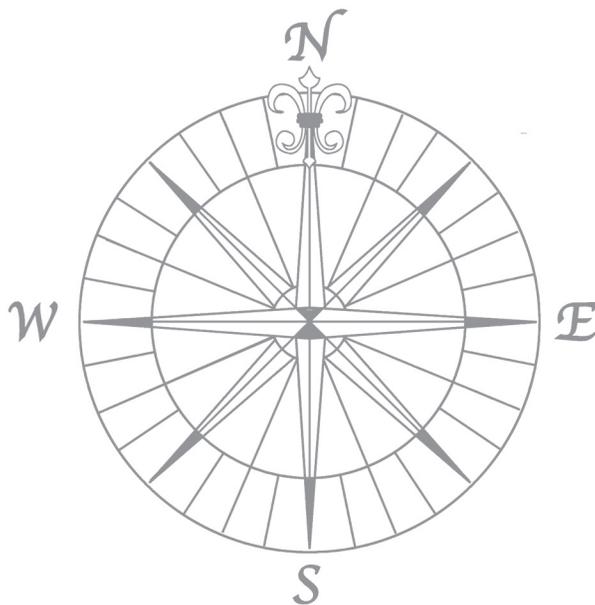


MARITIME
HERITAGE



EDUCATION
CONFERENCE

Charting a Course for Maritime Heritage Education



NOVEMBER 18 - 20, 2005 · NORFOLK, VA

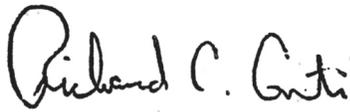
Dear Maritime Heritage Education Conference Attendees:

The National Maritime Center is pleased to host the first annual Maritime Heritage Education Conference. Where better to host a maritime conference than in a city rich with over 300 years of maritime and naval heritage? Founded in 1682, Norfolk grew up on the water. Residents for hundreds of years have relied on the water for all facets of life. Its miles of lake, river and bay fronts are now central to many of its neighborhoods and the more than 234,000 people who call this city home.

The National Maritime Center leads visitors to explore the economic, naval and natural power of the sea. Since our opening in 1994, we have been developing educational initiatives and strong partnerships supporting our mission. This conference gives us the opportunity to deepen some of those connections as well as forge new relationships to further our campus mission.

We hope your experience here will be fruitful and rewarding, and that you will walk away from the conference with new ideas and new contacts to enrich your maritime heritage education programs. On behalf of The National Maritime Center, we thank all the partner organizations that came together to make this conference possible.

Sincerely,

A handwritten signature in black ink that reads "Richard C. Conti". The signature is written in a cursive, flowing style.

Richard C. Conti

Executive Director

Nauticus: The National Maritime Center

The National Maritime Center is a maritime-themed educational campus located on the downtown Norfolk waterfront. Our primary goal is to educate students and the general public about the 'Power of the Sea'. This is accomplished in a unique manner by using exciting, hands-on exhibits and presenting fun, educational programs. The National Maritime Center has a unique partnership with the National Oceanic and Atmospheric Administration (NOAA) known as NOAA@Nauticus. The partnership is comprised of three NOAA field offices — NOAA's Virginia Office for the Chesapeake Bay, Office of National Marine Sanctuaries Maritime Heritage Program, and the Office of Coastal Survey's Mid-Atlantic Navigation Office. The National Maritime Center interprets Hampton Roads to the public as a significant ecological, scientific, cultural and historical region located on the southern end of the Chesapeake Bay. The stories presented are both local and global in context.

*Maritime Heritage Education Conference
Planning Committee*

Conference Organizer

Kate Thompson
NOAA National Marine Sanctuary System
Education Liaison
kate.thompson@noaa.gov

Conference Committee

Christine Arrasate
Nauticus
Education Manager
christine.arrasate@norfolk.gov

John Broadwater
NOAA National Marine Sanctuary System
Maritime Heritage Program Director
john.broadwater@noaa.gov

David Conlin
National Park Service
Submerged Resources Center Archaeologist
dave_conlin@nps.gov

Annalies Corbin
PAST Foundation
Executive Director
past@pastfoundation.org

Diane Depew
Colonial National Historic Park
Supervisory Park Ranger
diane_k_depew@nps.gov

Cathy Green
NOAA Thunder Bay National Marine Sanctuary
Education Coordinator
cathy.green@noaa.gov

Claire Johnson
NOAA National Marine Sanctuary System
National Education Liaison
claire.johnson@noaa.gov

Caroline Joyce
JASON Foundation
Education Director
caroline@jason.org

Adria Lande
American Sail Training Association
Education Coordinator
adria@sailtraining.org

Michiko Martin
NOAA National Marine Sanctuary System
National Education Coordinator
michiko.martin@noaa.gov

Larry Murphy
National Park Service
Submerged Resources Center Chief
larry_murphy@nps.gov

Della Scott-Ireton
Bureau of Archaeological Research
Division of Historical Resources, Underwater Archaeologist
dscott@dos.state.fl.us

Tangela Shepard
The Mariners' Museum
Educator
tshepard@mariner.org

Krista Trono
NOAA Monitor National Marine Sanctuary
Communications and Education Coordinator
krista.trono@noaa.gov

Odean Vanthul
Hampton Roads Naval Museum and Nauticus, The National
Maritime Center
Education Coordinator
ovanthul@nsn.cmar.navy.mil

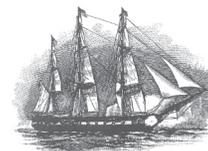
MARITIME
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Thanks to our partners and sponsors

Hampton Roads Naval Historical Foundation • Hampton Roads Naval Museum
 The Mariners' Museum • National Marine Sanctuary System • National Maritime Alliance
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 National Oceanic and Atmospheric Administration



Hampton Roads Naval Historical Foundation



The National Maritime Center



NATIONAL MARINE SANCTUARIES

Special Thanks to Our Sponsors

Hampton Roads Naval Historical Foundation

The Naval Historical Foundation is a non-profit 501(c) 3 organization operating under an agreement with Commander, Navy Region, Mid-Atlantic to support the Hampton Roads Naval Museum. The Foundation supports the education programs at the Naval Museum and aboard the Battleship Wisconsin for school students, service members, and the local community.

In 2004, the Hampton Roads Naval Historical Foundation provided over \$76,000 in support of the Naval Museums education program including payment of the final installment on a \$150,000 pledge to fund the museum's permanent Wisconsin exhibit.

