-profit organization managed by the Great Lakes Shipwreck Historical Society, Inc. of Sault Ste. Marie.

B) Port Adventure Le Sault de Sainte Marie Historical Sites, Inc. P.O. Box 1668 Sault Ste. Marie, MI 49783 (906) 632-3658

S.S. VALLEY CAMP and Marine Museum: Offers tours on an operational Great Lakes bulk carrier, maritime exhibits and a Great Lakes fish aquarium. Also operates the nearby Tower of History.

#### 25) Other Recreational Attractions

A) Whitefish Point Bird Observatory:

Operated by Michigan Audubon Society from mid-March to the end of June.

B) Paradise:

Tower of Paradise: Sightseeing tower 128 feet above Lake Superior.

C) State Parks:

Tahquamenon Falls State Park: Camping, hiking, fishing and hunting. Upper Tahquamenon Falls are the second largest waterfalls east of the Mississippi River, surpassed only by Niagara Falls. Commercial tour boats are available from Memorial Day through early October. Less than 10 miles from Paradise.

Muskallonge Lake State Park: Camping, swimming, fishing, hiking. Approximately 40 miles from Paradise.

Brimley State Park: Camping, swimming, fishing, hiking. Approximately 50 miles from Paradise.

D) State Forests:

Lake Superior State Forest: Camping, fishing, swimming, canoeing, hiking and other outdoor activities.

E) Sault Ste. Marie:

Visitor interest centers on the Soo Locks and Great Lakes vessels which travel the world's busiest shipping channel. Attractions include the Historic Locks Park Walkway. A gambling casino is also located in Sault Ste. Marie.

F) Brimley Area:

Pendills Creek/Hiawatha Forest Fish Hatchery Complex. Approximately 25 miles south of Paradise.

Point Iroquois Lighthouse.

G) Miscellaneous:

Agate collecting at Whitefish Point; golf at Newberry (approximately 40 miles from Paradise); canoeing and fishing on numerous rivers, lakes and streams; berry picking; birdwatching and photography.

# 26) Special Events and Festivals

#### Paradise:

July: 4th of July Celebration.

August: Wild Blueberry Festival and Arts & Crafts Fair.

Note: Also contact Sault Ste. Marie and Newberry Chamber of

Commerce offices.

# 27) Public Transportation Facilities

- A) Paradise: No public transportation services.
- B) Air Transportation:
  - Chippewa County International Airport Kincheloe, MI 49788 (906) 495-5656 (approximately 62 miles from Paradise) Carrier: Northwest Airlink (Simmons).
  - 2) Sault Municipal Airport Sault Ste. Marie, Ontario (approximately 65 miles from Paradise) Carriers: Air Canada Nordair Norontair
- C) Bus Transportation:
  - St. Ignace (approximately 62 miles from Paradise):
     North Star Lines and Greyhound.
  - Sault Ste. Marie, MI (approximately 60 miles from Paradise): North Star Lines.
  - 3) Sault Ste. Marie, Ontario: Greyhound.

D) Rail Transportation:

Sault Ste. Marie, Ontario: Algoma Central.

#### 28) <u>Visitor Overnight Accommodations</u>

A) Campgrounds:

Private Campgrounds (within 7 miles of Paradise): 65 sites.

State Forest Campgrounds (within 8 miles of Paradise): 42 sites.

Tahquamenon Falls State Park (within 8 miles of Paradise): 183 sites.

Tahquamenon Falls State Park - Rivermouth Unit (within 7 miles of Paradise): 136 sites.

Muskallonge Lake State Park (approximately 40 miles from Paradise): 179 sites.

- B) Motels, Cabins and Lodges:
  - 1) Paradise: 10 facilities within 12 miles of Paradise.

    Limited numbers of rental units per facility.
  - 2) Other lodging is available in Newberry (approximately 40 miles from Paradise and in Sault Ste. Marie (approximately 60 miles from Paradise).

# 29) Restaurants and Nightclubs

Five facilities in Paradise. One facility 10 miles south of Paradise. Limited seating per facility.

Other establishments are located in Newberry and Sault Ste. Marie.

- 30) Tourism and Economic Development Organizations
  - A) Paradise Area Chamber of Commerce P.O. Box 82 Paradise, MI 49768
  - B) Sault Ste. Marie Chamber of Commerce 2581 I-75 Business Spur Sault Ste. Marie, MI 49783 (906) 632-3301

- C) Newberry Chamber of Commerce 405 Newberry Avenue Newberry, MI 49868 (906) 293-5562
- D) Chippewa County Cooperative Extension Office 139 Arlington Sault Ste. Marie, MI 49783
- E) Eastern U.P. Regional Planning & Development Commission 416 Ashmun Street Sault Ste. Marie, MI 49783 (906) 635-1581
- F) Michigan's Eastern Upper Peninsula Tourist Association 100 Marley County Court House St. Ignace, MI 49781 (906) 643-7343
- G) Upper Peninsula Travel and Recreation Association P.O. Box 400 Iron Mountain, MI 49801 (906) 774-5480
- H) Michigan Sea Grant Extension U.P. Extension Center 1030 Wright Street Marquette, MI 49855 (906) 228-4830
- 31) Waterfront Development Plans

None Noted.

32) Public Inquiries About Bottomland Preserves

Unknown.

- 33) Publications Describing Whitefish Point Bottomland Preserve
  - A) Publications:
    - Hainault, P.E. 1979. The singing sirens that sank the FITZ. Houghton, MI.
    - Hemming, R.J. 1981. Gales of november: the sinking of the EDMUND FITZGERALD. Contemporary Books, Chicago, IL.
    - Lee, R.E. 1977. EDMUND FITZGERALD 1957-1975. Great Lakes Maritime Institute, Detroit, MI.
    - Stonehouse, F. 1973. Great wrecks of the great lake: a directory of shipwrecks of Lake Superior. Harboridge Press, Marquette.
    - Stonehouse, F. 1977. Wreck of the EDMUND FITZGERALD. Avery Color Studios, AuTrain, MI.

U.S. Coast Guard. 1977. Marine board of investigation: sinking of the EDMUND FITZGERALD 10 November 1975. Report No. USCG 16732/64216. Washington, D.C.

#### B) Other References:

1) Sea Fans Video Magazine 7800 East Lliff Ave., Suite E Denver, CO 80231

A video production was completed in 1988 for retail sales. It documents shipwrecks within Whitefish Point Bottomland Preserve and two other preserves.

2) Diving Times Magazine 4424 North Woodward Royal Oak, MI 48072 (313) 549-0303

Publishes articles on Michigan bottomland preserves and preserve shipwrecks.

3) For general Lake Superior and Great Lakes shipwreck information sources, including shipwreck and casualty lists or wreck charts, consult the following publication:

Feltner, C.E., and J.B. Feltner. 1982. Great Lakes maritime history: bibliography and sources of information. Seajay Publications, Dearborn, MI.

#### 34) Research Conducted on Underwater Resources

No scientific research conducted. Personnel from The Great Lakes Shipwreck Historical Museum have conducted varying levels of photo and video documentation on some shipwreck sites.

# 35) <u>Dive Clubs</u>

No active dive clubs in area.

#### 36) <u>Miscellaneous</u>

Principal economic base employers for Chippewa County include Kinross Correction Facility, War Memorial Hospital, Lake Superior State University, Kinross Manufacturing Corporation and Olofsson's Manufacturing Corporation. Tourism and recreation related employment is important to Paradise area residents. Paradise is a small, unincorporated village on Lake Superior. Chippewa County abounds in forest and water resources.

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#### SPORT DIVING STATISTICS

Fourteen statistical analyses were selected to provide a general impression of United States sport diving and Michigan bottomland preserve use. Additional surveys which compare Great Lakes diving visitation with other scuba diving destinations within the United States and abroad are needed. Such studies would be extremely beneficial in marketing Michigan bottomland preserves as destination recreational attractions.

Table 1. Yearly Student Scuba Certifications by the Professional Association of Diving Instructors (PADI).

| Area Concerned                  | 1983    | Percent<br>Change | 1987 <sup>-</sup> | Percent<br>Change | 1992*   |
|---------------------------------|---------|-------------------|-------------------|-------------------|---------|
| Michigan                        | 2,512   | + 45              | 4,539             | + 38              | 7,309   |
| Midwest<br>(MI, WI, IL, IN, OH) | 16,756  | + 48              | 32,234            | + 38              | 51,913  |
| U.S.A.                          | 123,546 | + 48              | 238,771           | + 38              | 384,543 |

<sup>\*</sup> Projected.

Source: PADI, Santa Ana, CA. 1988.

Table 2. Estimated Yearly Student Scuba Certifications by All United States Certifying Agencies.

| Area Concerned                  | 1983    | Percent<br>Change | 1987    | Percent<br>Change | 1992*   |
|---------------------------------|---------|-------------------|---------|-------------------|---------|
| Michigan                        | 4,170   | + 36              | 6,470   | + 34              | 9,740   |
| Midwest<br>(MI, WI, IL, IN, OH) | 27,900  | + 39              | 46,000  | + 34              | 69,200  |
| U.S.A.                          | 206,200 | + 40              | 341,100 | + 34              | 512,700 |

<sup>\*</sup> Projected.

Source: PADI, Santa Ana, CA. 1988.

NOTE: Figures based on the following estimates.

PADI issued approximately 60% of U.S. certifications in 1983. PADI issued approximately 70% of U.S. certifications in 1987. PADI projects an issuance of 75% of U.S. certifications in 1992.

