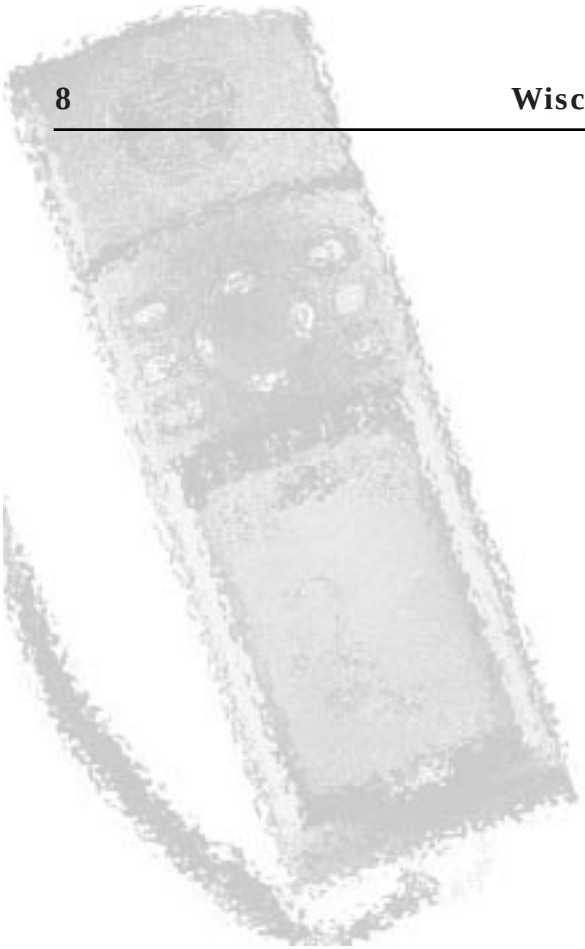


Upcoming Events

Nov. 1 **Gales of November** hosted by the Great Lakes Shipwreck Preservation Society. Site: Duluth, MN. For information, contact GLSPS, 7348 Symphony St. NE, Fridley, MN 55423.

Nov. 1 **Shipwrecks Remembered** Site: Port Huron, MI. For information, contact Out of the Blue Productions, 4658 S. Lakeshore, Lexington, MI 48450; (810) 359-8660.

Nov. 20-23 **Commemoration of the sesquicentennial of the loss of *Phoenix*** For information contact the Wisconsin Marine Historical Society, 814 W. Wisconsin Ave., Milwaukee, WI 53233; (414) 286-3074.

Wisconsin Underwater Archeological Association
P.O. Box 6081
Madison, WI 53716

Wisconsin Underwater Archeology Association

For those interested in the study and preservation of Wisconsin's underwater history and cultural resources.

Wisconsin's
UNDERWATER HERITAGE

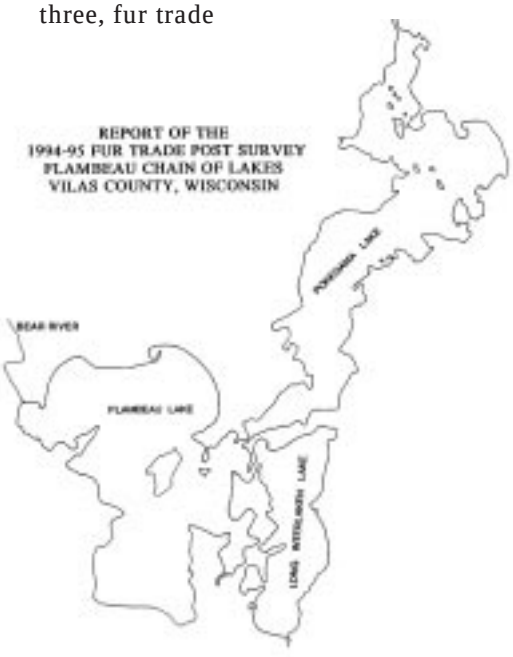
Vol.7 No. 3 *A publication of the Wisconsin Underwater Archeology Association* *September 1997*

Flambeau Lakes Fur Trade Post Survey

This report covers the activities of WUAA volunteers working with the Lac du Flambeau Chippewa band and other agencies. It is taken from the project report edited by Cindy Stiles.