The National Maritime Alliance

Formally organized in 1988, The National Maritime Alliance- with membership available to all-represents a diverse group including maritime museums, historic ships, lighthouses, canals, boat yards, boatbuilding and sailing schools, historic preservation groups, marine unions and businesses, and individuals. These organizations and persons all celebrate variations of a common tradition. Together they are the custodians of a maritime heritage that is as diverse as America itself.

The Alliance is committed to helping this country's maritime artifacts, projects and programs which have traditionally been underfunded. It coordinated a national effort which resulted in passage of federal legislation for assistance to the maritime heritage field. Information on the Alliance—its activities and how organizations and individuals may participate—can be obtained by contacting Dr. Timothy Runyan, c/o Maritime Studies Program, East Carolina University, Eller House, Greenville, NC 27858; 252-737-1072; email: runyant@mail.ecu.edu.

Downtown Norfolk

Attractions

- 1 American Rover Tall Ship Cruises
- 2 Armed Forces Memorial
- 3 Battleship *Wisconsin*
- 4 Carrie B. Harbor Tours
- 5 Cannonball Trail
- 6 Chrysler Museum of Art
- 7 Cruise Ship Dock – Nauticus Pier
- 8 d'Art Center at the Selden Arcade
- 9 Fort Norfolk
- 10 Freemason Historic District
- 11 The MacArthur Memorial
- 12 Hampton Roads Naval Museum
- 13 Hunter House Victorian Museum
- 14 Martin Luther King Monument
- 15 Moses Myers House
- 16 Nauticus, The National Maritime Center
- 17 Norfolk Trolley Tour
- 18 Pagoda and Garden
- 19 St. Paul's Episcopal Church
- 20 Spirit of Norfolk
- 21 Stockley Gardens
- 22 Town Point Park
- 23 Tugboat Museum
- 24 Victory Rover Naval Station Cruises
- 25 Waterside Festival Marketplace
- 26 West Point Monument
- 27 Willoughby-Baylor House / Norfolk History Museum
- 28 Windows On History

Performing Arts

- 29 Chrysler Hall
- 30 Attucks Theater
- 31 TCC Roper Performing Arts Center
- 32 The NorVa
- 33 Harrison Opera House
- 34 Wells Theatre
- 35 Granby Theater

Sports

- 36 Norfolk Scope
- 37 Harbor Park

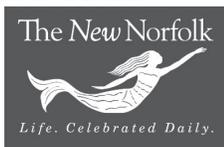
Shopping

- 38 MacArthur Center
- 39 Ghent Shopping & Antique Stores

Visitor Information Center

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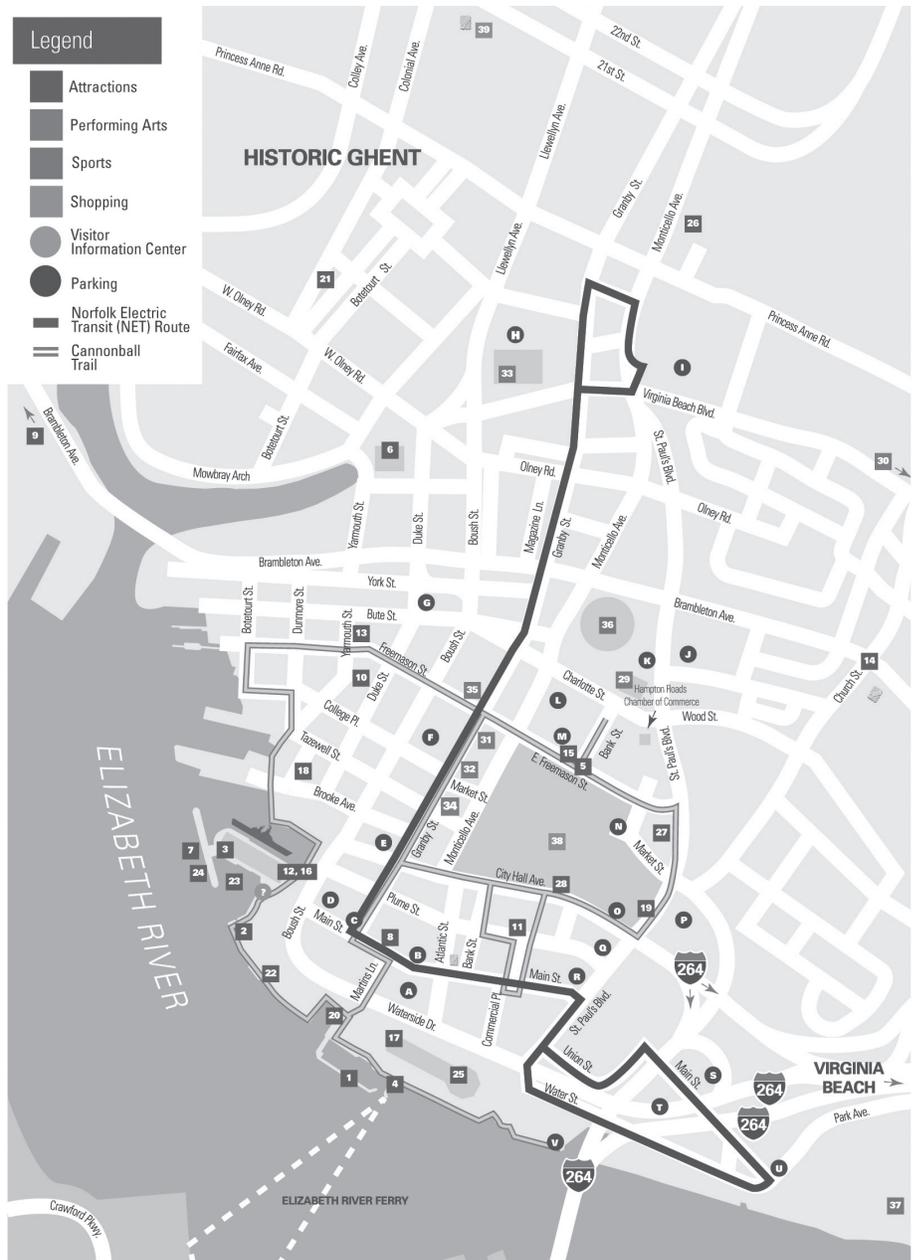
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Legend

- Attractions
- Performing Arts
- Sports
- Shopping
- Visitor Information Center
- Parking
- Norfolk Electric Transit (NET) Route
- Cannonball Trail