Table 3. Estimated Total Active United States Sport Divers.

| Area Concerned                  | 1983      | Percent<br>Change | 1987      | Percent<br>Change | 1992*     |
|---------------------------------|-----------|-------------------|-----------|-------------------|-----------|
| Michigan                        | 44,980    | + 25              | 59,640    | + 23              | 77,900    |
| Midwest<br>(MI, WI, IL, IN, OH) | 305,864   | + 24              | 402,570   | + 20              | 506,350   |
| U.S.A.                          | 2,249,000 | + 25              | 2,982,000 | + 23              | 3,895,000 |

<sup>\*</sup> Projected.

Source: PADI, Santa Ana, CA. 1988.

Table 4. Locations of Diving Trips Taken Inside the Continental United States in the Past Twelve Months by <u>Skin Diver</u> Magazine Subscribers. Survey Conducted Fall 1988.

| Location           | Percent |                       |  |
|--------------------|---------|-----------------------|--|
| Florida Keys       | 43.2    |                       |  |
| Florida East Coast | 29.4    |                       |  |
| Florida Springs    | 25.8    |                       |  |
| California         | 21.0    |                       |  |
| Florida West Coast | 20.3    |                       |  |
| Florida Panhandle  | 12.8    |                       |  |
| Middle Atlantic    | 12.2    | (639) Total Responses |  |
| Great Lakes        | 10.5    | -                     |  |
| New England        | 9.4     |                       |  |
| Gulf States        | 7.2     |                       |  |
| Pacific Northwest  | 4.9     |                       |  |
| British Columbia   | 1.1     |                       |  |

Source: 1989 <u>Skin Diver</u> Magazine Subscriber Survey

Table 5. Locations of Diving Trips Taken During 1984-1986 by Midwest Sport Divers.

|                                   | Respondents |         |  |
|-----------------------------------|-------------|---------|--|
| Location                          | Number      | Percent |  |
|                                   |             |         |  |
| Great Lakes                       | 286         | 87.7    |  |
| Inland Lakes (Great Lakes Region) | 244         | 74.8    |  |
| Florida                           | 123         | 37.7    |  |
| Caymans                           | 62          | 19.0    |  |
| Bahamas                           | 54          | 16.6    |  |
| Other Carribbean                  | 54 ,        | 16.6    |  |
| Gulf States                       | 48 .        | 14.7    |  |
| Mexico                            | 34          | 10,4    |  |
| Hawaii                            | 32          | 9.8     |  |
| Virgin Islands                    | 31          | 9.5     |  |
| Bonaire                           | 28          | 8.6     |  |
| All Other Locations               | 104         | 31.7    |  |

Source: Michigan Sea Grant Extension. MICHU-SG-87-508. 1987.

NOTE: Totals more than 100% due to multiple responses. Sample was taken from divers visiting Michigan bottomland preserves during 1986 and divers on mailing lists of two Michigan dive shops. Michigan resident were 74% of the sample.

Table 6. Locations of Great Lakes Dive Trips Taken During 1984-1986 by Midwest Sport Divers.

|                                  | Respondents |         |  |
|----------------------------------|-------------|---------|--|
| Location                         | Number      | Percent |  |
|                                  |             |         |  |
| Munising/Alger Preserve          | 162         | 53.5    |  |
| Alpena/Thunder Bay Preserve      | 140         | 46.2    |  |
| Tobermory/Fathom Five Park       | 120         | 40.0    |  |
| Mackinac Straits Preserve        | 100         | 33.0    |  |
| Huron County/Thumb Area Preserve | 79          | 26.1    |  |
| Whitefish Point Preserve         | 54          | 17.8    |  |
| Southern Lake Michigan           | 35          | 11.6    |  |
| Isle Royale National Park        | 30          | 9.9     |  |
| Grand Traverse Bay Area          | 28          | 9.2     |  |
| St. Clair River                  | 24          | 7.9     |  |
| Lake Erie                        | 20          | 6.6     |  |
| Manitou Islands Area             | 18          | 5.9     |  |
| Other Areas                      | 91          | 30.1    |  |
| Other Areas                      | 91          | 30.1    |  |

Source: Michigan Sea Grant Extension. MICHU-SG-87-508. 1987.

NOTE: Totals more than 100% due to multiple responses. Sample was taken from divers visiting Michigan bottomland preserves during 1986 and divers on mailing lists of two Michigan dive shops. Michigan residents were 74% of the sample

Table 7. Attributes Considered Important by Midwest Divers in Selecting a Great Lakes Diving Location.

| Attributes                              | NI<br>1 | SI<br>2 | VI<br>3                | C<br>4 | Mean |
|---|---------|---------|------------------------|--------|------|
|   |         | Percent | Percent of Respondents |        |      |
| Dive Shop Services                      | 2.3     | 23.2    | 51.1                   | 23.5   | 2.96 |
| Quality of Shipwrecks                   | 2.9     | 22.7    | 58.6                   | 15.9   | 2.87 |
| Diver Safety Procedures and Facilities  | 6.1     | 25.5    | 46.1                   | 22.3   | 2.85 |
| Information about Diving Sites          | 4.5     | 25.5    | 54.8                   | 15.2   | 2.81 |
| Water Clarity                           | 2.3     | 36.3    | 55.0                   | 6.4    | 2.66 |
| Well-marked Dive Sites                  | 10.3    | 35.3    | 43.6                   | 10.9   | 2.55 |
| Availability of Dive<br>Charters        | 18.8    | 33.0    | 33.7                   | 14.6   | 2.44 |
| Natural Beauty                          | 9.6     | 46.6    | 39.2                   | 4.5    | 2.39 |
| Services in Area (Dining,<br>Lodging)   | 11.3    | 51.4    | 31.5                   | 5.8    | 2.32 |
| Boat Launch and Marina Facilities       | 21.5    | 35.0    | 36.0                   | 7.4    | 2.29 |
| Weather-protected Dive<br>Sites         | 18.1    | 58.7    | 22.3                   | 1.0    | 2.06 |
| Other Recreation Activities in the Area | 31.4    | 54.4    | 13.6                   | 0.6    | 1.83 |
| Activities for Non-divers               | 42.4    | 41.7    | 14.6                   | 1.3    | 1.75 |
| Local Historical Attractions            | 43.1    | 43.4    | 12.9                   | 0.6    | 1.71 |
| Nearness to Home                        | 38.6    | 52.3    | 8.8                    | 0.3    | 1.71 |
| NI = not impor SI = somewhat            |         |         | very impor             | tant   |      |

Source: Michigan Sea Grant Extension. MICHU-SG-87-508. 1987.

NOTE: Sample was taken from divers visiting Michigan bottomland preserves during 1986 and divers on mailing lists of two Michigan dive shops. Michigan residents were 74% of the sample.

Table 8. Accommodations Used By First-Time and Repeat Visitors to Michigan Bottomland Preserves.

| Accommodations Used | First-Time (%) | Repeat (%) |
|---------------------|----------------|------------|
| Rental Cabins       | 1.7            | 2.6        |
| Second Home in Area | 2.1            | 3.3        |
| Staying on Boat     | 2.5            | 6.6        |
| Not Staying         | 5.9            | 8.5        |
| Family/Friends      | 5.1            | 11.2       |
| Camping             | 29.2           | 35.5       |
| Motel               | 53.4           | 32.2       |

Source: Michigan Sea Grant Extension. MICHU-SG-87-506. 1987.

NOTE: Sample was taken from divers visiting Alger, Thunder Bay, Whitefish Point, Straits of Mackinac and Thumb Area Bottomland Preserves during 1986.

Table 9. Diving Activities Participated in During the Past Twelve Months by <u>Skin Diver</u> Magazine Subscribers. Survey Conducted Fall 1988.

|                              | Percent |       |
|------------------------------|---------|-------|
| Diving Activity              | 1989    | 1987  |
| Reef Exploration             | . 61.7  | 59.6  |
| Wreck Diving                 |         |       |
| Night Diving                 |         |       |
| Underwater Photography       |         |       |
| Wall Diving                  |         |       |
| Drift Diving                 |         |       |
| Lobster or Abalone           |         |       |
| Shell Collecting             |         |       |
| Spearfishing                 |         |       |
| Underwater Video             |         |       |
| Cave Diving                  |         |       |
| Treasure Diving              |         |       |
| Search, Rescue and Recovery  |         |       |
| Other                        |         |       |
| None of the Above            |         |       |
| No Answer                    |         |       |
|                              |         |       |
| Total Number of Respondents: | 1,132   | 1,382 |

Source: 1989 Skin Diver Magazine Subscriber Survey.

Note: Total exeeds 100% due to multiple responses.

Table 10. Diving Activities Participated in During the Past Twelve Months and Diving Activities Planned in the Next Twelve Months. Sampled From Divers Certified With National Association of Underwater Instructors (NAUI) and Professional Association of Diving Instructors (PADI) during 1980-81. Survey Conducted in 1981.

| D                        | Percent                     |
|--------------------------|-----------------------------|
| Diving Activity          | Participated In Plan To Try |
| Underwater Recreation    | 75 5                        |
| Reef Exploration         |                             |
| Wreck Diving             |                             |
| Shell Collecting         |                             |
| Lobster or Abalone       |                             |
| Deep Diving              |                             |
| Spearfishing             |                             |
| Underwater Photography   |                             |
| Drift Diving             |                             |
| Cave Diving              |                             |
| Treasure Hunting         |                             |
| Tropical Fish Collecting |                             |
| Night Diving             |                             |
| Competitive Diving       |                             |
| Search/Rescue/Recovery   |                             |
| Ice Diving               |                             |
| Other                    |                             |
|                          | 8 25                        |

#### Source:

Harvey Research Organization, Inc. 1981. A market attitude study of the sport diving industry. Diving Equipment Manufacturers Association (DEMA), Tustin, CA.