In 1993 the Lac du Flambeau Band of the Lake Superior Chippewa Indians passed a resolution to support research toward locating Euro-American fur trade posts on three lakes of the Flambeau chain. The project has included archival research and both land and underwater archeology.

Three important canoe routes converged on three lakes in the Flambeau chain, located on the Lac du Flambeau Indian reservation, Flambeau Lake, Pokegama Lake and Long Interlaken Lake. Ancient and historic Indian villages have been reported through archeological investigation. Documents and oral tradition place two, possibly three, fur trade posts on the shoreline between 1795 and 1840 and over 100 traders either living in or traveling through the area during this period, representing the Northwest Company, the American Fur Company and the XY Company.



One special reference, that of Sherman Hall, a missionary, describes his journey from La Pointe (Bayfield) to Lac du Flambeau in 1832. He states that the journey from the Indian village to the post at Lac du Flambeau was two to three miles. Their most likely route was down the Bear River to Flambeau Lake. There are many references to the Flambeau village at this confluence. The surveys concentrated on areas two miles east of the village site since entry to the other lakes was gained by going east and it seemed most likely that a post commanding access to several lakes would have been selected.

Two submerged archeological investigations were conducted on possible submerged shorelines along the isthmus, in May 1995 and May 1996. Both days were overcast, rainy and cold. These investigations were considered necessary because there has been a rise in water level since historic logging in the late 19th century. The dam located on the confluence with the Bear River and Flambeau Lake has raised the water level in the chain as much as 8 ft. Since development of the isthmus may have destroyed all evidence of the posts on land, it was hoped that survey of the submerged shorelines would recover artifacts pinpointing the location.

The May 1995 survey covered the area surrounding Pig Pen Point and the shoreline south of the Indian Boarding School on Long Interlaken Lake. The lakebed was inspected in two to three transects from shore to the 4 ft contour along the Flambeau Lake side of Pig Pen Point. On Long Interlaken Lake the survey was conducted from the shore to the 8 ft contour line. The 8 ft contour line was quite distinct, as the lakebed dropped off quickly from this point, and it is likely that this contour represents the 1800's shoreline of the lake prior to construction of the dam.

The crew was able to distinguish between the areas that have always been lake bed and areas that once were marsh wetlands but are now submerged by the rise in water caused by the dam. At Pig Pen Point the old channel connecting Flambeau and Long Interlaken Lakes was also distinguishable.

Divers found applied lip molded and modern molded bottles, historic whiteware sherds, sawn logs and cut beef bones, probably related to the domestic animal farm from which Pig Pen Point received its name. These remains were a mixture of debris from late 19th century logging in the area, the time of the Indian Boarding School and since then the continual development and use of housing on shore. Most of the remains were not collected, although a few modern bottles and ceramics were given to the George W. Brown Jr. Ojibwe Museum for educational programs.

continued on page 2

Wisconsin's
Underwater Heritage is published quarterly by the Wisconsin Underwater Archeology Association, a nonprofit association of individuals and organizations who are interested in studying and preserving the underwater cultural resources and historical sites of Wisconsin.

In addition to publishing this newsletter, the Association also holds meetings twice a year and provides financial support to members' research and publication projects. For membership information, contact the secretary or write to the address below. Annual membership dues are $15.

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Janet Defnet
Mukwonago, 414-363-9874

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WUAA News

Fall Meeting

The fall meeting of the association was held last month in Bayfield. Several members came up before the meeting to assist the SHSW in their underwater survey projects in the area (see Dave Cooper's report on page 3). Although the planned dive charter was cancelled, some very nice dives we made in very pleasant weather.

