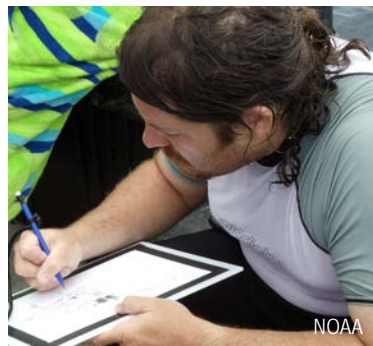
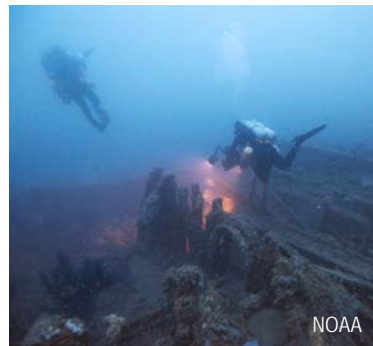


## A Look Ahead

In 2012, Monitor National Marine Sanctuary will celebrate and honor the 150<sup>th</sup> anniversary of the construction, history, and loss of the USS *Monitor*. Staff are working closely with genealogists and forensic experts from the U.S. Navy to identify the two crewmen recovered from the *Monitor* shipwreck in 2002. Additionally, the site is completing a new management plan, scheduled for release in 2013. This plan will guide the sanctuary over the next five years. The site is also working with partners to better understand, document and preserve the rich maritime heritage of the coastal waters of North Carolina.



## Monitor National Marine Sanctuary Advisory Council Members

### Officers

Chair: Wayne Smith  
Vice Chair: Susan Langley

### Non-Governmental Members

Recreational Diving: Debora Boyce  
Recreational Diving: Jim Bunch  
Recreational/Commercial Fishing: Jay Kavanagh  
Recreational/Commercial Fishing: Kenneth Fex, Jr.  
Archeological Research: Susan Langley  
The Mariners' Museum: Anna Holloway  
Alternate: Dave Krop  
Conservation: Wayne Smith  
Education: Terri Kirby-Hathaway

Citizen-at-Large: Joe Poe  
Heritage Tourism: Lauren Hermley  
Youth (non-voting): c/o Shannon Ricles  
Economic Development: vacant

### Governmental Members

#### State Government

N.C. Department of Cultural Resources: Mark Wilde-Ramsing  
Alternate: Steve Claggett  
N.C. Dept of Environmental and Natural Resources: Bracton Davis  
Va Department of Historic Resources: Joanna Wilson  
Alternate: vacant

### Federal Government

U.S. Navy: Robert Neyland  
Alternate: Alexis Catsambis  
National Park Service: Dave Conlin  
Alternate: Doug Stover  
U.S. Coast Guard: LCDR Kevin Saunders  
NOAA Monitor NMS (non-voting): David Alberg

Sanctuary Advisory Council Coordinator  
Shannon Ricles

<http://monitor.noaa.gov>

## NATIONAL MARINE SANCTUARY SYSTEM



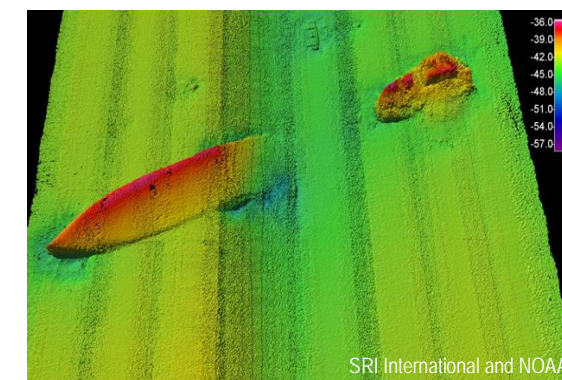
NOAA's Office of National Marine Sanctuaries is committed to supporting lives and livelihoods across the nation and in sanctuary communities through socioeconomic research and monitoring to understand the economic and social drivers of sanctuary resources and improve management practices.