Note: Total exceeds 100% due to multiple responses.

Table 11. Sports Activities Participated in During the Past Twelve Months. Sampled From Divers Certified With National Association of Underwater Instructors (NAUI) and Professional Association of Diving Instructors (PADI) during 1981-81. Survey Conducted in 1981.

| Sports Activity        | Percent |
|------------------------|---------|
| Boating                | 64      |
| Jogging                |         |
| Camping                |         |
| Fishing                |         |
| Photography            |         |
| Hiking                 |         |
| Skiing                 |         |
| Sailing                |         |
| Water Skiing           |         |
| Motorcycling           |         |
| Hunting                |         |
| Backpacking            |         |
| Surfing                |         |
| Snowmobiling           |         |
| Wind Surfing           |         |
| None of the Activities |         |

# Source:

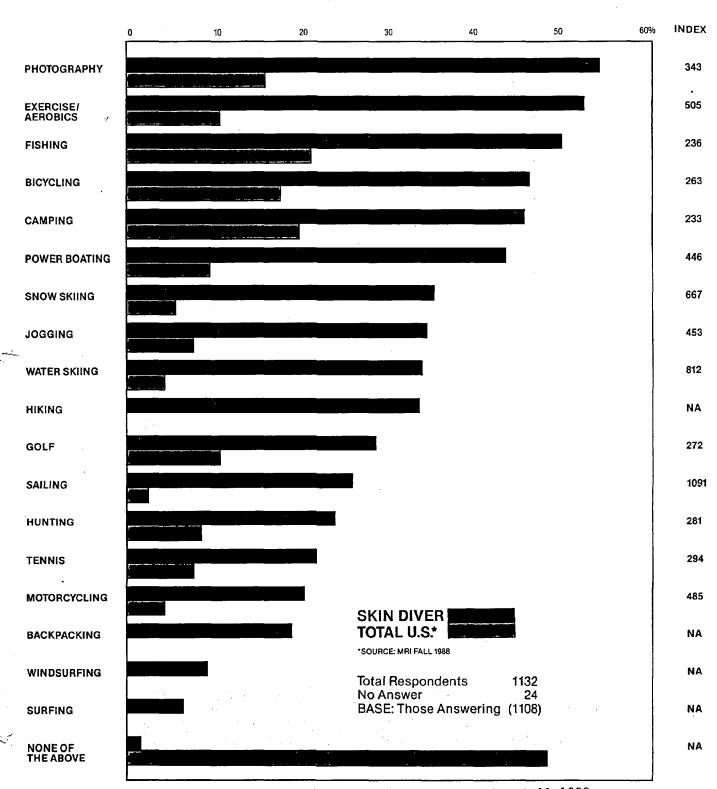
Harvey Research Organization, Inc. 1981. A market attitude study of the sport diving industry. Diving Equipment Manufacturers Association (DEMA), Tustin, CA.

Note: Total exceeds 100% due to multiple responses.

# OTHER ACTIVITIES

Table 12.

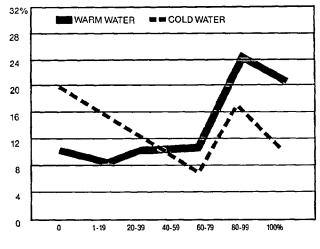
# 98.8% OF SKIN DIVER SUBSCRIBERS PARTICIPATED IN AN ACTIVITY DURING THE PAST 12 MONTHS



Source: Skin Diver Magazine Subscriber Survey Taken Fall 1988.

Table 13. 1989 Skin Diver Magazine Subscriber Survey.

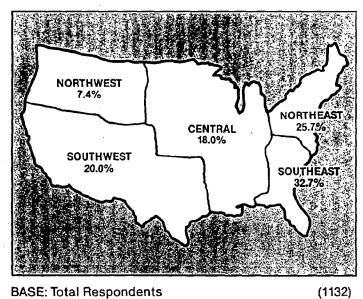
#### PERCENT OF DIVING DONE IN WARM VS. COLD WATER



**Total Respondents** 1132 No Answer 24 **BASE: Those Answering** (1108)

Table 14. 1989 Skin Diver Magazine Subscriber Survey.

#### DEPARTURE AREAS FOR DIVETRIPS TAKEN IN PAST YEAR



**BASE: Total Respondents** 

Act No. 452
Public Acts of 1988
Approved by the Governor
December 25, 1988
Filed with the Secretary of State
December 27, 1988

# STATE OF MICHIGAN 84TH LEGISLATURE REGULAR SESSION OF 1988

Introduced by Senators Faust, Irwin, Ehlers, DeGrow, Binsfeld, Geo. Hart, Cherry, Geake, Schwarz, Arthurhultz, Mack, Barcia, DiNello, J. Hart, Dingell, Sederburg, Pollack, Vaughn, Miller, Kelly, Gast, Posthumus, Carl, Dillingham and O'Brien

# ENROLLED SENATE BILL No. 721

AN ACT to amend the title and sections 1, 1a, 4, 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, and 5 of Act No. 173 of the Public Acts of 1929, entitled as amended "An act to protect and preserve, and to regulate the taking of, aboriginal records and antiquities within this state; to preserve abandoned property of historical or recreational value on the bottomlands of the great lakes and regulate the salvage of abandoned property of historical or recreational value; to designate and regulate great lakes bottomland preserves; and to prescribe penalties," section 1 as amended and sections 1a, 4a, 4b, 4c, 4d, 4e, 4f, 4g, and 4h as added by Act No. 184 of the Public Acts of 1980, being sections 299.51, 299.51a, 299.54, 299.54a, 299.54b, 299.54c, 299.54d, 299.54e, 299.54f, 299.54g, 299.54h, and 299.55 of the Michigan Compiled Laws; and to add sections 1b, 4i, 6, and 7.

#### The People of the State of Michigan enact:

Section 1. The title and sections 1, 1a, 4, 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, and 5 of Act No. 173 of the Public Acts of 1929, section 1 as amended by and sections 1a, 4a, 4b, 4c, 4d, 4e, 4f, 4g, and 4h as added by Act No. 184 of the Public Acts of 1980, being sections 299.51, 299.51a, 299.54, 299.54b, 299.54b, 299.54c, 299.54d, 299.54e, 299.54f, 299.54g, 299.54h, and 299.55 of the Michigan Compiled Laws, are amended and sections 1b, 4i, 6, and 7 are added to read as follows:

## TITLE

An act to protect and preserve, and to regulate the taking of, aboriginal records and antiquities within this state; to preserve abandoned property of historical or recreational value on the bottomlands of the Great Lakes and regulate the salvage of abandoned property of historical or recreational value; to designate and regulate Great Lakes bottomland preserves; to prescribe the powers and duties of certain state agencies; to create a fund; and to prescribe penalties and provide remedies.

Sec. 1. (1) The state reserves to itself the exclusive right and privilege, except as provided in this act, of exploring, surveying, excavating, and regulating through its authorized officers, agents, and employees, all aboriginal records and other antiquities, including mounds, earthworks, forts, burial and village sites, mines or other relics, and abandoned property of historical or recreational value found upon or within any of the lands owned by or under the control of the state.

(2) The state reserves to itself a possessory right or title superior to that of a finder to abandoned property of historical or recreational value found on the state owned bottomlands of the Great Lakes. This property shall belong to this state with administration and protection jointly vested in the department and the secretary of state.

#### Sec. 1a. As used in this act:

- (a) "Abandoned property" means an aircraft; a watercraft, including a ship, boat, canoe, skiff, raft, or barge; the rigging, gear, fittings, trappings, and equipment of an aircraft or watercraft; the personal property of the officers, crew, and passengers of an aircraft or watercraft; and the cargo of an aircraft or watercraft which have been deserted, relinquished, cast away, or left behind and for which attempts at reclamation have been abandoned by owners and insurers. Abandoned property also means materials resulting from activities of historic and prehistoric native Americans.
  - (b) "Bottomlands" means the unpatented lake bottomlands of the Great Lakes.
  - (c) "Committee" means the underwater salvage and preserve committee created in section 1b.
  - (d) "Department" means the department of natural resources.
  - (e) "Great Lakes" means lakes Erie, Huron, Michigan, St. Clair, and Superior.
- (f) "Great Lakes bottomlands preserve" means an area located on the bottomlands of the Great Lakes and extending upward to and including the surface of the water, which is delineated and set aside by rule promulgated pursuant to the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, as amended, being sections 24.201 to 24.328 of the Michigan Compiled Laws, for special protection of abandoned property of historical value, or ecological, educational, geological, or scenic features or formations having recreational, educational, or scientific value. A preserve may encompass a single object, feature, or formation, or a collection of several objects, features, or formations.
- (g) "Historical value" means value relating to, or illustrative of, Michigan history, including the statehood, territorial, colonial, and historic, and prehistoric native American periods.
- (h) "Mechanical or other assistance" means all manmade devices, including pry bars, wrenches and other hand or power tools, cutting torches, explosives, winches, flotation bags, lines to surface, extra divers buoyancy devices, and other buoyance devices, used to raise or remove artifacts.
- (i) "Recreational value" means value relating to an activity which the public engages in, or may engage in, for recreation or sport, including scuba diving and fishing.
- Sec. 1b. (1) The underwater salvage and preserve committee is created in the department to provide technical and other advice to the director of the department and the secretary of state with respect to their responsibilities under this act.
  - (2) The underwater salvage and preserve committee shall consist of 9 members appointed as follows:
- (a) Two individuals appointed by the director of the department who have primary responsibility in the department for administering this act.
- (b) Two individuals appointed by the secretary of state who have primary responsibility in the department of state for administering this act.
  - (c) One individual appointed by the director of commerce.
- (d) Four individuals appointed by the governor with the advice and consent of the senate from the general public. Two of these individuals shall have experience in recreational scuba diving.
- (3) An individual appointed to the committee shall serve for a term of 3 years. A vacancy on the committee shall be filled in the same manner as an original appointment and the term of a member appointed to fill a vacancy shall be for 3 years. Members of the committee shall serve without compensation, except for their regular state salary where applicable.
- (4) The chairperson of the committee shall alternate between the representatives from the department and the department of state. The chairperson shall be designated by the director of the department or the secretary of state, whichever is applicable from among his or her representatives on the committee. The chairperson's term shall run for 12 months, from October 1 through September 30. The director of the department shall appoint the first chairperson of the committee for a term ending September 30, 1989. The chairperson shall call meetings as necessary but not less than 4 times per year, set the agenda for meetings, ensure that adequate minutes are taken, and file an annual report of committee proceedings with the head of the departments of state, natural resources, and commerce.
  - (5) The committee is an advisory body and may perform all of the following functions:
- (a) Make recommendations with regard to the creation and boundaries of Great Lakes underwater preserves.