Elections

A new slate of officers was elected at the meeting. The new Association president is Jeff Gray, Bob O'Donnell was re-elected vice-president, Tom Villand is the new secretary and Danny Aerts was re-elected treasurer. Janet Defnet was elected a new director while Dick Boyd, Bob Korth and Craig Fink continue to serve on the board of directors.

Treasurer Report

The treasurer reported the Association has a balance of $2470. Sales of the Four Lakes book have been repaid the expenses of publication and a second printing is being planned. Bob and Nancy Korth made a $200 donation to WUAA and Betsy True and Danny Aerts donated $50 they received for conducting a grade school class in underwater archeology at UW-Baraboo.

Web Page

Thanks to WUAA member Brendon Baillod the organization now has a website on the World Wide Web. It is currently connected to Brendon's website, which is visited by about 1000 divers a month. Links will be made with other Great Lakes organizations. Wreck preservation and Underwater Archeology are hot areas on the internet.

The page's URL address is: http://www.execpc.com/~bbaillod/wuaa.html.

Publication

WUAA member John Jensen has published an interesting article titled "Hospitals and Mariners: A Study in Great Lakes Maritime History." The article, which examines and contrasts health, work injuries, ethnic backgrounds, and other factors amongst Great Lakes schoonermen and steamboatmen appears in the Winter 1997 issue of the journal "American Neptune."

Spring 1998 Meeting

The spring 198 meeting of the association will be held in Milwaukee at the site of the schooner project. Dates and details will be in the next newsletter.

Flambeau Lakes... *continued from page 1*

Another area completed in 1995 was the south shore of Pokegama Lake. The lake bed was inspected to the 8 ft contour line. The crew found modern cans and bottles and a U.S. Army brass belt buckle identified as a model 1874 enlisted men's saber buckle. The buckle was returned to Lac du Flambeau for curation.

In 1996 the survey was limited to the west shore of Pokegama Lake as other locations were still iced in. The lakebed was inspected to the 8 ft contour and was found littered with modern post-1930's debris: bottles, cans, glasses, many toys and miscellaneous trash. Extreme cold hampered the survey effort.

Unfortunately, no structures or artifacts relating to the fur trade era were found during any of the dive surveys. Further archival research has narrowed in on the site of the post and more archeological work may be done in the future.

1997 Field Season Review

by David J. Cooper, State Underwater Archeologist

Despite a generally wet rainy summer, the state underwater archeology program had a productive field season, dodging storm clouds and enjoying generally good visibility and surprisingly warm water. Working in conjunction with WUAA volunteers, underwater archeology program staff undertook an extensive survey of log salvage permit areas in the Apostle Islands in May and June, examining 25 permit areas. The survey area included four historic sawmill sites, three historic brownstone quarrying operations, and remains of several other historic logging and commercial fishing operations. State underwater archeologists returned to Bayfield in September to continue surveys of sawmill, logging and quarrying sites in the Apostle Islands area. WUAA members again gave generously of their time to help with these surveys.

A combined WUAA field trip and state underwater archeological survey took place in June, covering shipwrecks at Sturgeon Bay, Little Sturgeon Bay, Fish Creek, Baileys Harbor, and a historic lime kiln west of Little Sturgeon Bay. WUAA volunteers helped complete the underwater archeological survey of the steamer *Selah Chamberlain* at Sheboygan in August, and underwater archeologist (and incoming WUAA president) Jeff Gray assisted underwater videographer Allen Brown with video documentation of the *Hetty Taylor*, *McMullen* and *Pitz Dredge*, *Louisiana*, *Pretoria*, and *Sevona*. The remains of a nineteenth century wooden dam were investigated in the Milwaukee River, in conjunction with staff from the Wisconsin Department of Natural Resources and the City of Milwaukee. The underwater archeology program also examined the locations of a dock, a logging scow, and a historic sawmill threatened by pier, boat launch, and marina construction in Bayfield County. At the request of the Portage Canal Historical Society, program staff conducted an analysis of a nineteenth-century iron-hulled steam launch from the Wisconsin River. Laboratory conservation work continues, with two Indian dugout wooden canoes and artifacts from the schooners Lottie Cooper and Lucerne undergoing treatment.

