

Coming Events

- Feb. 7, 8 & 10, 2001 **The Excavation of the CSS Hunley**, lecture by Chris Amer, South Carolina state underwater archeologist, at the State Historical Society in Madison, the Superior Public Library in Superior and the Wisconsin Maritime Museum in Manitowoc. See page 3 for details or contact Cathy Fach, 608-271-8172.
- March, 2001 **Workshop on Steam Engines**. Sponsored by the Wisconsin Underwater Archeology Association, in Madison. Contact Cathy Fach, 608-271-8172.
- March 23-24, 2001 **Ghost Ships Festival**, at the Milwaukee Public Library. Contact the Great Lakes Shipwreck Research Foundation at P.O. Box 70887, Milwaukee, WI 53216.
- May 12, 2001 **Wisconsin Underwater Archeology Association Spring Meeting and Yahara River Canoe Trip**, in Madison. Contact Cathy Klecker, 608-655-3769.

Wisconsin Underwater Archeological Association

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Madison, WI 53716



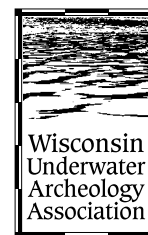
*For those interested in the study and preservation of
Wisconsin's underwater history and cultural resources.*

Wisconsin's UNDERWATER HERITAGE

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The *CSS Hunley*: An Ambitious Task

by Catherine Fach

Most people have probably heard of the *H.L. Hunley*, the Confederate submarine that sank the *USS Housatonic* in Charleston Harbor on February 17, 1864. The search for the successful, yet ill fated sub has occupied treasure seekers, underwater archeologists, and Civil War historians for years. However, it was adventure novelist Clive Cussler who, in 1995, finally located the sub, the first to sink a ship in battle. Working with his not-for-profit organization, NUMA (National Underwater Marine Agency), Cussler and a small group of trained underwater archeologist located the *Hunley* by towing a magnetometer over the area in which the sub reportedly sank.

The *Hunley* was not Cussler's first find, but it remains his most significant. For it is not the monetary value of the vessel, but the story behind this 32-foot iron boiler that holds the

key to its inherent value. The *Hunley* was a response to the prolonged Union blockade of southern ports during the Civil War. The northern strategy of applying a stranglehold to southern shipping most certainly had holes, as evinced by successful Confederate blockade runners. Yet, the pressure was severe enough to provoke the south into seeking new approaches to make up for the South's inadequate fleet. In addressing the matter of the Union's numeric superiority, Confederate Secretary of the Navy Stephen Mallory said in 1861, "Inequality of numbers may be compensated by invulnerability. Thus not only does economy, but naval success, dictate the wisdom and expediency of fighting with iron against wood, without regard to cost." Indeed, the human cost of the *Hunley* was large. Two crews had already been lost, including her inventor and namesake Horace Hunley, when she left Charleston on what would be her last mission.

It took incredible courage and heart-felt belief in the southern cause to compel those nine men to climb through the miniscule hatches and turn the hand-cranked propeller that

chilly February night in 1864. The successful delivering and detonating of a 135-pound torpedo to the Union Navy's 207-foot warship, the *U.S.S. Housatonic*, must have been the ultimate reward for the men who had suffered unfathomable fear and harsh conditions in the sub. Yet, with this ultimate reward, they would also pay the ultimate price. After the *Hunley* sank the *Housatonic* with her spar torpedo, she signaled back to shore with a blue light, indicating victory and her return home, yet she never made it. The *H.L. Hunley* disappeared beneath the waters of Charleston harbor, never seen again ... until this past summer.

After 136 years on the bottom, the *Hunley* broke the surface on August 8, 2000. Her excavation stands as one of the most dramatic recoveries in the field of underwater archeology. Only five years after discovery, the Hunley Project reached its goal of recovering the 14-ton submarine (30-tons including the silt that had permeated the hull of the vessel). The multi-million dollar Hunley Project is a joint effort of the Department of the Navy, the Park Service, NUMA, Oceaneering International, Inc., and the South Carolina Institute of Archeology and Anthropology (SCIAA), among others. Led by Project Director and Chief Archeologist Dr. Robert Neyland, this



Painting of the *CSS Hunley*, by Conrad Wise Chapman, circa 1865. Courtesy Museum of the Confederacy.