- (b) Review applications for underwater salvage permits and make recommendations regarding issuance.
- (c) Consider and make recommendations regarding the charging of permit fees and the appropriate use of revenue generated by those fees.
- (d) Consider the need for and the content of rules intended to implement this act and make recommendations concerning the promulgation of rules.
  - (e) Consider and make recommendations concerning appropriate legislation.
  - (f) Consider and make recommendations concerning program operation.
- (6) The committee shall not replace or supersede the responsibility or authority of the secretary of state or the director of the department to carry out their responsibilities under this act.
- Sec. 4. Without the consent of the land owner, a person shall not remove any relics or records of antiquity such as human or other bones; shells, stone, bone, or copper implements; pottery or shards of pottery, or similar artifacts and objects from the premises where they have been discovered.
- Sec. 4a. (1) Except as provided in section 4b, a person shall not recover, alter, or destroy abandoned property which is in, on, under, or over the bottomlands of the Great Lakes, including those within a Great Lakes bottomlands preserve, unless the person has a permit issued jointly by the secretary of state and the department pursuant to section 4c.
- (2) A person who recovers abandoned property without a permit when a permit is required by this act shall transmit the property to the secretary of state and the recovered property shall be the property of the secretary of state.
- (3) A person shall not remove, convey, mutilate, or deface a human body or the remains of a human body located on the bottomlands of the Great Lakes.
- (4) A person who violates subsection (1) by recovering or destroying abandoned property with a fair market value of \$100.00 or more is guilty of a felony, punishable by imprisonment for not more than 2 years, or by a fine of not more than \$5,000.00, or both.
- Sec. 4b. (1) A person may recover abandoned property outside a Great Lakes bottomlands preserve without a permit if the abandoned property is not attached to, nor located on, in, or located in the immediate vicinity of and associated with a sunken aircraft or watercraft and if the abandoned property is recoverable by hand without mechanical or other assistance.
- (2) A person who recovers abandoned property valued at more than \$10.00 without a permit pursuant to subsection (1) shall file a written report within 30 days after removal of the property with the department or the secretary of state if the property has been abandoned for more than 30 years. The written report shall list all recovered property which has been abandoned for more than 30 years and the location of the property at the time of recovery. For a period of 90 days after the report is filed, the person shall make the recovered property available to the department and the secretary of state for inspection at a location in this state. If the secretary of state determines that the recovered property does not have historical value, the secretary of state shall release the property to the person by means of a written instrument.
- Sec. 4c. (1) A permit issued under this section shall authorize a person to recover abandoned property located on, in, or located in the immediate vicinity of and associated with a sunken aircraft or watercraft.
- (2) A person shall file an application for a permit with the department on a form prescribed by the department and approved by the secretary of state. The application shall contain all of the following information:
  - (a) The name and address of the applicant.
- (b) The name, if known, of the watercraft or aircraft on or around which recovery operations are to occur and a current photograph or drawing of the watercraft or aircraft, if available.
  - (c) The location of the abandoned property to be recovered and the depth of water in which it may be found.
  - (d) A description of each item to be recovered.
  - (e) The method to be used in recovery operations.
- (f) The proposed disposition of the abandoned property recovered, including the location at which it will be available for inspection by the department and the secretary of state.
- (g) Other information which the department or the secretary of state considers necessary in evaluating the request for a permit.
- (3) An application for a permit shall not be considered complete until all information requested on the application form and any other information requested by the department or the secretary of state has been received by the department. After receipt of an otherwise complete application, the department may request

additional information or documents as are determined to be necessary to make a decision to grant or deny a permit. The department, or the secretary of state, shall notify the applicant in writing when the application is deficient.

- (4) An applicant notified that an application for a permit may be deficient and returned due to insufficient information under subsection (3) shall, within 20 days after the date the notice is mailed, provide the information. If the applicant fails to respond within the 20-day period, the application shall be denied unless the applicant requests additional time and provides reasonable justification for an extension of time.
- (5) The department and the secretary of state shall, with the advice of the committee, approve or disapprove an application for a permit within 30 days after the date a complete application is filed with the department. The department and the secretary of state may approve an application conditionally or unconditionally. A condition to the approval of an application shall be in writing on the face of the permit. The department and the secretary of state may impose such conditions as are considered reasonable and necessary to protect the public trust and general interests, including conditions that accomplish 1 or more of the following:
- (a) Protect and preserve the abandoned property to be recovered, and the recreational value of the area in which recovery is being accomplished.
  - (b) Assure reasonable public access to the abandoned property after recovery.
  - (c) Are in conformity with rules applying to activities within a Great Lakes bottomlands preserve.
- (d) Prohibit injury, harm, and damage to a bottomlands site or abandoned property not authorized for removal during and after salvage operations by the permit holder.
- (e) Prohibit or limit the amount of discharge of possible pollutants, such as floating timbers, planking, and other debris, which may emanate from the shipwreck, plane wreck, or salvage equipment.
- (f) Require the permit holder to submit a specific removal plan prior to commencing any salvaging activities. Among other matters considered appropriate by either the department or the secretary of state, or both, the removal plan may be required to ensure the safety of those removing or assisting in the removal of the abandoned property and to address how the permit holder proposes to prevent, minimize, or mitigate potential adverse effects upon the abandoned property to be removed, that portion of the abandoned property which is not to be removed, and the surrounding geographic features.
- (6) The department shall approve an application for a permit unless the department determines that the abandoned property to be recovered has substantial recreational value in itself or in conjunction with other abandoned property in its vicinity underwater, or the recovery of abandoned property would not comply with rules applying to a Great Lakes bottomlands preserve.
- (7) The secretary of state shall approve the application for a permit unless the secretary of state determines that the abandoned property to be recovered has substantial historical value in itself or in conjunction with other abandoned property in its vicinity. If the property has substantial historical value, the secretary of state, pursuant to subsection (5), may impose a condition to the approval of the application requiring the applicant to turn over recovered property to the secretary of state for the purpose of preserving the property or permitting public access to the property. The secretary of state may authorize the display of the property in a public or private museum or by a local unit of government. In addition to the conditions authorized by subsection (5), the secretary of state may provide for payment of salvage costs in connection with the recovery of the abandoned property.
- (8) A person who discovers an abandoned watercraft which is located outside of a Great Lakes bottomlands preserve shall be entitled to recover cargo situated on, in, or associated with the watercraft, if the person applies for a permit pursuant to this section within 90 days after discovering the watercraft. If an application for a permit to recover cargo is not filed within 90 days after a watercraft discovery, subject to subsections (4) and (5) an exclusive cargo recovery permit shall be issued to the first person applying for such a permit. Only 1 permit to recover the same cargo shall be issued and operative at a time. When a watercraft containing cargo is simultaneously discovered by more than 1 person, a permit shall be approved with respect to the first person or persons jointly applying for a permit.
- (9) A person aggrieved by a condition contained on a permit or by the denial of an application for a permit may request an administrative review of the condition or the denial by the director of the department or the secretary of state, whichever disapproves the application or imposes the condition. A person shall file the request for review with the department or the secretary of state, whichever is applicable, within 90 days after the permit application is submitted to the department. An administrative hearing conducted pursuant to this subsection shall be conducted under the procedures set forth in chapter 4 of the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, as amended, being sections 24.271 to 24.287 of the Michigan Compiled Laws. If neither the department or the secretary of state approves the application and an administrative review is requested from both the department and the secretary of state, the appeals shall be combined upon request of the appellant or either the department or the secretary state and a single

administrative hearing shall be conducted. The director of the department and the secretary of state shall issue jointly the final decision and order in the case.