Good progress has been made with development of the Apostle Islands maritime heritage trail. In May, a joint SHSW-National Park Service team placed a heavy sinker and special mooring on the shipwreck Noquebay. This is the first in what will hopefully be a series of special dive boat moorings on historic shipwreck sites around the state. The Sea Grant Web site/visitor's guide project has progressed to include the *Lucerne*, *Fedora*, and *Pretoria* on-line (www.seagrant.wisc.edu/Communications/Shipwrecks) and a waterproof guide to the Lucerne has been published and is now available through the UW Sea Grant Institute and through local dive shops. The wrecks of the Noquebay, Sevona, and Ottawa are next in line to be added.

Underwater program staff have also been very busy with public education activities. Ten public programs have been provided to schools, museums, and other organizations this year, including a shipboard program for teachers taught aboard the sailing schooner Inland Seas, chartered for a special Great Lakes field learning program though Milwaukee's Cardinal Stritch College and the Wisconsin Lake Schooner Education Association. The September 20 Pearl Lake research diver workshop was also a success, attracting 25 new students. Ten WUAA members participated in the workshop, both as instructors and as students.

The summer of 1997 was also an important summer for underwater archeology media coverage. News stories on the state underwater archeology program appeared on Green Bay and Madison network television, Wisconsin Public Radio, and in newspapers in Ashland, Sturgeon Bay, Milwaukee, Kenosha, Madison, and Portage. Program staff also assisted a National Public Broadcasting television team filming a documentary about Apostle Islands lighthouses and shipwrecks. The program should air nationwide in the fall of 1998.

As we go to press, news on the state budget is still uncertain. However, it appears that the state senate has replaced much of the funding slated to be cut from the State Historical Society budget, If the assembly and governor approve the senate version of the budget, all the hard work of letter writing and phone calls to your legislators will have paid off! We will keep our fingers crossed that the state legislature will see fit to continue funding the important work of preserving Wisconsin's underwater heritage. A big round of thanks is owed to everyone who participated in the campaign to save the state underwater archaeology program. Your support has made a real difference!

Divers Guide to Electronic Navigation

How to find wrecks using GPS, LORAN and Charts

by Brendon Baillod

So somebody gave you "numbers" for a wreck? Good numbers are important, but what kind of numbers are they? LORAN TDs? Are they corrected or uncorrected? How old are they? Are they LAT/LONs? What format are they in? Which datum? Were they actually measured at the wrecksite, or did someone extrapolate them from a map? What kind of map were they extrapolated from? How old was the map? The following essay is designed to acquaint divers with the potential problems inherent in electronic navigation.

I try only to use wreck numbers that have been generated onsite. This means that they were measured at the wrecksite using modern electronic navigational equipment. This does not necessarily mean that the sites will be easy to relocate. I have had tremendous difficulty locating many wrecks despite having "good numbers" for them. Divers are cautioned that LORAN and LAT/LON coordinates are only as accurate as the electronics that were used to plot them. GPS plotters can vary dramatically with satellite geometry, overhead obstructions and machine quality, while LORAN plotters may also vary according to signal geometry and geographic location. Thus, the numbers you have may not place you directly over a given wreck. They may not even put you in the neighborhood. If you 're lucky they should put you close enough to see a mooring buoy if one exists. Most wrecks however, don't sport mooring buoys and "dragging" for wrecks can cause irreparable damage.