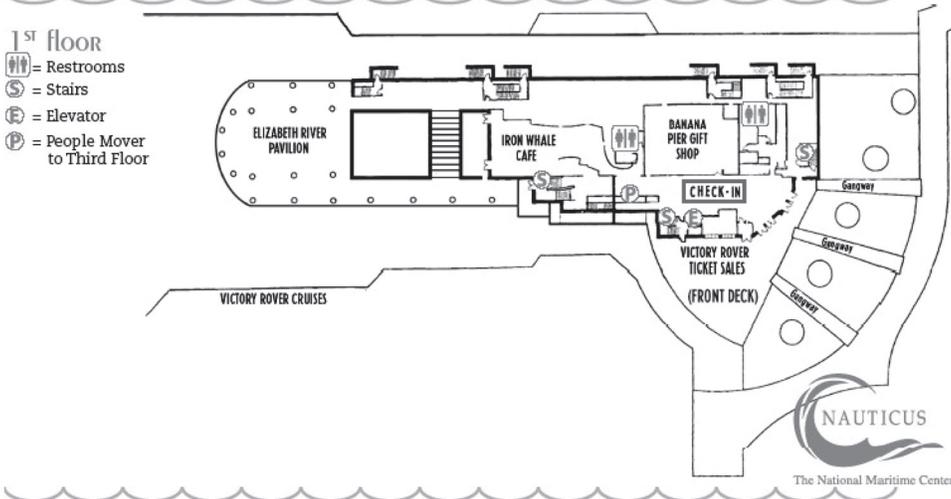
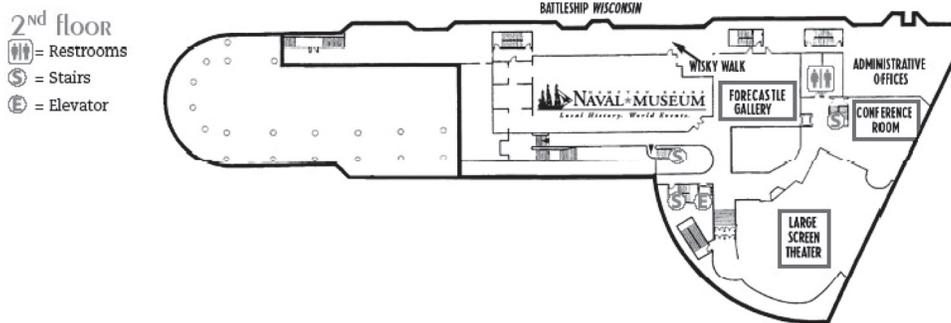
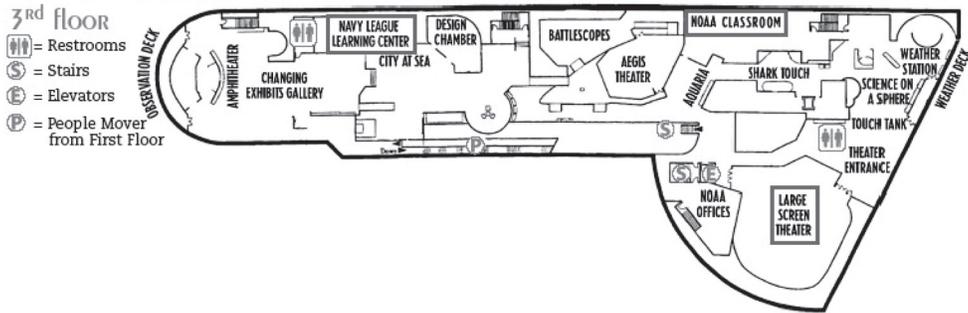


Downtown Parking

- | | | |
|-----------------------------------|-----------------------------------|----------------------------------|
| A Waterside Garage | H Harrison Opera House Lot | Q Plume Street Lot |
| B Main Street Garage | I Cedar Grove Lot | R Commercial Place Garage |
| C Town Point Garage | J Brambleton Lot | S City Hall Garage North |
| D West Plume Street Garage | K Scope Garage | T City Hall Garage South |
| E Boush Street Garage | L Monticello Lot | U Harbor Park |
| F Freemason Street Garage | M Monticello Avenue Garage | V Dominion Tower |
| G York Street Garage | N MacArthur North Garage | |
| | O MacArthur South Garage | |
| | P Education Lot | |

Norfolk Division of Parking
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NAUTICUS IS A MARITIME-THEMED SCIENCE AND TECHNOLOGY CENTER THAT EXPLORES THE ECONOMIC, NAVAL, AND NATURAL POWER OF THE SEA!



Thursday, November 17, 2005
Nauticus, The National Maritime Center



3:00 - 5:00 pm Conference Registration Opens
5:00 - 7:00 pm Wine and Hors D'oeuvres Reception



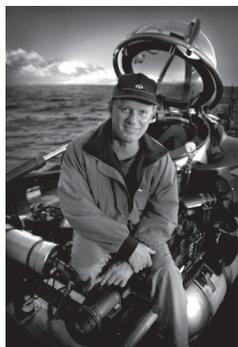
Friday, November 18, 2005

Nauticus, The National Maritime Center

7:30 am - 5:00 pm	Registration Desk Open
8:30 - 10:00 am	Keynote Presentation: Dr. Robert Ballard in the Nauticus Theater
10:00 - 10:25 am	Break and Refreshments

	Conference Room	NOAA Classroom	Navy League 1	Navy League 2
10:30 - 11:10 am	Maritime Heritage Interpretation at Stellwagen Bank National Marine Sanctuary	Successful Strategies for Engaging Families	Education Programs aboard the Schooner <i>Virginia</i>	Boat-in-a-Day: Hands on Education for All the Family
11:25 am - 12:00 pm	Educational Diver Program on the <i>Queen Anne's Revenge</i> - Blackbeard's Flagship	More Than Just Marine Debris: Massachusetts' Shoreline Heritage Identification Partners - SHIPS	The Periauger Project	Spirits of the Passage: Lessons from the Wreck of the Slave Ship the <i>Henrietta Marie</i>
12:00 - 1:00 pm	Lunch — available for purchase			
1:00 - 2:00 pm	<i>Teaching Maritime Heritage Through the Arts Roundtable in Theater</i>			
2:10 - 2:55 pm	Ancient Mariners: Horseshoe Crabs, the Birds and the Baymen	The Button Wreck: Florida Keys National Marine Sanctuary	Child's Play: Learning About Underwater Archaeology Online	Boatbuilding in Key West: Past and Future
3:00 - 3:40 pm	The Porpoise Factory of Hatteras Island	The Russian-American Company Ship Kad'yak: Outreach and Public School Education in Alaska	The North Carolina Shipwreck Survey project: Public Outreach and Graduate Education	Live Dive 2005 — The Wreck of the <i>Portland</i>

3:45 pm	Buses depart in front of Nauticus for Mariners' Museum
5:00 pm	Tour of the Mariners' Museum (sponsored by the <i>Monitor</i> National Marine Sanctuary)
6:00 pm	Hors D'oeuvres and Entertainment
7:30 pm	Buses return to Nauticus
8:30 pm	Arrive at Nauticus



Dr. Robert Ballard—explorer, author, television producer, scientist, naval officer, educator, and Titanic discoverer—will be the keynote speaker for the Maritime Heritage Education Conference.