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Wisconsin Underwater Archeology Association Fall Meeting Summary

The Fall meeting of the Association was held at the Canal Park Museum in Duluth, MN, on November 12, 2000. There were 20 people present, including 9 guests.

The treasurer reported that revenues since the spring meeting were \$2412; from membership dues, workshop fees and donations. Expenses were \$1983, resulting in an increase in funds of \$429. Major expenses were the the newsletter, The current association balance is \$4445.

Members are asked to give comment on the newsletter, their likes and dislikes, and what they want to see more of. Members are also asked to contribute articles to the newsletter. Announcements from organizations and museums are welcome.

The Four Lakes book of Madison has been updated with more dive sites. Plans are to have it printed by early next year.

Cathy Fach, Jeff Gray's new assistant at the State Historical Society, replacing Fil Ronca, was introduced.

The court case on the looting of the yacht *Rosinco* is almost 3 years old and will not be completed soon. E-mail reports which say all Great Lakes shipwrecks are now open for looting are FALSE.

Lake Michigan and Lake Superior dive guides are available for sale at dive shops.

The UW-Seagrant web site is being updated. Visit the web site at www.seagrant.wisc.edu/shipwrecks.

A group from East Carolina University worked on the *City of Glasgow* in Door County this fall. Notes from the field were included on the Seagrant site. Two teachers have asked for curriculum development so they can interact with students during projects. East Carolina University is considering returning yearly.

Moorings were put on the *Hetty Taylor* and *Selah Chamberlain* this summer. More permit applications have been made for the coming summer.

Suggestions were made that WUAA consider doing another underwater workshop on shipwreck drawing in the future and conduct an underwater project next summer.

Russel Leitz reported on the Door County Advocate database. He hopes to have it on the WUAA web site soon. Plans are in the works to do a similar database with another newspaper. Volunteers to help will be needed. Contact Russ at 920-231-9082 if you are interested.

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

In addition to publishing this newsletter, the Association also holds

semiannual meetings and provides support to members' research and publication projects. Annual membership dues are \$15. For membership information, contact the secretary or write to the address below.

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Spring Lecture-The Excavation of the Submarine CSS Hunley

Most underwater archeologist dream of working on an enormous and well-funded project like the *Hunley*. South Carolina State Underwater Archeologist Chris Amer had that opportunity, and will share his experiences with groups around Wisconsin in three presentations in Superior, Madison and Manitowoc February 7-10, 2001. He will recount the history of the submarine and the results of the 1996 *Hunley* survey as well as the 1999 survey of the *USS Housatonic*. He will also discuss the summer 2000 excavation and recovery of the vessel, including the ongoing conservation work and plans for exhibition.

The lecture tour is sponsored by the Wisconsin Underwater Archeology Association and the State Historical Society of Wisconsin.

For more information, on the lecture series contact the State Historical Society Underwater Archeology office at 608-271-8172.

In Madison:

Wednesday, Feb 7, 7:00pm
State Historical Society
816 State Street
608-271-8172 for info

In Superior:

Thursday, Feb. 8, 7:00pm
Superior Public Library
1530 Tower Avenue
715-394-8860 for info

In Manitowoc:

Saturday, Feb 10
part of the annual dinner event at the
Wisconsin Maritime Museum
920-684-0218

Spring Meeting and Canoe Trip

The Spring meeting of the Wisconsin Underwater Archeology Association will be held in Madison on Saturday May 12, 2001. There will be a business meeting in the morning followed by a canoe trip down the Yahara River. The canoe trip will be led by state archeologist Bob Birmingham and will feature Native American mounds and fish weirs.

Mark the date on your calendars. Details will be in the next issue of *Underwater Heritage*.

WUAA Workshop - Evolution of the Marine Steam Engine

The Association will sponsor a workshop on marine steam engines in March 2001. The date and location have not been confirmed, but a flyer describing the workshop will be sent to all members as soon as details are available.

Until then, to express your interest in the workshop you may contact Cathy Fach at 608-271-8172 or email us at wuaa@mailbag.com.