Two terms that help to conceptualize the navigational problems in finding wrecks are "accuracy" and "repeatability." For our purposes, the accuracy of a navigation device refers to its ability to give the correct coordinates for your true or "actual" location as plotted on a modern NOAA chart. The repeatability of a navigation device refers to its ability to bring you back to a point that the same device previously plotted. Repeatability of both LORAN and GPS in the Great Lakes region is usually exceptional. Either type of unit will generally be able to bring you back to within 75 ft. of a point previously plotted by the same device. The difficulty usually lies in the accuracy. A good GPS receiver can generally give your actual location to within 75 ft. with good satellite geometry and no overhead obstructions. However, many LORAN units can be off by 100 to 1000 yards when giving your actual position. This means that if you set your LORAN to express itself in LAT/LON coordinates, and you try to plot the numbers it gives for your location on a detailed NOAA chart, you're likely to find a significant discrepancy with surrounding landmarks.

This difference in accuracy between LORAN and GPS is due to the different ways the two systems plot location. GPS machines use signals from geosynchronous satellites to plot positions, while LORAN machines measure differences in the time it takes signals from land based transmitters to reach them (TDs). Unfortunately, LORAN signals are slowed when crossing land masses and are subsequently not uniform at all points in a given region. This distortion is particularly pronounced in the Great Lakes and will cause a LORAN unit to vary significantly from the LORAN overlay lines printed on some NOAA charts. Because of these variances, a GPS machine and a LORAN machine sitting in the same spot will usually give very different numbers, even when set to express themselves in the same units of measurement. Subsequently, a GPS machine can reliably relocate a spot plotted by another GPS machine, but won't be able to reliably relocate a spot plotted by a LORAN machine, and vice versa.

Newer LORAN units often have a feature called an "ASF Correction" or Automatic Secondary Factors Correction which attempts to correct for signal distortion from land masses. This feature improves the accuracy of LORAN somewhat, but adds the further complication of having to guess whether a given LORAN measurement was made with or without the feature. Because of this accuracy problem and because of the advent of GPS, LORAN is slowly falling out of favor for nautical navigation. All coordinates that I give out are measured using a GPS, and as such, should be relocated with a GPS or, if you're adventurous, a LORAN with ASF. Numbers measured with a GPS will also plot accurately on a modern NOAA chart. Divers using LORAN without ASF will find a nonstandard error from 100 to 1000 yards. Unfortunately, most TDs floating around out there are non-ASF TDs, and cannot be reliably relocated with a GPS unit even if it is set to express itself in TDs. Further, many people have converted old TDs to LAT/LONs using their machines. These "converted" LAT/LON numbers will be just as inaccurate as the TDs they were converted from. For these reasons, when somebody gives you a set of numbers, you must ask what kind of machine generated them and whether LORAN generated numbers are raw or ASF corrected. All modern GPS and LORAN machines can express themselves in both TDs and LAT/LONs. Some GPS machines can be set to express themselves in LORAN TDs. Divers are cautioned that these TDs are "theoretical TDs." They will correspond perfectly to the LORAN overlay lines on some

NOAA charts, but they cannot be used to reliably locate wrecks. If all you have is a set of numbers, don't be surprised if the wreck isn't where your machine says it should be, and be prepared for some trolling.

Another navigational term that divers should be familiar with is map "datum." For our purposes, a map's datum refers to the orientation of the coordinate grid used to overlay that map. Surprisingly, not all maps use the same units of measurement or even the same coordinate grid. Thus, 47.14.00'/88.37.90' will find a different spot on a modern NOAA chart than it will on an old USGS 7.5' Series map. The LAT/LON lines are simply in different places. Most modern GPS machines subsequently have a built in datum menu which must be set to the proper datum in order to generate accurate and reliable numbers. The datum which modern NOAA charts use is the World Geodetic System 1984 datum, or "WGS84." This is the default datum in which most modern coordinates are expressed. If you have numbers plotted from an older map or chart, (as many shipwreck researchers do) you must convert them to a modern datum, and many GPS machines will do this for you automatically.