Ballard is world-famous for his discovery of the Titanic shipwreck, the German battleship Bismarck, the lost fleet of Guadalcanal, the U.S. aircraft carrier Yorktown (sunk in the World War II Battle of the Midway), and most recently John F. Kennedy's boat, PT-109. A renowned scientist and explorer, he is the author of 16 books including his most recent, *The Lost Ships of Robert Ballard: An Unforgettable Underwater Tour by the World's Leading Deep-Sea Explorer*. Over the last 30 years, he has organized and conducted more than 100 deep-sea expeditions and has spent more time underwater than any other scientist in the world. Currently, Ballard heads up the Jason Project, a hands-on, interactive science education program for elementary school children.

Maritime Heritage Interpretation at the Stellwagen Bank National Marine Sanctuary

Deborah E. Marx, Stellwagen Bank National Marine Sanctuary

The Stellwagen Bank National Marine Sanctuary contains a rich variety of maritime heritage resources. The sanctuary interprets its maritime heritage through interactive kiosks, exhibits, and live broadcasts. These outreach tools provide the public a view beneath the waves and connect the sanctuary's historical and ecological aspects.

Successful Strategies for Engaging Families

Kristin Gallas, USS Constitution Museum, Sara Meirowitz, Mystic Seaport, The Museum of America and the Sea

Families represent the largest percentage of visitors to all museums. Maritime museums face unique challenges in providing family visitors dynamic learning experiences in their exhibits and programs. Discover new visitor-tested techniques for engaging families from the USS Constitution Museum and Mystic Seaport, The Museum of American and the Sea.

Education Programs aboard the Schooner Virginia

Scott Nielson, Virginia Maritime Heritage Foundation

The Virginia Maritime Heritage Foundation is a nonprofit organization promoting the Commonwealth's maritime heritage by engaging the recreated Pilot Schooner Virginia, a traditional sailing ship, through an innovative interdisciplinary curriculum using the latest technologies providing a synergistic learning experience to motivate students and educators in the classroom.

Boat-in-a-Day: Hands-on Education for All the Family

William D. Prentice, Watercraft Center Manager

Overview of the N. Carolina Maritime Museum's Harvey W. Smith Watercraft Center's program of classes; highlighting the Boat-in-a-Day class which allows up to four members of a family to work together and construct a small rowing skiff, from a pre-cut kit, in a six hour class.

Educational Diver Program on the Queen Anne's Revenge — Blackbird's Flagship

Lauren Hermley, Olympus Diving

North Carolina's Underwater Archaeology Branch has developed an innovative form of public outreach designed for the recreational diver, featuring the wreck site of Blackbeard's flagship, Queen Anne's Revenge. The program focuses on maritime history, underwater archaeology, ecology, and geology, and culminates with a guided dive on the shipwreck. This new model may play a vital role in generating additional support for the protection and continued study of underwater heritage sites.

More Than Just Marine Debris: Massachusetts' Shoreline Heritage Identification Partnerships – SHIPS

Victor T. Mastone and David W. Trubey, Massachusetts Board of Underwater Archaeological Resources, Lisa Hutchings and Caroleann McPherson, Newburyport Maritime Society

Massachusetts' Shoreline Heritage Identification Partnerships Strategy, SHIPS, was developed to respond to coincidental shoreline discoveries and the on-going need to inventory shoreline cultural resources. SHIPS provide an opportunity for involving the public at the discovery level in the archaeological process through local historical organizations in partnership with the state program.

The Periauger Project

Paul E. Fontenoy, North Carolina Maritime Museum

Partnership synergy expanded involvement and made the periauger project the platform for a host of educational and outreach opportunities –dedicated exhibitry and educational material; docent interaction, school group participatory programs (including web-based nationwide broadcasting); public hand-on involvement, television, videography, still photography, and live web-cam coverage; and on-the-water and voyaging activities

Spirits of the Passage: Lessons from the Wreck of the Slave Ship Henrietta Marie

Clarice M. Yentsch, Corey Malcom, T.J. McDermott, and Rita Kingsbury, Mel Fisher Maritime Museum

The Henrietta Marie was a slave ship that sank 35 miles west of Key West in the summer of 1700. Our efforts use the Henrietta Marie evidence and experience to learn systems thinking, sustainability, stewardship and social justice. Posters and various activities can be downloaded from our website <http://www.melfisher.org/>.

Teaching Maritime Heritage Through the Arts Roundtable

Panelists: Bob Zentz, Suzan Wallace, John Jameson, Michael Goldberg, Eric Worden, and Joseph Filipowski

The Maritime Arts are as old as the sea, as alive as a fresh breeze and have been known to be the driving force behind a well-seasoned program. The panelists of this 'Roundtable discussion' are well versed in how the arts add a dimension of integration that so easily pulls together all of the disciplines of a voyaging education. Whether it's the song in the air, the craft in the fo'c'sle or an interpretation of sea culture, maritime artisans continue to inspire a long legacy of heritage worth preserving!!

Ancient Mariners: Horseshoe Crabs, the Birds & the Baymen

Trish Schuster, Tuckerton Seaport

Though often misunderstood, horseshoe crabs fascinate almost everyone! Gain insight into horseshoe crab biology, anatomy, evolution, their role in bay food webs and why they are of such great interest to scientists, baymen and laymen alike in this interactive program.

The Button Wreck, Florida Keys National Marine Sanctuary

Kathy Schubert, ADMAT USA

The remains of a historic shipwreck found in the Florida Keys National Marine Sanctuary was dubbed the Button Wreck based on English Regimental buttons found on site. NOAA provided permits for ADMAT USA to conduct a 3-week maritime archaeological field school to determine type, age and purpose of the vessel.

