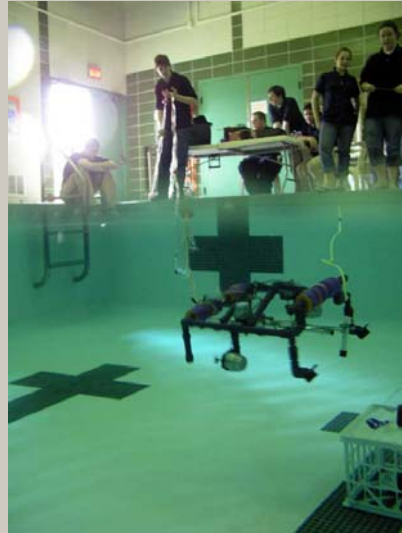




# MAKING SHIPWRECKS ACCESSIBLE THROUGH EDUCATION AND OUTREACH

*Thunder Bay National Marine Sanctuary*



**THE ALPENA NEWS**  
North Eastern Michigan's 3rd largest paper

MONDAY, SEPTEMBER 15, 2008 2 SECTIONS - 50 CENTS

**Showees** High '09 Line-up still...  
**TIGHT RACE** Gerhard Schröder...  
**ASSASSINATED** Insurgents assassinated a...  
**HOME VICTORY** Alpena girls basketball team...

"We've waited a long time to say this, but welcome to the Great Lakes Maritime Heritage Center."  
**JEFF GRAY**,  
Sanctuary manager

**Doors finally open**

**Great Lakes heritage center unveiled**

By SARA SCHWENK  
After 10 years of planning and construction, the Great Lakes Maritime Heritage Center has finally opened its doors to the public. The new center, located on the waterfront in Alpena, Michigan, is a state-of-the-art facility that will serve as a hub for maritime education and research. The center features a large exhibit hall, a theater, and a variety of educational programs. The unveiling ceremony was held on September 15, 2008, and was attended by hundreds of people. The center is a testament to the community's commitment to preserving and sharing its maritime heritage.



## Access Via Current Thunder Bay National Marine Sanctuary

### Education & Outreach Initiatives

- Great Lakes Maritime Heritage Center Exhibits and In-building programming
- Distance-learning programs & Telepresence
- “The Shipwreck Century” Curriculum (4th-7th grade)
- ROV building team
- Shipboard Education Programs
- Shoreside historical markers
- Special events, including 4th of July TB Maritime Festival
- Thunder Bay Community Boat Building Program
- Web access to data and research
- Integrating TBNMS into successful existing Great Lakes education and outreach programs



### Access Through Exhibits:

9,000 sq. feet of exhibit Space featuring the shipwrecks and maritime History of the Great Lakes