Computer mapping programs on CD ROM now include amazingly high definition maps of every square foot of the United States. Using these programs, one can zoom in on an area the size of a football field and generate 14 digit LAT/LONs with good accuracy. LAT/LONs generated with most computer mapping programs will correspond to GPS measurements, and such programs can be used to extrapolate fairly good locations for wrecks near land.

Divers making use of NOAA charts for locating wrecks should also be aware that NOAA charts express LAT/LON graduations in degrees, minutes and seconds (60ths of minutes), while most GPS and LORAN machines express LAT/LON as degrees, minutes and decimal minutes (100ths of minutes). Subsequently, when your GPS machine gives you a location of 47.14.75'/88.37.90', it must be plotted on a NOAA chart as 47.14'45"/88.37'54".

Given the above navigational considerations, it is not surprising that a lot of "bad numbers" are floating around out there. In most cases, even good numbers still necessitate a good SONAR unit, especially in deep water. Many divers can attest to dropping down only 50 ft. away from a wreck in 100 ft. of water and not finding it. Thus, when diving an unbuoyed wreck, find it on SONAR first, anchor a safe distance away, then suit up. It's never a good idea to moor a boat of any size to a wreck unless it's buoyed or you've found an existing mooring spot. Many historic wrecks were damaged by boaters creating moorings on fragile wood or old metal appendages.

The above information won't guarantee that you'll locate a given wreck, but it will significantly increase your chances. If you are using an old LORAN machine, or even a newer one with ASF, make sure you tell people this when giving out your numbers. Also, if you visit a wreck for which no newer, accurate numbers exist, try to make an accurate reading with a GPS so the wreck won't be lost. With any luck we'll soon have GPS numbers to replace all the old TDs that were plotted in the 1970s and 80s.

WUAA Position on LORAN

Following is a letter written by WUAA director Richard Boyd concerning the LORAN system.

DOT LORAN-C Survey
c/o Booz Allen & Hamilton
8251 Greensboro Drive
McLean, VA 22012

Gentlemen:

As per a suggestion in a recent issue of BOAT/US Reports, I am writing from a unique user standpoint to advocate the continuation of LORAN-C. Since completion of that system in the Great Lakes in the early 1980's, LORAN has seen widespread use by both individuals and organizations interested in shipwrecks and other specific underwater bottom sites. Sport divers, salvage operators and professional underwater archeologists have found the system to be highly precise and usable for the repeated relocation of submerged "targets". Over the past 20 years, hundreds of underwater sites have been discovered and cataloged using the LORAN numbers as standard loci.

While it is true that GPS can accomplish the same task, differential GPS would be required to achieve the needed accuracy for pinpoint relocations. Also, 20 years of collected LORAN TD's would have to be converted to GPS data and then field-checked ... no small task! This is above and beyond the purchase of the D-GPS equipment, which many people feel is an unwanted, and perhaps needless, expense.

Based on the above statements, we heartily endorse the continuance of LORAN-C.

Yours truly,

Dr. Richard Boyd
WUAA Board of Directors

Shipwrecks in Review

by Dick Boyd

As is our yearly custom, we review developments and discoveries in shipwreck diving and related archeology. Our emphasis is on the Great Lakes, but other developments are mentioned.

Up in Lake Superior, a potentially important discovery took place this fall off Marquette, Michigan. Back in Nov. of 1913, the 525-foot freighter *Henry B. Smith* departed that port with 11,000 tons of iron ore directly into the jaws of the Great Storm of 1913. The ship was never seen again. Late this summer, a group of Navy Reservists from Pennsylvania were flying simulated anti-submarine detection patterns across the Lake. The flyers had been forewarned by local historians to watch for any strong underwater magnetic anomalies north and east of the city near the shipping lanes. As good luck would have it, a large magnetic abnormality was detected some 4 miles north of Marquette. This mysterious contact is now being investigated to determine if it is indeed the *Smith*.