- (10) A permit issued under this section shall be valid until December 31 of the year in which the application for the permit was filed and is not renewable. If an item designated in a permit for recovery is not recovered, a permit holder may, upon request following the expiration of the permit, be issued a new permit to remove the same abandoned property if the permit holder demonstrates that diligence in attempting recovery was exercised under the previously issued permit.
- (11) A permit issued under this section shall not be transferred or assigned unless the assignment is approved in writing by both the department and the secretary of state.
- Sec. 4d. (1) Within 10 days after recovery of abandoned property, a person with a permit issued pursuant to section 4c shall report the recovery in writing to the department. The person recovering the abandoned property shall give authorized representatives of the department and the secretary of state an opportunity to examine the abandoned property for a period of 90 days after recovery. Recovered abandoned property shall not be removed from this state without written approval of the department and the secretary of state. If the recovered abandoned property is removed from the state without written approval, the attorney general, upon request from the department or the secretary of state, shall bring an action for the recovery of the property.
- (2) If the secretary of state determines that the recovered abandoned property does not have historical value, the secretary of state shall release the property to the person holding the permit by means of a written instrument.
- Sec. 4e. (1) The department shall establish Great Lakes bottomlands preserves by rule promulgated pursuant to the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled Laws. A Great Lakes bottomlands preserve shall be established by emergency rule if it is determined by the director of the department that this action is necessary to immediately protect an object or area of historical or recreational value.
- (2) A Great Lakes bottomlands preserve may be established whenever a bottomlands area includes a single watercraft of significant historical value, includes 2 or more abandoned watercraft, or contains other features of archaeological, historical, recreational, geological, or environmental significance. Bottomlands areas containing few or no watercraft or other features directly related to the character of a preserve may be excluded from preserves.
- (3) In establishing a Great Lakes bottomlands preserve, the department shall consider all of the following factors:
- (a) Whether creating the preserve is necessary to protect either abandoned property possessing historical or recreational value, or significant underwater geological or environmental features.
  - (b) The extent of local public and private support for creation of the preserve.
  - (c) Whether a preserve development plan has been prepared by a state or local agency.
- (d) The extent to which preserve support facilities such as roads, marinas, charter services, hotels, medical hyperbaric facilities, and rescue agencies have been developed in or are planned for the area.
- (4) The department and the secretary of state shall not grant a permit to recover abandoned artifacts within a Great Lakes bottomlands preserve except for historical or scientific purposes or when the recovery will not adversely affect the historical, cultural, or recreational integrity of the preserve area as a whole.
- (5) An individual Great Lakes bottomlands preserve shall not exceed 400 square miles in area. Great Lakes bottomlands preserves shall be limited in total area to not more than 10% of the Great Lakes bottomlands within this state.
- (6) Upon the approval of the committee, not more than 1 vessel associated with Great Lakes maritime history may be sunk intentionally within a Great Lakes bottomlands preserve. However, no state money shall be expended to purchase, transport, or sink the vessel.
- Sec. 4f. (1) The department and the secretary of state, jointly or separately, may promulgate rules pursuant to the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, as amended, being sections 24.201 to 24.328 of the Michigan Compiled Laws, as are necessary to implement this act.
- (2) Within each Great Lakes bottomlands preserve, the department and the secretary of state may jointly promulgate rules, pursuant to the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, which govern access to and use of a Great Lakes bottomlands preserve. These rules may regulate or prohibit the alteration, destruction, or removal of abandoned property, features, or formations within a preserve.

Sec. 4g. Sections 4a to 4d shall not be considered to impose the following limitations:

(a) A limitation on the right of a person to engage in diving for recreational purposes in and upon the Great Lakes or the bottomlands of the Great Lakes.

- (b) A limitation on the right of the department or the secretary of state to recover, or to contract for the recovery of, abandoned property in and upon the bottomlands of the Great Lakes.
- (c) A limitation on the right of a person to own either abandoned property recovered before July 2, 1980 or abandoned property released to a person after inspection.
- Sec. 4h. (1) If the department or the secretary of state finds that the holder of a permit issued pursuant to section 3 or 4c is not in compliance with this act, a rule promulgated under this act, or a provision of or condition in the permit, or has damaged abandoned property or failed to use diligence in attempting to recover property for which a permit was issued, the department or the secretary of state, individually or jointly, may summarily suspend or revoke the permit. If the permit holder requests a hearing within 15 days following the effective date of the suspension or revocation, the department or the secretary of state shall conduct an administrative hearing pursuant to chapter 4 of the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.271 to 24.287 of the Michigan Compiled Laws, to consider whether the permit should be reinstated.
- (2) The attorney general, on behalf of the department or the secretary of state, individually or jointly, may commence a civil action in circuit court to enforce compliance with this act, to restrain a violation of this act or any action contrary to a decision denying a permit, to enjoin the further removal of artifacts, geological material, or abandoned property, or to order the restoration of an affected area to its prior condition.
- Sec. 4i. Each person who participates in the sport of scuba diving on the Great Lakes bottomlands accepts the dangers which adhere in that sport insofar as the dangers are obvious and necessary. Those dangers include, but are not limited to, injuries which can result from entanglements in sunken watercraft or aircraft; the condition of sunken watercraft or aircraft; the location of sunken watercraft or aircraft; the failure of the state to fund staff or programs at bottomlands preserves; and the depth of the objects and bottomlands within preserves.
- Sec. 5. (1) A person who violates section 3 or 4 of this act is guilty of a misdemeanor, and shall be punished by a fine of not more than \$100.00 or by imprisonment for not more than 30 days, or both.
- (2) A person who violates sections 4a to 4e or a rule promulgated under this act is guilty of a misdemeanor. Unless another penalty is provided in this act, a person convicted of a misdemeanor under this subsection shall be punished by a fine of not more than \$500.00 or by imprisonment for not more than 6 months, or both.
- Sec. 6. (1) If a person who violates this act or a rule promulgated under this act uses a watercraft, mechanical or other assistance, scuba gear, sonar equipment, a motor vehicle, or any other equipment or apparatus during the course of committing the violation, the items so used may be attached, proceeded against, and confiscated as prescribed in this act.
- (2) To effect confiscation, the law enforcement or conservation officer seizing the property shall file a verified complaint in the circuit court for the county in which the seizure was made or in the circuit court for Ingham county. The complaint shall set forth the kind of property seized, the time and place of the seizure, the reasons for the seizure, and a demand for the property's condemnation and confiscation. Upon the filing of the complaint, an order shall be issued requiring the owner to show cause why the property should not be confiscated. The substance of the complaint shall be stated in the order. The order to show cause shall fix the time for service of the order and for the hearing on the proposed condemnation and confiscation.
- (3) The order to show cause shall be served on the owner of the property as soon as possible, but not less than 7 days before the complaint is to be heard. The court, for cause shown, may hear the complaint on shorter notice. If the owner is not known or cannot be found, notice may be served in 1 or more of the following ways:
- (a) By posting a copy of the order in 3 public places for 3 consecutive weeks in the county in which the seizure was made and by sending a copy of the order by certified mail to the last known business or residential address of the owner. If the last addresses of the owner are not known, mailing a copy of the order is not required.
- (b) By publishing a copy of the order in a newspaper once each week for 3 consecutive weeks in the county where the seizure was made and by sending a copy of the order by registered mail to the last known residential address of the owner. If the last residential address of the owner is not known, mailing a copy of the order is not required.
  - (c) In such a manner as the court directs.
- (4) Upon hearing of the complaint, if the court determines that the property mentioned in the petition was possessed, shipped, or used contrary to law, either by the owner or by a person lawfully in possession of the property under an agreement with the owner, an order shall be made condemning and confiscating the property and directing its sale or other disposal by the director of the department. If the owner signs a property

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release, a court proceeding shall not be necessary. At the hearing, if the court determines that the property was not possessed, shipped, or used contrary to law, the court shall order the director of the department to immediately return the property to its owner.

- (5) The department shall deposit the proceeds it receives under this section into the state treasury to the credit of the underwater preserve fund created in section 7.
- Sec. 7. (1) The underwater preserve fund is created as a separate fund in the state treasury, and it may receive revenue as provided in this act, or revenue from any other source.
  - (2) Money in the underwater preserve fund shall be appropriated for only the following purposes:
  - (a) To the secretary of state for the development of maritime archaeology in this state.
  - (b) To the department of commerce for the promotion of Great Lakes bottomlands preserves.
  - (c) To the department for the enforcement of this act.

Section 2. This amendatory act shall take effect January 1, 1989.

Secretary of the Senate.

| Secretary of the Senate.
| Clerk of the House of Representatives.

# ACT NO. 184 PUBLIC ACTS OF 1980 APPROVED BY GOVERNOR JULY 2, 1980

# STATE OF MICHIGAN 80TH LEGISLATURE REGULAR SESSION OF 1980

Introduced by Rep. Rocca

# ENROLLED HOUSE BILL No. 4601

AN ACT to amend the title and sections 1, 2, and 3 of Act No. 173 of the Public Acts of 1929, entitled "An act to protect and preserve, and to regulate the taking of aboriginal records and antiquities within the state of Michigan, and to provide penalties for the violation of this act," being sections 299.51, 299.52, and 299.53 of the Compiled Laws of 1970; and to add sections 1a, 4a, 4b, 4c, 4d, 4e, 4f, 4g, and 4h.

# The People of the State of Michigan enact:

Section 1. The title and sections 1, 2, and 3 of Act No. 173 of the Public Acts of 1929, being sections 299.51, 299.52, and 299.53 of the Compiled Laws of 1970, are amended and sections 1a, 4a, 4b, 4c, 4d, 4e, 4f, 4g, and 4h are added to read as follows:

## TITLE

An act to protect and preserve, and to regulate the taking of, aboriginal records and antiquities within this state; to preserve abandoned property of historical or recreational value on the bottomlands of the great lakes and regulate the salvage of abandoned property of historical or recreational value; to designate and regulate great lakes bottomland preserves; and to prescribe penalties.