Child's Play: Learning About Underwater Archaeology Online

T. Kurt Knoerl and Michelle Damian, The Museum of Underwater Archaeology

The online Museum of Underwater Archaeology introduces: A Children's Introduction to Underwater Archaeology. The website features interactive pages designed to engage the child's attention while teaching key concepts fundamental to the ethical and scientific study of submerged cultural resources. Elements of the design process and lessons learned while developing the exhibit are also discussed.

Boatbuilding in Key West: Past and Future

T.J. McDermott, Mel Fisher Maritime Museum

Join the Portsmouth Lightship Museum as we introduce the life of a Lightship sailor and the joys, and challenges, of having an artifact to use as the platform of educational programming. The programs demonstrate changes in Lightship service throughout American history.

The Porpoise Factory of Hatteras Island: Oil Production, Scientific Inquiry, and Shifting Values in early Twentieth Century America

Barbara Garrity-Blake, Mount Olive College

From the late 19th century to the early 20th century, a "porpoise factory" or oil rendering plant was located on the Outer Banks of North Carolina in Hatteras village. This paper explores the differing views and values as expressed in these accounts, as the early 20th century was a pivotal period whereby porpoises were both a commercially harvested natural resource and of growing scientific interest. The interplay of nature, culture, and science during this expedition is considered, as well as the wider social context of Outer Banks life in early 20th century America.

The Russian-American Company Ship Kad'yak (lost 1860; identified 2004): Outreach and Public School Education in Alaska

Timothy J. Runyan and Frank J. Cantelas, East Carolina University

The Russian-American Company ship Kad'yak sank in 1860 near Kodiak, Alaska with a cargo of ice while bound for San Francisco. Identified in 2004 by a research team led by East Carolina University, the shipwreck is important in local Native lore and history. East Carolina University partnered with three museums and the Kodiak Public Schools. This paper will focus on the educational outreach and public school curriculum developed in response to the discovery of the Kad'yak.

The North Carolina Shipwreck Survey Project: Public Outreach and Graduate Education

Melissa Madrigal and Valerie Grussing, East Carolina University

The North Carolina coast is known as the Graveyard of the Atlantic due to the large number of vessels lost there. A project to create a database of shipwrecks was funded by NOAA's Office of Ocean Exploration and the University of North Carolina Coastal Studies Institute. The database is in GIS and includes over 2,000 shipwrecks for the area from Cape Hatteras to Cape Lookout. This project extended the range of educational benefits of funded scientific research beyond public outreach and the schools, to include graduate-level university education.

Live Dive 2005 – The Wreck of the Portland - Developing Broadband Coastal Networks for Maritime Heritage Education and Outreach

Ivar G. Babb, Kevin Joy, Michael McKee, NOAA's Undersea Research Center at the University of Connecticut and Matthew Lawrence, and Deborah Marx, Gerry E. Studds Stellwagen Bank National Marine Sanctuary

During the summer of 2005 we conducted a series of dives within Gerry E. Studds Stellwagen Bank National Marine Sanctuary, highlighted by a "Live Dive" from the wreck of the steamship Portland. The Live Dive event utilized broadband wireless network to connect live video cameras, including a feed from National Undersea Research Center's remotely operated vehicle exploring the features of the Portland, along with an audio narration.



For over seventy years, the history of the ocean and its relationship with humankind has been told and displayed in one of the largest maritime museums in the world. In 1930, The Mariners' Museum was brought to life by Archer Milton Huntington, son of railroad and shipping magnate Collis P. Huntington, who had founded Newport News Shipbuilding and Drydock Company just a few miles from the Museum. Archer and his wife, sculptor Anna Hyatt Huntington, acquired 800 acres of land that would come to hold 61,000 square feet of exhibition galleries, a research library, a 167-acre lake, a five-mile shoreline trail with fourteen bridges, and over 35,000 maritime artifacts from around the globe.



Saturday, November 19, 2005

Nauticus, The National Maritime Center

8:30 - 9:00 am Breakfast in Forecastle Gallery				
	Conference Room	NOAA Classroom	Navy League 1	Navy League 2
9:00 - 9:40 am	Our Whaling Heritage: Where Away?	The PAST Foundation: Looking Over the Archaeologist's Shoulder	Florida's Maritime Heritage Trail	Building a New Generation of Preservationists Through the Education of Youth
10:00 - 10:40 am	The Sinking of the Edmund Fitzgerald: The ship, the storm, and the song	Interpretive Connections to the American Public through Underwater National Park Resources	Maritime Heritage Education and the Florida Keys National Marine Sanctuary	Charting a Course: The Lightship Life
11:10 am - 12:00 pm	U.S.S. Alligator Roundtable <i>Meet in Theater</i>	Getting Paid Twice: Finding Innovative Ways to Use Archaeological Research for Public Outreach	History is the Real Treasure: The 1733 Spanish Galleon Trail	The Sea, the Ship and the Sailor
12:00 - 1:00 pm Lunch – available for purchase				
1:00 - 2:00 pm Informal and Formal Maritime Heritage Education Connections Roundtable in Theater				
1:00 - 1:30 pm Lake Mead's Cold War Legacy – The Lost B-29 Bomber (Conference Room)				
1:30 - 2:00 pm Poised and Frozen in Time: the Japanese Midget Sub (Conference Room)				
2:15 - 3:00 pm	Portals to Learning: Tried and True to Hip and New	Flooding Trenches: Academic Archaeology and Professional Practice in the Training of Maritime Archaeologists	Waterfront Industries in Our Backyard	The Navy and Marine Living History Association: Teaching Naval History in Field – Literally
3:15 pm Meet at the Spirit of Norfolk in Norfolk Harbor				
4:00 - 7:00 pm Spirit of Norfolk Cruise				
<i>Head for Norfolk's Waterside and step aboard the Spirit of Norfolk for unparalleled cruising fun on the historic Elizabeth River. You'll dine, dance, enjoy star-quality entertainers and exciting skyline views including the Navy's Atlantic Fleet on this Norfolk cruise ship. Our group will celebrate the opening of the winter holiday season as Norfolk lights the skyline. The best view of the holiday lights is from the water!</i>				

Our Whaling Heritage: Where Away?

Hans Van Tilberg, Office of National Marine Sanctuaries

American whaling is a significant part of our national maritime heritage, encompassing historic voyages and seafaring traditions set on a global stage. Recent discoveries of whaling wreck sites have raised the issue of our whaling heritage and its educational potential; how do these 19th century artifacts speak to us?