Canal Park Museum Research Materials Change Hands

by C. Patrick Labadie

Historical research can be great fun, and of course much of the fun is in "the chase", the searching and eventual discovery of useful information. In spite of the excitement that results from accidental finds in unexpected places however, the rewards are usually greatest when the researcher has a good grasp of informational resources.

Experienced researchers like Brendon Baillod and Kimm Stabelfeldt, have discussed at recent "Ghost Ships" and "Gales of November" presentations the options available to researchers, including the most significant institutional collections in and around Wisconsin. One of most important is the collection of the Canal Park Museum in Duluth, now known as the Corps of Engineers' Lake Superior Maritime Visitors Center.

The Visitors Center has undergone some significant changes in the past several years, among which is the transfer of its valuable Great Lakes library collection to the University of Wisconsin's Jim Dan Hill Library in Superior. Divestiture of the library was prompted by regulations which were adopted a few years ago to govern the Corps' visitors center program nationwide. The transfer took place in September 2000 and involved several truckloads of materials. The collection includes more than 30,000 photographs, several hundred ship plans, approximately 1,000 books, about 250 maps and charts, 36 linear feet of U.S. Customs records, 40 feet of Corps of Engineers' reports, plus a mass of periodicals, manuscript materials and "ephemera". It is certainly the largest such library in any Lake Superior community.

The Visitors Center library collec-

tion was gathered in the Twin Ports area between 1973 and the present time, drawing on the generosity of hundreds of corporate and individual donors. Records were contributed by Zenith Dredge Company, U.S. Steel Corporation's Great Lakes Fleet, the U.S. Customs Department and the U.S. Coast Guard. A large part of the collection came from the U.S. Army Corps of Engineers, who had offices at Duluth since the 1870s. Private collections of many local shipyard workers and sailors were acquired over the years, and collectors and historians like Kenneth Thro, Dr. Julius F. Wolff, Arvid Morken, Edwin Eddy and others made very valuable contributions to the facility; Ken Thro alone donated no fewer than 10,000 ship photographs.

The library focuses on commercial shipping and harbor development in the upper Great Lakes, with special emphasis on Western Lake Superior. There are vertical files on every major vessel and thousands of smaller tugs and working craft, each with a data sheet, relevant clippings and where they are available, photographs. Some files have no photos at all while others have literally hundreds of illustrations. There is a drawer full of information about the famous *Edmund Fitzgerald*, for example.

Shipwrecks are a strong focus because of the contributions by Visitors Center Director Thom Holden, Dr. Julius Wolff, Jim Marshall, Elmer Engman, Al Miller, Jerry Eliasson and Ken Merryman. The author was privileged to perform several archeological research contracts for the State of Minnesota, and those jobs also resulted in a body of relevant and useful shipwreck data in the Visitors Center library. Some shipwreck infor-

mation was also generated by Corps of Engineers field personnel in the course of surveys, dredging and harbor improvement work. There are voluminous files on the better-known Lake Superior, North Shore and Isle Royale wrecks.

The library's photographic holdings are very strong, with the greatest strength being in the steel ships of the present century. Photographer Hugh McKenzie of Duluth photographed almost every vessel operating on the upper Lakes between 1910 and about 1935, and all of his glass-plate negatives are now a part of the collection. Ken Thro made a deliberate effort to acquire photos of every vessel, augmenting the McKenzie collection with commercial-quality photographs from studios and collectors all over the Lakes. Thro had the largest collection of whaleback ship photographs anywhere.

There are scale drawings of hundreds of ships, including Lakes freighters, tugs, Coast Guard craft and wartime vessels built at Great Lakes shipyards. Most of these plans came from U.S. Steel's Great Lakes Fleet office in Duluth, but others were donated by nearby Fraser Shipyards, the Corps of Engineers Marine Design Center at Philadelphia, Boucher-Lewis Precision Models in Minneapolis and the U.S. Coast Guard Office of Marine Inspections at Duluth.

The records of the U.S. Customs Department also deserve special mention. These bound volumes include official documents relating to Duluth District merchant ships between 1872 and 1940. There are Master Carpenters' Certificates, Certificates of Enrollment, Bills of Sale, Licenses, Certificates of Registry, Mortgages and Oaths of Masters. These docu-

ments are loaded with fascinating details about the thousands of ships they describe.