- Sec. 1. (1) The state reserves to itself the exclusive right and privilege, except as provided in this act, of regulating, exploring, excavating, or surveying, through an authorized officer, agent, or employee, all aboriginal records and other antiquities, including mounds, earthworks, forts, burial and village sites, mines or other relics and abandoned property of historical or recreational value found upon or within any of the lands owned by or under the control of the state.
- (2) The state reserves to itself a possessory right or title superior to that of a finder to abandoned property of historical or recreational value found on the state owned bottomlands of the great lakes. This property shall belong to this state with the administration and protection vested in the department of natural resources and the secretary of state.

#### Sec. la. As used in this act:

(a) "Abandoned property" means an aircraft; a watercraft, including a ship, boat, canoe, skiff, raft, or barge; the rigging, gear, fittings, trappings, and equipment of an aircraft or watercraft; the personal property of the officers, crew, and passengers of an aircraft or watercraft; and the cargo of an aircraft or watercraft which have been deserted, relinquished, cast away, or left behind and for which attempts at

reclamation have been abandoned by owners and insurers. Abandoned property also means materials resulting from activities of historic and prehistoric Indians.

- (b) "Bottomlands" means the unpatented lake bottomlands of the great lakes.
- (c) "Great lakes" means lakes Erie, Huron, Michigan, St. Clair, and Superior.
- (d) "Great lakes bottomlands preserve" means an area located on the bottomlands of the great lakes and extending upward to and including the surface of the water, which is delineated and set aside by rule promulgated pursuant to Act No. 306 of the Public Acts of 1969, as amended, being sections 24.201 to 24.315 of the Michigan Compiled Laws, for special protection of abandoned property of historical value, or ecological, educational, geological, or scenic features or formations having recreational, educational, or scientific value. A preserve may encompass a single object, feature, or formation, or a collection of several objects, features, or formations.
- (e) "Historical value" means value relating to, or illustrative of, Michigan history, including the statehood, territorial, colonial, and historic and prehistoric Indian periods.
- (f) "Recreational value" means value relating to an activity which the public engages in, or may engage in, for recreation or sport, including scuba diving and fishing.
- Sec. 2. A deed, as provided by this act, given by this state, except state tax deeds for the conveyance of any land owned by the state, shall contain a clause reserving to this state a property right in aboriginal antiquities including mounds, earthworks, forts, burial and village sites, mines, or other relics and also reserving the right to explore and excavate for the aboriginal antiquity by and through this state's authorized agent and employee. This section shall apply only to the sale of tax reverted land. The commission of natural resources with the approval of the secretary of state may waive this reservation when conveying platted property and when making conveyances under Act No. 193 of the Public Acts of 1911, as amended, being sections 322.481 to 322.484 of the Michigan Compiled Laws.
- Sec. 3. A person, either personally or through an agent or employee, shall not explore or excavate an aboriginal remain covered by this act upon lands owned by the state, except under a permit issued by the director of the department of natural resources with written approval of the secretary of state. A permit shall be issued without charge. This section shall not apply to the Mackinac Island state park commission on lands owned or controlled by the commission.
- Sec. 4a. (1) Except as provided in section 4b, a person shall not recover, alter, or destroy abandoned property which is in, on, under, or over the bottomlands of the great lakes, including those within a great lakes bottomlands preserve, unless the person has a permit issued jointly by the secretary of state and the department of natural resources pursuant to section 4c.
- (2) A person who recovers abandoned property without a permit when a permit is required by this act shall transmit the property to the secretary of state and the recovered property shall be the property of the secretary of state.
- (3) A person shall not remove, convey, mutilate, or deface a human body or the remains of a human body located on the bottomlands of the great lakes.
- Sec. 4b. (1) A person may recover abandoned property outside a great lakes bottomlands preserve without a permit if the abandoned property is not attached to, nor located on or in, a sunken aircraft or watercraft and if the abandoned property is recoverable by hand without mechanical or other assistance.
- (2) A person who recovers abandoned property without a permit pursuant to subsection (1) shall file a written report within 30 days after removal of the property with the department of natural resources or the secretary of state if the property has been abandoned for more than 30 years. The written report shall list all recovered property which has been abandoned for more than 30 years and the location of the property at the time of recovery. For a period of 90 days after the report is filed, the person shall make the recovered property available to the department of natural resources and the secretary of state for inspection at a location in this state. If the secretary of state determines that the recovered property does not have historical value, the secretary shall release the property to the person.
- Sec. 4c. (1) A permit shall authorize a person to recover abandoned property located on or in a sunken aircraft or watercraft.
- (2) A person shall file an application for a permit with the department of natural resources on a form prescribed by the department of natural resources. The application shall contain all of the following information:
  - (a) The name and address of the applicant.

- (b) The name, if known, of the watercraft or aircraft on or around which recovery operations are to occur and a current photograph or drawing of the watercraft or aircraft, if available.
- (c) The location of the abandoned property to be recovered and the depth of water in which it may be found.
  - (d) A description of each item to be recovered.
  - (e) The method to be used in recovery operations.
- (f) The proposed disposition of the abandoned property recovered, including the location at which it will be available for inspection by the department of natural resources and the secretary of state.
- (g) Other information which the department of natural resources or the secretary of state considers necessary in evaluating the request for a permit.
- (2) The department of natural resources and the secretary of state shall approve or disapprove an application for a permit within 30 days after the date the properly completed application is filed with the department of natural resources. The department of natural resources and the secretary of state may approve an application conditionally or unconditionally. A condition to the approval of an application shall be in writing on the face of the permit. The department of natural resources and the secretary of state may impose a condition which accomplishes 1 or more of the following:
- (a) Protection and preservation of the abandoned property to be recovered, and the recreational value of the area in which recovery is being accomplished.
  - (b) Assurance of reasonable public access to the abandoned property after recovery.
  - (c) Compliance with rules applying to activities within a great lakes bottomlands preserve.
- (3) The department of natural resources shall approve an application unless the department determines that the abandoned property to be recovered has substantial recreational value in itself or in conjunction with other abandoned property in its vicinity underwater, or the recovery of abandoned property would not comply with rules applying to a great lakes bottomlands preserve.
- (4) The secretary of state shall approve the application unless the secretary of state determines that the abandoned property to be recovered has substantial historical value in itself or in conjunction with other abandoned property in its vicinity. If the property has substantial historical value, the secretary of state, pursuant to subsection (2), may impose a condition to the approval of the application requiring the applicant to turn over recovered property to the secretary of state for the purpose of preserving the property or permitting public access to the property. The secretary of state may authorize the display of the property in a public or private museum or by a local unit of government. In addition to the conditions authorized by subsection (2), the secretary of state may provide for payment of salvage costs in connection with the recovery of the abandoned property.
- (5) A person aggrieved by a condition contained on a permit or by the denial of an application for a permit may request an administrative review of the condition or the denial by the director of natural resources or the secretary of state, whichever department disapproves the application or imposes the condition. A person shall file the request for review with the appropriate department within 90 days after the permit application is submitted to the department of natural resources. An administrative hearing conducted pursuant to this subsection shall be conducted under the procedures set forth in chapter 4 of Act No. 306 of the Public Acts of 1969, as amended, being sections 24.271 to 24.287 of the Michigan Compiled Laws. If neither department approves the application and an administrative review is requested from each department, the appeals shall be combined upon request and a single administrative hearing shall be conducted. The director of natural resources and the secretary of state shall issue jointly the final decision and order in the case.
- Sec. 4d. (1) Within 10 days after recovery of abandoned property, a person with a permit issued pursuant to section 4c shall report the recovery in writing to the department of natural resources. The person recovering the property shall give authorized representatives of the department of natural resources and the secretary of state an opportunity to examine the property for a period of 90 days after recovery. Recovered abandoned property shall not be removed from this state without written approval of the department of natural resources and the secretary of state. If the property is removed from the state without written approval, the attorney general, upon request from either agency, shall bring an action for the recovery of the property.
- (2) If the secretary of state determines that the recovered abandoned property does not have historical value, the secretary of state shall release the property to the person holding the permit.
- Sec. 4e. (1) The department of natural resources shall establish great lakes bottomlands preserves. Within each established great lakes bottomland preserve, the department of natural resources may establish

rules, promulgated pursuant to Act No. 306 of the Public Acts of 1969, as amended, which govern access to, and use of a great lakes bottomlands preserve. These rules may also regulate or prohibit the alteration, destruction, or removal of abandoned property, features, or formations within a preserve. A permit shall not be issued pursuant to section 4c which is not in compliance with the rules applying to a great lakes bottomlands preserve.

- (2) A preserve shall be established by emergency rule pursuant to Act No. 306 of the Public Acts of 1969, as amended, if it is determined by the director of the department of natural resources that this action is necessary to immediately protect an object or area of historical or recreational value.
- (3) Great lakes bottomlands preserves shall be limited in total area to not more than 5% of the great lakes bottomlands within this state.
- Sec. 4f. The department of natural resources and the secretary of state may promulgate rules pursuant to Act No. 306 of the Public Acts of 1969, as amended, necessary to implement this act.
  - Sec: 4g. Sections 4a to 4d shall not be considered to impose the following limitations:
- (a) A limitation on the right of a person to engage in diving for recreational purposes in and upon the great lakes or the bottomlands of the great lakes.
- (b) A limitation on the right of the department of natural resources or the secretary of state to recover, or to contract for the recovery of, abandoned property in and upon the bottomlands of the great lakes.
- (c) A limitation on the right of a person to own either abandoned property recovered before the effective date of this section of abandoned property released to a person after inspection.
- Sec. 4h. A person who violates sections 4a to 4e or rules promulgated under this act is guilty of a misdemeanor.