Down at Munising, a brand new dive site was created when the 71-foot tug *Steven M. Selvick* was deliberately scuttled in Lake Superior near Grand Island. The sinking project, which took several years to organize and to prepare the vessel, was spearheaded by charter captain Pete Lindquist and members of the Alger County Underwater Preserve. This is the first vessel to be sunk in the Great Lakes expressly for underwater recreation and will no doubt be visited by numerous sport divers in coming years. The tug rests upright in 60 feet of clear water with its pilothouse roof at about 40 feet. The workboat was built in 1915 in Cleveland and was used extensively during the construction of the Mackinac Bridge.

In upper Lake Michigan, the saga of the schooner *Gay Captain Lawrence* and its relationship to the rumored treasure of Poverty Island continues. A wreck, thought to be the Lawrence, was found several years ago by a salvage firm from the east coast. The group wanted to dredge the wreck site, hoping to find clues to the whereabouts of the lost gold. They also petitioned the federal district court to restrict diving in those areas of Poverty Island Passage where they had laid claim. The State of Michigan opposed these activities and won the case. An appeal is quit likely...we'll certainly be hearing more on this matter.

Over near Beaver Island on northern Lake Michigan, Fred Shannon and James Clary conducted the first recent survey of the sunken freighter *Carl D. Bradley*. Shannon gained previous notoriety for his submersible dives on the *Edmund Fitzgerald* and Clary is a well-known Great Lakes artist. The *Bradley*, of course, foundered with all hands, save one, in a wild storm in November 1958. Frank Mays, that sole survivor, reported that the hull had broken in two on the surface; this claim eventually resulted in charges of negligence on the part of the ship's owner, U.S. Steel Corporation. Years of bitter litigation followed between that company and families of lost crew members.

In 1959, a secretive and perhaps suspect underwater survey of the sunken ship was conducted by U.S. Steel which then reported that the hull had indeed cracked, but remained intact. No other investigations have been undertaken since. In fact, further work on the wreck was discouraged by U.S. Steel. Shannon attempted to carry out submersible dives on the wreck in 1995, but poor underwater visibility thwarted the expedition and few meaningful results were achieved.

The 1997 survey, performed with robotic cameras, showed the ship to be in two distinct pieces resting on a sloping bottom about 90 feet apart. Water depth ranged from 320 to 380 feet. The two sections appeared to be in relatively good shape with great amounts of the coal cargo strewn around the site. A large stress crack was noted on the port side of the bow and additional miscellaneous damage was also apparent. Videos, drawings and other documentation on the wreck should be released later this year.

In the spring of 1996, the remains of the steamer *Two Brothers* were discovered in shallow water near South Manitou Island within the Sleeping Bear Dunes National Lakeshore. The 165-foot vessel sank in a 1911 storm and was thought to have broken up. However, the hull was apparently buried and protected by shifting sands until spring storms in 1996 uncovered her once again. The wreck was surveyed shortly after discovery by National Park Service divers and was found to be remarkably intact with numerous artifacts, including the name-board, still present. Unfortunately, only a year later, the vessel has suffered significant looting...various artifacts including brass fittings and carved wooden pillars have already vanished. This pillage occurred even though the vessel is located adjacent to the island's ranger station!

(To be continued in the next issue of *Wisconsin's Underwater Heritage*.)

Around The Great Lakes

Door County Maritime Museum

The Door County Maritime Museum's new Sturgeon Bay facility is now open.

The museum's first floor contains the Peterson Gallery which displays several small craft, including a 1928 Chris Craft and the *Wanda*, a 1900 wooden pleasure craft. The gallery also has a display of marine propulsion systems ranging from small outboards to a 10-foot, two cylinder Kahlenberg engine. Also on display is the actual recompression chamber used in Captain Roen's raising of the *George M. Humphrey* in 1944, along with a hard hat diving suit.