The PAST Foundation: Looking Over the Archaeologist's Shoulder

Andrew W. Hall, The PAST Foundation

Working in partnership with non-profit organizations and agencies, the PAST Foundation develops hands-on field schools, educational programming and web-based outreach for K-12, university students and the general public. This presentation highlights four key projects that represent the PAST Foundation's evolving approach to bringing maritime archaeology to a larger audience.

Florida's Maritime Heritage Trail

Dr. Roger C. Smith, Florida Bureau of Archaeological Research

To nurture the public's understanding and interest in Florida's coastal resources, the Florida Department of State's Bureau of Archaeological Research has created the Florida Maritime Heritage Trail. Six thematic segments comprise this collective trail: Lighthouses, Coastal Communities, Historic Ports, Coastal Environments, Historic Shipwrecks, and Coastal Forts.

Building a New Generation of Preservationists through the Education of Youth

Mary Ann Moore, Great Lakes Lighthouse Keepers Association

Since 1989, the members of the Great Lakes Lighthouse Keepers Association have been mentoring youth; guiding them as they restore the St. Helena Island Light Station, Straits of Mackinac, Michigan. During this session, you will discover the process used to recruit and train youth who will become tomorrow's caregivers of historic property.

The Sinking of the Edmund Fitzgerald: The Ship, the Storm and the Song.

Steven A. Ackerman, University of Wisconsin-Madison and John A. Knox, University of Georgia

Thirty years ago, on November 10, 1975 the SS Edmund Fitzgerald sank in Lake Superior. All 29 crewmembers died. At the time, it was the worst shipping disaster on the Great Lakes in 11 years. Using weather maps, the ship's journey and the Gordon Lightfoot ballad, this presentation will demonstrate how this tragic, historic event can be used to teach the weather associated with the midlatitude cyclone.

Interpretive Connections to the American Public through Underwater National Park Resources

Larry E. Murphy, National Park Service

The National Park Service developed the first federal underwater archeological team in 1980. Part of its mission is to develop interpretive products to facilitate connection of the American people with underwater areas in the National Park System. For more than two decades, the NPS Submerged Resources Center has experimented with many interpretive devices to enable public connection with underwater areas. This paper will review past and present interpretive initiatives in national parks and future directions currently being developed.

Maritime Heritage Education and the Florida Keys National Marine Sanctuary

Nancy Diersing, Florida Keys National Marine Sanctuary

Dive into maritime heritage education in the Florida Keys National Marine Sanctuary. This presentation provides an overview of the sanctuary's Shipwreck Trail and other maritime education programs and products that are available to visitors, students, teachers, and others interested learning more about maritime heritage in the Keys.

Charting a Course: The Lightship Life

M. Helene Tisdale, Portsmouth Lightship Museum

Join the Portsmouth Lightship Museum as we introduce the life of a Lightship sailor and the joys, and challenges, of having an artifact to use as the platform of educational programming. The programs demonstrate changes in Lightship service throughout American history.

Marine Science Investigations: The Hunt For The *USS Alligator*

The Hunt for the *USS Alligator*, the Navy's first submarine, is being used as vehicle to implement a multidisciplinary curriculum including topics such as oceanography, language arts, biology, chemistry, technology, scientific inquiry, geography, social science, art, and mathematics. Students have the opportunity to hone their scientific method, critical thinking, and research skills as they learn, research, and develop a hypothesis for the location of the Alligator.

Getting Paid Twice: Finding Innovative Ways to use Archaeological Research for Public Outreach

Russ Green, Thunder Bay National Marine Sanctuary and Underwater Preserve

Officially designated in 2000, the Thunder Bay National Marine Sanctuary is only the second sanctuary in the nation dedicated solely to the preservation of historic shipwrecks. The sanctuary seeks to ensure that both divers and non-divers share in the discovery, exploration and enjoyment of Thunder Bay's historic shipwrecks. Russ will discuss the various ways the sanctuary uses field research as the foundation for many of its education and outreach initiatives.

History is the Real Treasure: The 1733 Spanish Galleon Trail

Della Scott-Iretton, Florida Bureau of Archaeological Research

In 2004, the Florida Bureau of Archaeological Research investigated, recorded, and researched the wrecks of the 1733 Spanish Plate Fleet in the Keys. Final products include public interpretation materials for heritage, educational, and recreational tourism. This paper will describe the project, including research and development of interpretive and educational strategies.

The Sea, the Ship and the Sailor

Bob Zentz

From the AGE of SAIL, to the AGE of SONAR, the Sailor has always been a mysterious folkloric figure, veiled in the mists and magic of the sea and returning home with treasures of the heart, mind and soul. And, the Songs & Stories of these Voyagers, give us an intimate glimpse into their minds, lives and experiences, as well as the Nature of those Liquid Highways, upon which they travel.

Making the Connection — Maritime Heritage Education Programs for the Classroom Based on Informal Education Roundtable

Panelists: Caroline Joyce, Andrew Hall, Mary Ann Moore, Michele Vander Velde, Cathy Green, Gaye Lynn Clyde, Victor Mastone, Lisa McIntosh, Nancy Diersing, and Jamie Purves

“I must down to the sea again, to the lonely sea and sky, and all I ask is a tall ship and a star to steer her by.” The sea, ships, stars, and an open world of vastness calls all to reflect and wonder at the greatness of our planet. The panelists of this roundtable discussion are well versed in the use of formal and informal education as a pathway to inspiring our strong maritime heritage past, present, and future with all learners, young and seasoned. Join them and bring your ideas to share!

Lake Mead’s Cold War Legacy—The Lost B-29 Bomber

Dave Conlin, National Park Service

On July 21, 1948 B-29 serial number 45-21847 crashed into the Overton Arm of Lake Mead while engaged in top-secret high-altitude research. Following the successful location of the Lake Mead B-29 by Lake Mead in 2002 the Submerged Resources Center (SRC) was called in to document and assess the condition of the wrecked plane. This talk will discuss some of the details of underwater archeological operations 190 feet deep as well as the NPS plans for long-term stewardship, public involvement and education.

Poised and Frozen in Time: the Japanese Midget Sub at Pearl Harbor

Hans Van Tilberg, NW Hawaiian Islands Coral Reef Ecosystem Reserve

One of five small subs involved in the attack on Pearl Harbor lies intact on the deep sea floor, now the focus of a joint agency research and preservation effort. It is a war grave, an historical resource, and a test case for maritime heritage education and deepwater resources.