This act is ordered to take immediate effect.

| Thos     | Thatcher                      |
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| Clerk of | the House of Representatives. |
| <i>a</i> | ./                            |

Secretary of the Senate.

| Approved |           |  |
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| •        |           |  |
|          | Governor. |  |
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PUBLIC LAW 100-298-APR. 28, 1988

ABANDONED SHIPWRECK ACT OF 1987

19-139 0 - 88 (298)

102 STAT. 432

## PUBLIC LAW 100-298—APR. 28, 1988

Public Law 100-298 100th Congress

An Act

Apr. 28, 1988 [S. 858]

To establish the title of States in certain abandoned shipwrecks, and for other purposes.

Abandoned Shipwreck Act of 1987. Maritime affairs. 43 USC 2101 note.

43 USC 2101.

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 "Abandoned Shipwreck Act of 1987".

SEC. 2. FINDINGS.

The Congress finds that-

(a) States have the responsibility for management of a broad range of living and nonliving resources in State waters and submerged lands; and

(b) included in the range of resources are certain abandoned shipwrecks, which have been deserted and to which the owner has relinquished ownership rights with no retention.

43 USC 2102.

SEC. 3. DEFINITIONS.

For purposes of this Act-

(a) the term "embedded" means firmly affixed in the submerged lands or in coralline formations such that the use of tools of excavation is required in order to move the bottom sediments to gain access to the shipwreck, its cargo, and any part thereof;

(b) the term "National Register" means the National Register of Historic Places maintained by the Secretary of the Interior under section 101 of the National Historic Preservation Act (16 U.S.C. 470a);

(c) the terms "public lands", "Indian lands", and "Indian tribe" have the same meaning given the terms in the Archaeological Resource Protection Act of 1979 (16 U.S.C. 470aa-47011);

(d) the term "shipwreck" means a vessel or wreck, its cargo, and other contents;

(e) the term "State" means a State of the United States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Northern Mariana Islands; and (f) the term "submerged lands" means the lands—

(1) that are "lands beneath navigable waters," as defined in section 2 of the Submerged Lands Act (43 U.S.C. 1301); (2) of Puerto Rico, as described in section 8 of the Act of March 2, 1917, as amended (48 U.S.C. 749);

(3) of Guam, the Virgin Islands and American Samoa, as described in section 1 of Public Law 93-435 (48 U.S.C. 1705); and

(4) of the Commonwealth of the Northern Mariana Islands, as described in section 801 of Public Law 94-241 (48 U.S.C. 1681).

Environmental

42 USC 2103.

Cultural programs.
Historic
preservation.

## PUBLIC LAW 100-298-APR. 28, 1988

SEC. 4. RIGHTS OF ACCESS.

(a) Access Rights.—In order to—
(1) clarify that State waters and shipwrecks offer recreational and educational opportunities to sport divers and other interested groups, as well as irreplaceable State resources for tourism, biological sanctuaries, and historical research; and

(2) provide that reasonable access by the public to such abandoned shipwrecks be permitted by the State holding title to such shipwrecks pursuant to section 6 of this Act,

it is the declared policy of the Congress that States carry out their responsibilities under this Act to develop appropriate and consistent policies so as to-

(A) protect natural resources and habitat areas:

(B) guarantee recreational exploration of shipwreck sites; and (C) allow for appropriate public and private sector recovery of shipwrecks consistent with the protection of historical values and environmental integrity of the shipwrecks and the sites.

(b) PARKS AND PROTECTED AREAS.—In managing the resources subject to the provisions of this Act, States are encouraged to create underwater parks or areas to provide additional protection for such resources. Funds available to States from grants from the Historic Grants. Preservation Fund shall be available, in accordance with the provisions of title I of the National Historic Preservation Act, for the study, interpretation, protection, and preservation of historic shipwrecks and properties.

#### SEC. 5. PREPARATION OF GUIDELINES.

(a) In order to encourage the development of underwater parks and the administrative cooperation necessary for the comprehensive management of underwater resources related to historic shipwrecks, the Secretary of the Interior, acting through the Director of the National Park Service, shall within nine months after the date of enactment of this Act prepare and publish guidelines in the Federal Register which shall seek to:

(1) maximize the enhancement of cultural resources;

(2) foster a partnership among sport divers, fishermen, archeologists, salvors, and other interests to manage shipwreck resources of the States and the United States;

(3) facilitate access and utilization by recreational interests; (4) recognize the interests of individuals and groups engaged

in shipwreck discovery and salvage.

(b) Such guidelines shall be developed after consultation with appropriate public and private sector interests tincluding the Secretary of Commerce, the Advisory Council on Historic Preservation, sport divers, State Historic Preservation Officers, professional dive operators, salvors, archeologists, historic preservationists, and fishermen).

(c) Such guidelines shall be available to assist States and the appropriate Federal agencies in developing legislation and regulations to carry out their responsibilities under this Act.

# SEC 6 RIGHTS OF OWNERSHIP.

(a) United States Title.—The United States asserts title to any abandoned shipwreck that is-

(1) embedded in submerged lands of a State;

(2) embedded in coralline formations protected by a State on submerged lands of a State; or

43 USC 2104. National parks.

monuments, etc. Federal Register publication.

43 USC 2105.

## 102 STAT. 434

# PUBLIC LAW 100-298—APR. 28, 1988

(3) on submerged lands of a State and is included in or determined eligible for inclusion in the National Register.

Public information. Historic preservation.

(b) The public shall be given adequate notice of the location of any shipwreck to which title is asserted under this section. The Secretary of the Interior, after consultation with the appropriate State Historic Preservation Officer, shall make a written determination that an abandoned shipwreck meets the criteria for eligibility for inclusion in the National Register of Historic Places under clause (a)(3).

(c) TRANSFER OF TITLE TO STATES.—The title of the United States to any abandoned shipwreck asserted under subsection (a) of this section is transferred to the State in or on whose submerged lands the shipwreck is located.

Gifts and property. Indians.

(d) Exception.—Any abandoned shipwreck in or on the public lands of the United States is the property of the United States Government. Any abandoned shipwreck in or on any Indian lands is the property of the Indian tribe owning such lands.

(e) RESERVATION OF RIGHTS.—This section does not affect any right reserved by the United States or by any State (including any right reserved with respect to Indian lands) under-

(1) section 3, 5, or 6 of the Submerged Lands Act (43 U.S.C.

1311, 1313, and 1314); or

(2) section 19 or 20 of the Act of March 3, 1899 (33 U.S.C. 414 and 415).

43 USC 2106.

#### SEC. 7. RELATIONSHIP TO OTHER LAWS.

(a) Law of Salvage and the Law of Finds.—The law of salvage and the law of finds shall not apply to abandoned shipwrecks to which section 6 of this Act applies.

(b) LAWS OF THE UNITED STATES.—This Act shall not change the laws of the United States relating to shipwrecks, other than those to which this Act applies.

(c) Effective Date.—This Act shall not affect any legal proceeding brought prior to the date of enactment of this Act.

Approved April 28, 1988.

LEGISLATIVE HISTORY—S. 858:

HOUSE REPORTS: No. 100-514, Pt. 1 (Comm. on Interior and Insular Affairs) and Pt. 2 (Comm. on Merchant Marine and Fisheries).

SENATE REPORTS: No. 100-241 (Comm. on Energy and Natural Resources).

CONGRESSIONAL RECORD:
Vol. 133 (1987): Dec. 19, considered and passed Senate.
Vol. 134 (1988): Mar. 28, 29, Apr. 13, considered and passed House.

#### Great Lakes Sport Diving and Michigan Bottomland Preserves

- Halsey, J.R., and J.L. Martindale. 1987. Sacking the inland seas: shipwreck plundering in the Great Lakes. Michigan History 71(6):32-38.
- Halsey, J.R. 1985. Michigan's Great Lakes bottomland preserves. Pages 65-76 in Lien, J., and R. Graham, editors. Marine parks & conservation: challenge and promise. National and Provincial Parks Association of Canada, St. John's, NFLD.
- Holecek, D.F., and E.T. Smiley. 1982. Management guidelines for Michigan's Great Lakes bottomland preserves. MICHU-SG-82-201. Michigan Sea Grant Program, Michigan State University.
- Holecek, D.F., and S.J. Lothrop. 1980. Attitudes of a scuba diving population concerning government regulation of underwater resources. MICHU-SG-80-201. Michigan Sea Grant Program, Michigan State University.
- Holecek, D.F., and S.J. Lothrop. 1980. Shipwreck vs. nonshipwreck scuba divers: characteristics, behavior, and expenditure patterns. MICHU-SG-80-205. Michigan Sea Grant Program, Michigan State University.
- Hulse, C.A., and D.F. Holecek. 1980. Michigan's coastal waters: a pilot study in underwater cultural resources. MICHU-SG-80-204. Michigan Sea Grant Program, Michigan State University.
- Hulse, C.A., and D.F. Holecek. 1979. Underwater parks: symposium proceedings. MICHU-SG-79-902. Cooperative Extension Service, Michigan State University.
- Kenner, C.K. 1988. A listing of dive shops & diving equipment sales agencies in Michigan. Westland, Michigan.
- Kinnunen, R., J. Peterson, S. Stewart, and C. Swinehart. 1985. Sea grant research and community development make Michigan's bottomland preserves a reality. Pages 77-84 in Lien, J., and R. Graham, editors. Marine parks & conservation: challenge and promise. National and Provincial Parks Association of Canada, St. John's, NFLD.
- Lenihan, D.J., editor. 1987. Submerged cultural resources study: Isle Royale National Park. National Park Service, Santa Fe, NM.
- Michigan Department of Natural Resources. 1987. Michigan Great Lakes underwater resources. Division of Land Resources, Lansing.