Records of the Army Corps of Engineers are both voluminous and valuable. They include all of the Annual Reports of the Chief of Engineers from 1866 to 1950, with descriptions of wrecks and obstructions, harbor facilities and docks and Corps vessels. There are also highly detailed soundings charts for all of the federal harbors of western Lake

Superior, including Keweenaw Waterway, Ashland, Duluth-Superior, Two Harbors and Grand Marais (Minnesota). Corps reports such as Waterborne Commerce of the United States also provide yearly statistical data on cargoes and commerce at ports all over the nation. There are also fine histories generated by the Corps during the 1930s and '40s of most of the major ports of the upper Lakes.

The Jim Dan Hill Library is open

daily from 10 a.m. to 9 p.m. virtually the year round. The collection is under the care of archivist Laura Jacobs, who has already begun the long process of cataloguing and digitizing the ship files. All of the files will be entered into a searchable on-line database linked to the Milwaukee Public Library's famous Runge files. Researchers, authors, and journalists are invited to use the facilities in the meantime; telephone reservations are recommended (715-394-8359).

USS Wisconsin Enters National Maritime Center

On December 7, 2000, the battleship *USS Wisconsin* was moved from the Norfolk Naval Shipyard to its new home at Nauticus, the National Maritime Center and the Hampton Roads Naval Museum in Norfolk, VA.

The arrival of the ship was celebrated by hundreds of people, includ-

ing some USS Wisconsin veteran sailors from Wisconsin.

The *Wisconsin* was launched on December 7, 1943, was commissioned for service in April 1944 and saw its first combat at Iwo Jima in February 1945. The battleship also served in the Korean War and the Gulf War. It was decommissioned in September 1991.

One of only four Iowa-class battleships ever built, the *Wisconsin* was 887 feet 3 inches long, with a beam

of 108 feet 2 inches and a draft of 37 feet 9 inches. Each of the two anchors weighed 300 pounds and had 1080 feet of chain. Each link in the chain weighed 120 pounds. The ship was capable of a speed of 33 knots and during World War II carried a crew of 2,911.

The *Wisconsin* Veterans Museum, 30 West Mifflin Street, in Madison, has a display about the ship, including the ship's bell.

The USS Wisconsin at the National Maritime Center in Norfolk, VA. Wisconsin State Journal photograph.



The CSS Hunley: An Ambitious Task

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group planned and engineered the design of, and procedures regarding the recovery system. They also assembled an impressive team of professional underwater archeologists to carry out diving operations.

Wisconsin is fortunate to have the lead SCIAA archeologist, Chris Amer, speaking about the *Hunley* to groups around the state as part of the State Historical Society's fourth annual lecture series this February.

On her journey from the bottom of Charleston Harbor to the conservation lab, the *Hunley* traveled in the safe confines of a recovery frame, or truss. This delicate process began with the lowering of two massive 18-foot by 12-foot, custom engineered suction piles to serve as platforms. Once these were in place, the team lowered the truss onto the submarine. Nylon slings with inflated foam pillows and sensors (to distribute the weight evenly) cradled the underside of the *Hunley*, and a crane lifted the entire truss to the surface. Archeologists

and engineers then loaded the delicate package onto a barge and delivered the precious cargo to the prepared conservation lab at Charleston Navy Base.

Nonetheless, the recovery of the *Hunley*, intact after all these years, is only the beginning of the project's responsibilities. Conservation of the submarine encompasses much of the project's timeline and expense. A state of the art conservation lab was constructed to handle the stabilization and restoration of the composite artifact assemblage of the *Hunley* and her contents. With advanced technology like computer regulated tanks monitoring various aspects of the submerged vessel and her aqueous environment, the *Hunley* still requires at least five to ten years for conservation. The iron vessel itself is a container for an aggregate of artifacts contained in her belly. Moreover, conservators cannot actively treat the hull until after they excavate, examine and stabilize the complex contents of the vessel.

But what is inside this 1864 time capsule? The bodies of the nine-man



Computer generated graphic of the USS Housatanic. by Dan Dowdy.

crew remain in the forefront of many peoples' minds. Because the possibility exists that human remains may indeed still be interred in the iron sarcophagus, archeologists and conservators proceed with the utmost caution and respect. Lab designers incorporated a refrigerated morgue into the lab facilities in preparation for such a situation. Any human remains will be reburied next to the other *Hunley* crews at Magnolia Cemetery in Charleston.