Portals to Learning: Tried & True to Hip & New

Barbara Wright and Stacy Hasselbacher, The Mariners’ Museum

This presentation will revisit classic frontiers of learning as we demonstrate how to assemble Age of Exploration, Transatlantic Slave Trade, and USS Monitor interactive classroom kits. Participants in the first session will learn how to create an interactive classroom kit that will help them successfully teach Standards of Learning related to the Age of Exploration, Transatlantic Slave Trade, and USS Monitor. The kit will include hands-on materials and information on ways students and teachers can use them effectively in their classroom.

Flooding Trenches: Academic Archaeology and Professional Practice in the Training of Maritime Archaeologists

Joe Flatman, UCL Institute of Archaeology

This paper discusses the job prospects of maritime archaeology postgraduates, and whether or not universities provide suitable training and transferable skills. Closer collaboration with industry and archaeological consultancies is proposed as a way of producing graduates suited to immediate employment in the public and private sectors.

Waterfront Industries in Our Backyard

Lisa McIntosh, Vancouver Maritime Museum and Jamie Purves, City of Richmond-Britannia Shipyard National Historic Site of Canada

A partnership between the Vancouver Maritime Museum and the North Shore Waterfront Industrial Association resulted in a unique education program that helped both organizations reach some of their goals. We will introduce this program, some of the challenges, and discuss how to use our model create unique education programs.

The Navy & Marine Living History Association: Teaching Naval History in the Field—Literally

Chuck Veit, Navy & Marine Living History Association

In the field of maritime education, there is a genre of presentation that is often overlooked and vastly underrated—but which has proven an excellent conduit for sharing naval history with the public. There are distinct advantages to living history over the traditional museum—but a melding of the two approaches could result in the best experience for the visitor, as well as sparking a continued interest in maritime history. Learn how the Navy & Marine Living History Association makes it work across the country, in schools, at round tables, historical societies, and, yes, in orchards and wheat fields.



Sunday, November 20, 2005

Nauticus, The National Maritime Center

8:30 - 9:00 am Breakfast in the Forecastle Gallery

	Conference Room	NOAA Classroom	Navy League 1	Navy League 2
9:00 - 9:40 am	Connecting Teachers and Museums	Explore the Past and Present <i>USS Monitor</i>	Arts of a Seafarer	The Key to the Silent World
10:00 - 10:40 am	Summer Science School – Learning Fun Programs based on Maritime Heritage and the Coastal Natural History of N. Carolina	Mapping the Other 70%: Envisioning the Seafloor	Inspiration through Archaeology: Training and Initiatives in Fostering Opportunities for Emotional, Intellectual, and Artistic Connections to Resource Meanings	Portals to Learning: Tried and True to Hip and New
11:15 - 12:00 pm	A Deep Understanding – A Collaborative Distance Learning Expedition with Pier Wisconsin and Thunder Bay National Marine Sanctuary	Oysters and Origin: The Roots of the NMS in the Oyster Bed Maps of the U.S. Coast Survey	The Pirate-Dredger's Doom: Politics, Pirates, and a "Little Travesty" on the Lower Chesapeake Bay, 1882-1883	

12:00 - 1:00 pm Lunch – available for purchase

1:00 - 1:40 pm	Battleship Education Aboard the <i>USS Wisconsin</i> <i>Meet at Forecastle Gallery</i>	Education and Maritime Heritage	Navigating the Waters, Navigating the Web	Effective Planning for Effective Programs
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1:40 - 2:00 pm Break

2:00 - 3:00 pm Closing Plenary: Dr. Caroline Joyce in Nauticus Theater *Pulling it Together: Make Maritime Heritage Education Work for You!*



Caroline B. Joyce, a former middle school teacher of 17 years, is a Dr. of Education at the University of Wisconsin-Milwaukee, as well as the Director of Student Explorations for the JASON Foundation for Education, where she served for seven years as the Director of Content Development for the JASON Project from 1997-2003. Of interest for this conference, Caroline has recently been named the new Director of the regional Wisconsin Lake Sturgeon Bowl competition part of the National Ocean Sciences Bowl (NOSB).

The *charted course* of the Maritime Heritage Education Conference is coming to an end. Meet opening speaker Dr. Robert D. Ballard's challenge to use marine archeology and ocean sciences to excite and engage all learners to understand the inter and intra disciplinary nature of life on the planet. Don't leave without capturing your ideas and experiences to include them in your formal and informal education programs! Decide how to use Maritime Education's authentic offerings in the form of activities, technology, outreach, lighthouses, sail training, boat building, navigation, shipwrecks, sanctuaries, ecological issues and school based programs to set a new course that is inclusive of the many fine ideas and relationships experienced during this powerful conference.

Connecting Teachers and Museums

Jamie Purves, City of Richmond-Britannia Shipyard National Historic Site of Canada

Museums are great places to learn but are often under used or overlooked by teachers. Two creators of the Lower Mainland Field Trip Fair and website will share their approach for breaking down barriers to field trips and increasing the number of teachers visiting your institution.

Explore the Past and Present USS Monitor

Kathryn Shaffner, Hampton Roads Naval Museum and Krista Trono, Monitor National Marine Sanctuary

Come explore the famous USS Monitor, the first ironclad vessel. The Hampton Roads Naval Museum has partnered with NOAA's Monitor National Marine Sanctuary to develop a unique elementary school curriculum that teaches the history and science of the Monitor. By providing an interactive activity, students advance their math, science, problem solving, history, reading and comprehension skills. Curriculum has proven successful for both classroom use as well as outreach activities.

Arts of a Seafarer

Suzan Wallace, SeaQuest Studio

The visual Maritime Arts encompass many forms both practical and aesthetic. Inspired by the sea, sailors have long been documenting their legacy of creativity and resourcefulness in the face of often, difficult circumstances. Take an historical glance at their origins and how they remain a mainstay in our seagoing heritage today.

The Key to the Silent World

Clark Lee Merriam, Cousteau Society

Partnership synergy expanded involvement and made the periauger project the platform for a host of educational and outreach opportunities –dedicated exhibitry and educational material; docent interaction, school group participatory programs (including web-based nationwide broadcasting); public hand-on involvement, television, videography, still photography, and live web-cam coverage; and on-the-water and voyaging activities

Summer Science School—Learning Fun Programs Based on Maritime History and the Coastal Natural History of North Carolina

JoAnne Powell, North Carolina Maritime Museum

The North Carolina Maritime Museum has offered Summer Science School programs to children that focus on the maritime history and coastal natural history of North Carolina for over 30 years. Model making, archaeology, and NC maritime history are just a few of the programs for entering 1st through 10th grade students. This is a review of those programs and how they operate, including their success and failures.