- Murphy, J.W., editor. 1988. Historic shipwrecks: issues in management. Partners for Livable Places and National Trust for Historic Preservation, Washington, D.C.
- National Park Service. 1985. Shipwreck mooring buoy project. Resources management report #7. Isle Royale National Park.
- National Park Service. 1987. Nominating historic vessels and shipwrecks to the national register of historic places. National Register Bulletin. Interagency Resources Division, Washington, D.C.
- Peterson, J.P., T.C. Sundstrom, and R.E. Kinnunen. 1987. 1986 recreational diving activity in Michigan bottomland preserves. MICHU-SG-87-506. Michigan Sea Grant College Program, Michigan State University.
- Peterson, J.P., T.C. Sundstrom, and S. Stewart. 1987. A profile of Great Lakes diver activity, travel, and expenditure patterns. MICH-SG-87-508. Michigan Sea Grant Program, Michigan State University.
- Smiley, E.T., and D.F. Holecek. 1982. Aquatic park management: symposium proceedings. MICHU-SG-82-900. Michigan Sea Grant Program, Michigan State University.
- Somers, L.E. 1979. Profile of a great lakes diver. MICHU-SG-79-301. Michigan Sea Grant Program, Michigan State University.
- Swinehart, C.Y. 1988. Buried treasures Michigan's bottomland preserves. Extension Review 59(2):10-11.
- Vrana, K.J. 1988. Divers treasure bottomland preserves. Water Impacts 9(9):4. Institute of Water Research, Michigan State University.
- Warner, T.D., and D.F. Holecek. 1978. Underwater parks: an unexplored recreation frontier. Parks & Recreation 13(11):18-22.

#### Travel, Tourism and Recreation Resources

- AAA Michigan. 1988. Michigan outdoor guide. Touring Research, AAA Michigan, Dearborn.
- DeLorme Mapping Company. 1987. Michigan atlas & gazetteer: guide to outdoor recreation. DeLorme Mapping Company, Freeport, Maine.
- Michigan Association of Private Campground Owners. 1988. Michigan campground directory. MAPCO, Ann Arbor.
- Michigan Department of Commerce. 1988. Michigan county economic profiles. University of Michigan, Ann Arbor.

- Michigan Department of Natural Resources. 1985. Building Michigan's recreation future appendix B, recreation in Michigan: users, activity, programs, and opportunities. Recreation Services Division, Lansing.
- Michigan Department of Natural Resources. 1987-88. Michigan boat launching directory. Michigan State Waterways Commission, Lansing.
- Michigan Department of Natural Resources. 1988. Michigan harbors guide. Michigan State Waterways Commission, Lansing.
- Michigan Department of Natural Resources. 1988. Michigan state forest campgrounds directory. Forest Management Division, Lansing.
- Michigan Department of Natural Resources. 1988. Michigan state parks. Parks Division, Lansing.
- Michigan Charter Boat Association. 1988. Michigan charterboat: fishing & specialty charters reference guide. The All Seasons Agency, Inc., Romeo, Michigan.
- Michigan Museum Association. 1988. Michigan museums & more: a locator guide. Michigan Museum Association, Frankenmuth.
- Michigan Department of Transportation. 1988. Michigan public transportation directory. Bureau of Urban and Public Transportation, Lansing.
- Spotts, D.M., editor. 1986. Travel and tourism in Michigan: a statistical profile. Travel, Tourism and Recreation Resource Center, Michigan State University.

# Other Sources of Information, Technical and Financial Assistance

# A) University of Michigan:

Michigan Sea Grant College Program 2200 Bonisteel Boulevard Ann Arbor, MI 48109 (313) 763-1437

Research, communications and publication programs. Request scuba diving publication lists.

- B) Michigan State University:
  - Donald Holecek, Director
     Michigan Travel, Tourism and Recreation Resource Center
     172 Natural Resources Building
     Michigan State University
     East Lansing, MI 48824-1222
     (517) 355-1822

Research, information and technical assistance.

2) Louis Twardzik, Professor Department of Park and Recreation Resources 131 Natural Resources Building Michigan State University East Lansing, MI 48824 (517) 353-5190

Park and recreation extension programs.

3) John Schwartz, Program Leader
Ken Vrana, Bottomland Preserve Specialist
Michigan Sea Grant College Program
334 Natural Resources Building
Michigan State University
East Lansing, MI 48824
(517) 353-9568

Michigan Sea Grant Extension: Bottomland preserve area technical assistance and development programs.

C) Michigan Sea Grant Extension Offices:

# Upper Peninsula

Ron Kinnunen
District Extension Sea Grant Agent
Upper Peninsula Extension Center
1030 Wright Street
Marquette, MI 49855
(906) 228-4830

# Northwest Michigan

John McKinney
District Extension Sea Grant Agent
Governmental Center
400 Boardman Avenue
Traverse City, MI 49684
(616) 922-4620

#### Southwest Michigan

Charles Pistis
District Extension Sea Grant Agent
County Extension Office, Room 101
Ottawa County Building
Grand Haven, MI 49417
(616) 846-8250

#### Southeast Michigan

Steve Stewart
District Extension Sea Grant Agent
Cooperative Extension Service
County Building, 11th Floor
Mount Clemens, MI 48043
(313) 469-5180

# Northeast Michigan

District Extension Sea Grant Agent Gooperative Extension Service P.O. Box 599 Tawas City, MI 48764 (517) 362-3449

- D) Michigan State Government:
  - 1) Martha Bigelow, State Historic Preservation Officer (SHPO) John Halsey, State Archeologist Kathryn Eckert, Deputy SHPO Michigan Department of State Bureau of History 717 West Allegan Lansing, MI 48918 (517) 373-0510

The bureau administers the National Historic Preservation Act grant program.

2) Tom Graf, Water Quality Specialist Michigan Department of Natural Resources Land and Water Management Division P.O. Box 30028 Lansing, MI 48909 (517) 373-1950

The division administers the Coastal Zone Management Act grant program, Great Lakes Submerged Lands Act conveyance and permit program, and Underwater Salvage Permit Program.

3) Jim Hane, In Charge, Advance & Special Studies Michigan Department of Natural Resources Parks Division P.O. Box 30028, Knapp's Center Lansing, MI 48909 (517) 373-1270

The division administers the Michigan state park system and state recreation bond grant program.

4) James Martindale, Marine Specialist
Michigan Department of Natural Resources
Law Enforcement Division
P.O. Box 30028
Lansing, MI 48909
(517) 373-1230

The division maintains records on bottomland preserve related law violations and scuba diving emergency medical incidents. Responsible for bottomland preserves law enforcement programs.

5) Sargent James Ewers
Michigan State Police
Special Operations Section
Underwater Recovery Unit
714 South Harrison
East Lansing, MI 48823
(517) 337-6171 or 332-2521 Extension 624

The unit maintains a search & recovery dive team and records on scuba diving accidents/incidents.

6) Melinda Remer
Michigan Travel Bureau
Department of Commerce
P.O. Box 30226
Lansing, MI 48909
(517) 335-1865 or 373-0670
(800) 5432-YES (general information)

The bureau administers the Cooperative Advertizing and Publication program.

7) Michigan Department of Commerce Resource Center P.O. Box 30004 Lansing, MI 48909 (517) 373-0221

The center maintains and distributes the Michigan "County Economic Profiles."

# <u>Hyperbaric (Recompression) Chambers Nearest Michigan's Bottomland</u> . <u>Preserves</u>

The Divers Alert Network (DAN), based at Duke University in Durham, N.C. advises the following procedure when faced with a scuba diving illness involving compressed gases.

- A) Transport diver(s) to the nearest hospital emergency room.
- B) Call DAN at (919) 684-8111. General information phone number is: (919) 684-2948
- C) DAN can assist in arranging transportation to the nearest available and appropriate hyperbaric chamber. DAN may also provide emergency medical consultation.

Hyperbaric chambers nearest Michigan's bottomland preserves include the following.

- 1) Kalamazoo, MI
  Bronson Methodist Hospital
  Dr. John Direks and Dr. Geoff Grambau
  (616) 341-7654 (main switchboard)
  (616) 341-7778 (hyperbaric chamber)
  One multi-place and two mono-place hyperbaric chambers
- 2) Alpena, MI Alpena General Hospital Dr. Donald Ohmart (517) 356-7252 (emergency room) One mono-place hyperbaric chamber
- 3) Marquette, MI
  Marquette General Hospital
  Dr. Klemme and Dr. Emerson
  (906) 225-3560 (emergency room)
  One mono-place hyperbaric chamber (operational June 1, 1989)
- 4) Milwaukee, WI St. Lukes Hospital Dr. Robert Goldmann (414) 649-6577 (hyperbaric medicine) Two multi-place and one mono-place hyperbaric chambers
- 5) Minneapolis, MN
  Hennepin County Hospital
  Dr. Adkinson
  (612) 347-3131 (emergency room)
  One multi-place hyperbaric chamber

# U.S. Coast Guard Emergency Evacuation

- U.S. Coast Guard Air Station Traverse City Traverse City, Michigan 49684
- U.S. Coast Guard Air Station Traverse City conducts air rescue and emergency evacuation operations throughout the Great Lakes. U.S. Coast Guard will transport sport divers to a recompression chamber if no commercial air service is available. Three search and rescue helicopters are based at Air Station Traverse City. Contact (616) 922-8214 for further information.

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