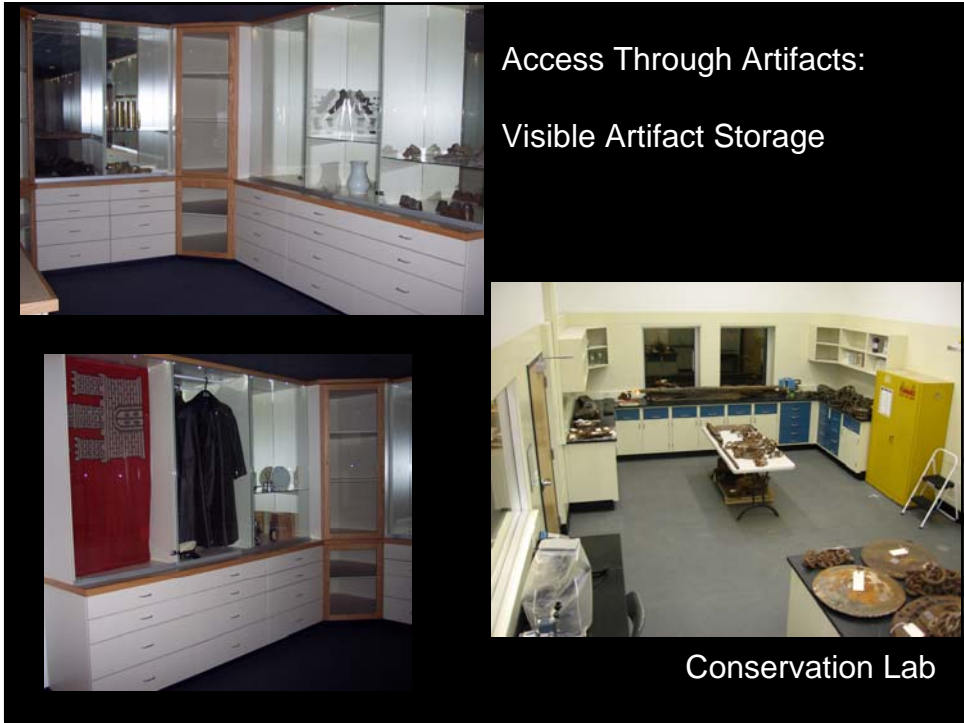
## Science on a Sphere



New data sets are being developed that extend sanctuary messages

## Under development: permanent exhibits - late 2007





Access Through Artifacts:  
Visible Artifact Storage

Conservation Lab



Access Through In-Building Classroom Programs  
and Distance Learning

Education room and distance learning studio



## Previous Live Dives at Thunder Bay

QuickTime™ and a YUV420 codec decompressor are needed to see this picture.



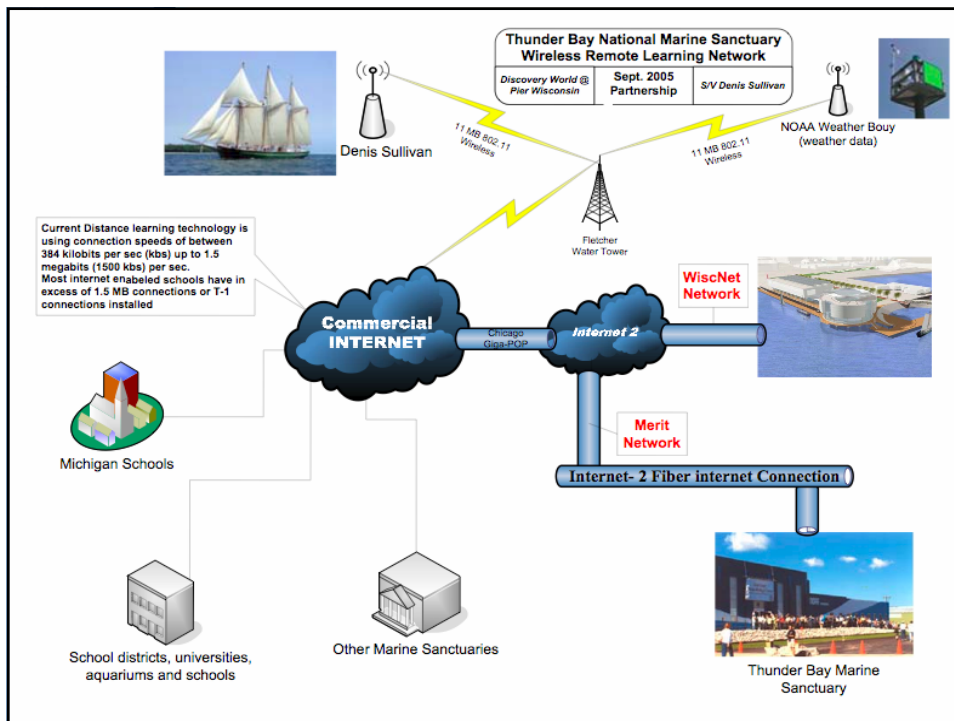
## Nautical Archaeology Live in the Classroom: Thunder Bay National Marine Sanctuary and Pier Wisconsin's "Live Dive" Broadcasts 2005