Mapping the Other 70%: Envisioning the Seafloor

Captain Albert E. Theberge, NOAA Central Library

Seafloor mapping began with the first crude seafloor map produced 152 years ago. Since then ever-improving technologies have led to discovering the true nature of the sea floor. The story of ocean mapping and the technologies that have made our present understanding of the sea floor possible will be presented.

Inspiration through Archeology: Training and Initiatives in Fostering Opportunities for Emotional, Intellectual, and Artistic Connections to Resource Meanings

John H. Jameson, Jr., National Park Service

Marine heritage sites as well as terrestrial sites can be used to inspire and educate the public. The National Park Service, a leader in public interpretation and education, has developed standards for effective interpretation and inspiration for public audiences. An agency training module for public interpretation of archeology was developed for interdisciplinary cross-training of employees. In partnership with professional interpreters and educators, we use the power of artistic expression to convey archeological information and insights to the public.

Portals to Learning: Tried & True to Hip & New

Barbara Wright and Stacy Hasselbacher, The Mariners' Museum

This presentation will revisit classic frontiers of learning as we demonstrate how to assemble Age of Exploration, Transatlantic Slave Trade, and USS Monitor interactive classroom kits. Participants in the second session will be familiarized with the resources available on the World Wide Web, and with Video Internet Conferencing. Possibilities for using Standards of Learning-related websites and Video Internet Conferencing will be demonstrated.

A Deep Understanding – A Collaborative Distance Learning Expedition with Pier Wisconsin and Thunder Bay National Marine Sanctuary

Cathy Green, Thunder Bay National Marine Sanctuary and Gaye-Lynn Clyde, Pier Wisconsin

While distance learning programs are now possible in many schools, how do we use this technology to its best advantage? This presentation will highlight a successful collaborative distance learning program designed and implemented by Pier Wisconsin in Milwaukee, Wisconsin and Thunder Bay National Marine Sanctuary in Alpena, Michigan.

Oysters and Origins: The Roots of NMS in the Oyster Bed Maps of The US Coast Survey

John Cloud, NOAA Central Library

The National Marine Fisheries Service and National Marine Sanctuaries can trace their origins to the Commission on Fish and Fisheries, the original conservation agency in the US government. However, early in the history of the Commission, the agency collaborated with geodesists and hydrographic surveyors from the US Coast Survey to pioneer the mapping of oyster beds and other marine resources in the Chesapeake Bay and the oyster reaches of rivers in Maryland and Virginia. The presentation will examine the methods of hydrographic surveying of the oyster beds and the maps themselves as they are being re-discovered and made digitally accessible.

The Pirate-Dredger's Doom: Politics, Pirates, and a "Little Travesty" on the Lower Chesapeake Bay, 1882-1883

Anna Gibson Holloway, The Mariners' Museum

The "Oyster Wars" of the lower Chesapeake Bay, waged by Virginia's Governor Cameron between 1882-1883, were merely some of the more spectacular events in an ongoing war between the government of the Commonwealth and the "lawless" oystermen of the Chesapeake Bay. This presentation includes will cover the history and the music behind this rare, but delightful piece of late 19th century entertainment, and how such pop culture items can make teaching local history as well as maritime and political history more entertaining for students at the high school level.

Battleship Education Aboard the USS Wisconsin

Odean Vanthul, Hampton Roads Naval Museum

Take a guided tour through the Hampton Roads Naval Museum and onboard the Battleship Wisconsin. Participate in and observe working education programs that use discovery learning as the major teaching tool. Our programs help children of this decade connect with realities of our past.

Finding Links: Education and Maritime Heritage

Annemarie van Hemmen, Navesink Maritime Heritage Association

Education and Maritime Heritage Stewardship form a perfect match because they are mutually beneficial. Maritime environments require strong visionary, organizational and creative skills. Whatever capacity a student fulfills later in life, skills like long-term planning, being able to envision delayed gratification, organizational ability and cooperation will serve that person well - and by extension the community at large.

Navigating the Waters, Navigating the Web

Eryn Welch, Nauticus, The National Maritime Center

This session will highlight the instructional value of the Internet as an educational resource. Preview of "Navigating the Waters" educational CD. You'll learn how to locate the best sources of data as well as learn about lesser known but more effective search engines. Learn what "public domain" and "fair use" really means.

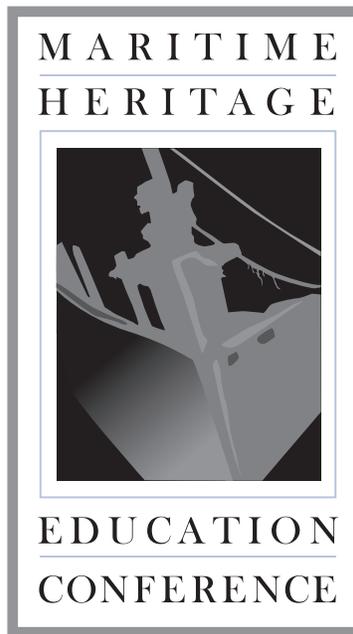
Effective Planning for Effective Programs

Lisa McIntosh, Vancouver Maritime Museum

Good programs don't just happen – they take planning and preparation. During this session we'll introduce one program planning method, discuss some pitfalls in the planning process and begin to develop the framework for an interpretive programs. Participants should come with a new program topic in mind.

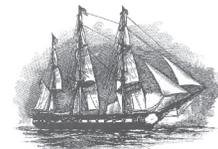
Charting a Course for Maritime Heritage Education

Our nation was settled via the oceans, lakes, rivers and streams that run through our vast land. Maritime heritage celebrates the unique traditions we have created through the connections to our coasts. The stories and traditions passed on from generation to generation help us to learn how we must become stewards of our heritage to create a better future for us all. The first-ever Maritime Heritage Education Conference will bring formal and informal educators together to focus exclusively on the sharing of maritime heritage education partnerships, program and products and their linkages to science and conservation.



Thanks to our partners and sponsors

Hampton Roads Naval Historical Foundation • Hampton Roads Naval Museum
The Mariners' Museum • National Marine Sanctuary System • National Maritime Alliance
National Park Service • Nauticus: The National Maritime Center
National Oceanic and Atmospheric Administration



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The National Maritime Center