The *Hunley* *sank* twice before that infamous February night. Raised and refitted for service both of those times, the *Hunley* Project carried on the tradition with their recovery of the sub this past summer. In this refitting, however, she is charged with educating future generations about her history and, according to the *Hunley* Commission, also to, "convey the attributes she symbolizes, including valor, courage, sacrifice, commitment and integrity". The *Hunley* recovery was an ambitious task, financially and logistically. However, with widespread continued interest in the Civil War and with a best-selling author behind the project, the public embraced the excavation, generating unprecedented interest in underwater archeology. For more information check out the project web site at www.hunley.org.



Lifting the CSS Hunley.

Great Lakes Shipwreck Research Foundation Ghost Ships Festival and Grant Program

The Great Lakes Shipwreck research Foundation, Inc., a 501(c)(3) charitable organization and an AGLMH member, is pleased to announce the second annual Ghost Ships Festival. The festival will be held on Friday, March 23 and Saturday, March 24, 2001 at the Milwaukee Public Library's Centennial Hall. The festival will again feature films, seminars, classes, displays, booths and presentations by and for Great Lakes sport divers, marine historians, underwater archeologists and wreck hunters.

Last year's festival was a resounding success, drawing nearly 500 attendees from throughout the Midwest.

Through the generosity of our attendees, presenters and advertisers, the Great Lakes Shipwreck Research Foundation was able to make a donation of \$1,500 to the State Historical Society of Wisconsin, Division of Historic Preservation for the purpose of placing permanent mooring buoys on endangered wooden wrecks in Lakes Michigan and Superior.

The wrecks to be buoyed include the schooner *Lumberman* off Milwaukee as well as the *Sevona* and *Pretoria* in the Apostle Islands.

The Great Lakes Shipwreck Research Foundation was awarded certificates of appreciation by the State Historical Society of Wisconsin for their role in preserving these historic Great Lakes wrecks.

Other activities of the Great Lakes Shipwreck Research Foundation for this year have included a photo survey of the historic sidewheel steamer *Traveller*

that burned at Eagle Harbor, Michigan in 1865. Also preliminary plans with the Great Lakes Shipwreck Preservation Society and the Wisconsin State Underwater Archeologist to reinforce the hull and deck of the schooner *Lumberman* which is rapidly deteriorating due to vandalism and natural forces.

The Great Lakes Shipwreck Research Foundation is also pleased to announce the creation of the Ghost Ships Awards. The Ghost Ships Awards are grants, which will be awarded annually to individuals and organizations, engaged in research, education or preservation oriented work related to Great Lakes maritime history.

If you are a not for profit organization looking for projects to be funded which are for the greater Great Lakes development of education on wrecks, please consider submitting an application. Applications are due by February 1, 2001. The earlier the better.

Application merit is based on the impact of the applicant's past, present and future activities with respect to the Foundation's stated mission of stimulating and furthering research, education and preservation efforts concerning Great Lakes shipwrecks and Great Lakes Maritime History.

For more information about this year's Ghost Ships festival or to obtain a grant application, visit their website at www.ghost-ships.org

The Great Lakes Shipwreck Research Foundation may also be contacted at P.O. Box 70887, Milwaukee, WI 53216.

Henry N. Barkhausen Award for Original Research in Great Lakes Maritime History

The Association for Great Lakes Maritime History announces the Henry N. Barkhausen Award for Original Research in Great Lakes Maritime History. The winner of the award will receive a \$500 cash prize. In addition he or she will be invited to present his or her research at their annual meeting in the year 2001.

The AGLMH goal is to promote responsible and scholarly research in the field of Great Lakes maritime history. The purpose of the award is to recognize and encourage new research in the field of Great Lakes maritime history.

Submissions may be submitted by any person involved in Great Lakes maritime history regardless of formal training. Entries must be postmarked by May 1, 2001.

Entries will be judged by a panel of readers who will rate each entry on form, readability, documentation, originality and impact.

Guidelines for entry can be found at www.aglmh.org/barkawd.html. Send entries or inquiries to the AGLMH Research and Publication Committee, 77 Esther Street, Crystal Lake, IL 60014.