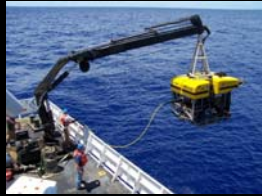


### 2005 “Live Dive” broadcasts - What did we do?

- Introduced students to nautical archaeology, Great Lakes maritime history, Thunder Bay National Marine Sanctuary, shipboard education programs and Pier Wisconsin in an exciting and effective way
- Used hands-on activities coupled with live interaction with archaeologists in the field, to engage students
- Designed pre- and post-broadcast activities. This gave teachers the information needed to prepare students for the program and continue exploring on their own afterward.



The Next Step...  
Telepresence:  
Being part of  
the expedition



Telepresence Theater



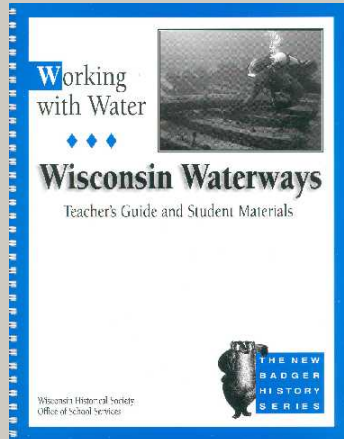
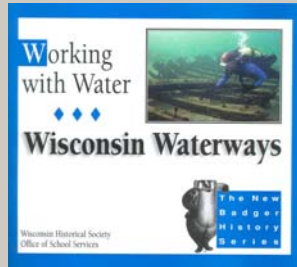
Thunder Bay future  
In water connection:  
The schooner *EB Allen*



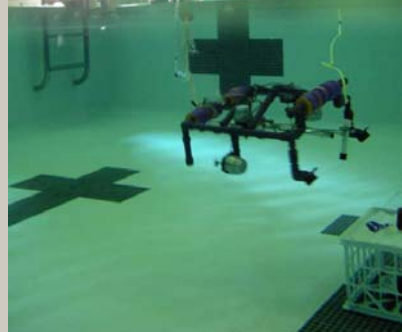
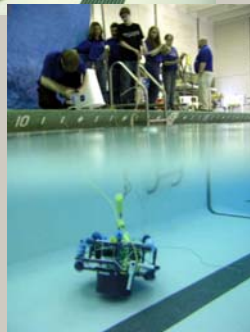


*The Shipwreck Century*  
Great Lakes Maritime Curriculum  
4th-7th grade

Partnership with TBNMS and Wisconsin Historical Society



MATE ROV Building Competition  
High School Students  
Great Lakes Regional - Thunder Bay NMS





## Lake Watch & Teacher Training Programs on the Great Lakes Schooner *SSV Denis Sullivan*

Over 1,000 students  
participated in this  
program in 2004 & 2005



- Lake ecology/Lake health
- Maritime history/shipboard traditions
- Shipwrecks/underwater archaeology

### WINTER LAY-UPS

**THE FLEET HIBERNATES FOR "DOWN TIME"**  
During the 1800s, dozens of ships left ports for the winter months and hibernated in the Great Lakes. Some of these ships were used for military purposes. They were the remains of warships that had been built for the United States Army and Navy. The ships were used for military purposes for many years. Some of these ships were used for military purposes for many years. Some of these ships were used for military purposes for many years.

Great Lakes Maritime Heritage Trail

Access Through  
Shoreside Historical Markers



# Thunder Bay Maritime Festival



## Thunder Bay Community Boat Building Program & Family Boat Building Weekend







### **Increasing Access through Partnerships with existing successful Great Lakes education and outreach programs and institutions**

- Alpena-Alcona-Montmorency Educational Service District
- Alpena Public Schools
- Alpena Public Library
- Alpena Community College
- University of Michigan
- Northwood University
- Michigan Sea Grant
- NOAA - Great Lakes Environmental Research Lab
- NOAA - National Weather Service
- Shedd Aquarium
- Discovery World at Pier Wisconsin