Also on the first floor is the Founders' Gallery which focuses on the development of the Door County shipbuilding industry from its earliest beginnings up to today. The first room examines the use of waterways by Native Americans. The next room examines the development of the lumbering industry in Northeast Wisconsin and the growth of schooner construction in Little Sturgeon Bay. From this point, the visitor enters a room filled with exhibits relating to shipbuilding during the period 1900-1940. The next room looks at the local shipbuilding industry's role in World War II. Another room focuses on today's shipbuilding industry in Door County.

The second floor houses the museum's Lighthouse Gallery which contains exhibits on the history of Door County's twelve lighthouses. There is also a nearly-full size replica of the lantern room and surrounding platform of the Sherwood Point Lighthouse. A huge mural has been painted on one of the gallery walls as a backdrop for presentations on shipwrecks and lifesaving methods. The pilothouse of the steamship *Elba* is also located on the second floor and looks out over a large wall mural.

Lake Superior Wreck

At this year's Great Lakes Shipwreck Festival, Darryl Ertel and Matthew Turchi previewed a new video they co-produced on the wreck of the *Judge Hart*. The ship was a UK-built, 253-foot bulker that went down in Ashburton Bay on Lake Superior's North Shore in 1942. Ertel and Turchi previously produced a video on the wreck of the *Guinilda*.

City Of Milwaukee Lifeboat

A life boat from the ill-fated carferry *City of Milwaukee* has been put on display at the Lake Michigan Carferry Dock in Ludington, Mich. The carferry sank off Racine, Wis. with the loss of some fifty people in October 1929. The lifeboat washed ashore near South Haven, MI days later. The boat was given to Lake Michigan Carferry President Robert Mangiltz several years ago after it had been used as a fishing boat out of Saugatuck, Mich. A crib was built for the life boat which will be displayed along with several other marine artifacts owned by the company.

Lake Superior Maritime Visitors Center

In July, the Lake Superior Maritime Visitors Center, formerly known as the Canal Park Museum, welcomed its 10 millionth visitor since it was opened in 1973. The museum also recently transferred a former U.S. Coast Guard motor life boat to the Keweenaw County Historical Society.

The life boat was built in the 1930s and saw service on the Great Lakes until it was donated in 1973 to the Canal Park Museum. Since the Duluth-based museum focuses on the maritime history of the U.S. Army Corps of Engineers, Director Pat Labadie thought that the lifeboat would better serve to promote the history of the life saving service of the U.S. Coast Guard at Eagle Harbor. It's now displayed at a former Coast Guard life saving station which was made available through the efforts of officials at Fort Wilkins State Park in Copper Harbor.

Le Sault de Ste. Marie Historical Sites

The Le Sault de Ste. Marine Historical Sites recently announced the creation of the Manse Maritime Research Library. The new library will be located at 501 East Water Street in Sault Ste. Marie, MI, and officials hope to have it open by May 15, 1998. Both personal and professional researchers will be able to use the library's collection which includes a variety of Great Lakes-related materials including books, journals, charts, videos and photographs.

Wisconsin Marine Historical Society

The Wisconsin Marine Historical Society has negotiated the donation of the second phase of the late Professor Harold Mayer's collection of color slides on Great Lakes and marine subjects. The collection will add somewhere between 4,000 and 6,000 slides to the Historical Society's collection.

Wisconsin Maritime Museum

The Wisconsin Maritime Museum is planning to offer a new overnight educational program aboard it's submarine, the *U.S.S. Cobia*. The program, which will be able to accommodate up to 42 people, is based on similar programs aboard the *U.S.S. Silversides* in Muskegon, MI and the *U.S.S. Pampanito* in San Francisco.

In June, over 25,000 people participated in the 11th annual Riverwalk Festival which is held on Manitowoc's lakefront and is co-sponsored by Wisconsin Maritime Museum. The day-long event included tours of the U.S. Coast Guard Cutter *Katmai Bay*.