Office of National Marine Sanctuaries  
National Oceanic and Atmospheric Administration

MONITOR NATIONAL MARINE SANCTUARY



## 2011 ACCOMPLISHMENTS



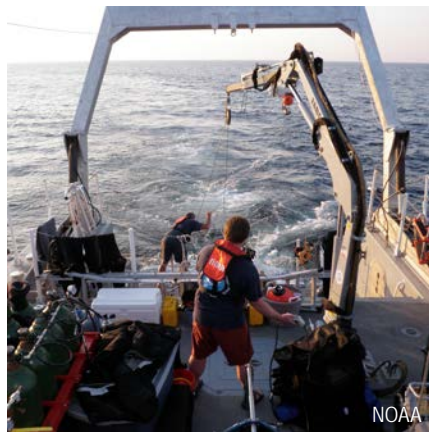
Monitor National Marine Sanctuary was designated the nation's first national marine sanctuary in 1975. The site protects the wreck of the famed Civil War ironclad USS *Monitor* off Cape Hatteras, N.C., best known for its battle in 1862 with the Confederate ironclad CSS *Virginia* at Hampton Roads. In partnership with The Mariners' Museum in Newport News, Va., the sanctuary is working to conserve over 1,500 artifacts recovered from the famous shipwreck and works to preserve, study and educate the public about this iconic piece of our nation's maritime past. Established January 30, 1975.





### Queen Anne's Revenge archaeological recovery

Partnering with North Carolina's Department of Cultural Resources, Monitor National Marine Sanctuary assisted in the recovery of a cannon from one of the oldest known shipwreck sites in North Carolina waters - believed to be the remains of Blackbeard the Pirate's flagship *Queen Anne's Revenge*. Since 1997, recovery at *Queen Anne's Revenge* has been a major initiative of the North Carolina Underwater Archaeology branch, with the goal of completing excavation by 2013. MNMS has collaborated on this effort since 2010. This accomplishment is an extension of the successful ongoing partnership between the sanctuary and the state of North Carolina.



### New generation of small research vessel: SRVx

Monitor National Marine Sanctuary is the keeper of *SRVx*, a small research vessel equipped with an integrated computer system that provides unprecedented processing of both engineering and navigation diagnostics, in addition to hosting a range of scientific instrumentation. During the summer of 2011, *SRVx* supported the most extensive range of complex missions since its 2010 acquisition: marine archaeology expeditions using AUVs, ROVs, multibeam and technical diving operations, a NASA satellite calibration mission, buoy deployment, and multiple education and outreach programs. *SRVx* has demonstrated an unprecedented and marketable utility and holds promise for potential partners in addition to future ONMS research endeavors.



### Battle of the Atlantic

In 2011, Monitor National Marine Sanctuary conducted a series of complex maritime archaeological surveys off the coast of North Carolina in search of sites associated with WWII's Battle of the Atlantic. This project represents the largest maritime archaeology survey ever conducted off the North Carolina coast, covering more than 275 square miles of seabed using AUVs and multibeam surveys. Over the course of the survey, Monitor National Marine Sanctuary identified and documented 47 potential targets of interest, which may represent new archeological finds. In addition, the sanctuary team surveyed 17 known wreck sites using technical diving, ROVs and remote sensing.



### Girl Scout Jamboree

In October 2011, Monitor National Marine Sanctuary, NASA Langley Research Center and The Mariners' Museum collaborated to host the Colonial Coast Girl Scout Jamboree. More than 3,000 girl scouts and their families attended the event and sailed on voyages of discovery and exploration. The jamboree hosted a variety of exhibits, interactive activities and tours that allowed Girl Scouts to investigate our fragile planet through stories of the past, tales of the present and visions of the future on land, in the sea and in space.



### More than 20,000 touched by sanctuary outreach

Through numerous education and outreach events and programs, Monitor National Marine Sanctuary reached over 20,000 students, teachers and members of the general public in 2011. These events, held throughout the year, brought awareness to maritime heritage and ocean issues while focusing on science, technology, engineering and math (STEM). In collaboration with various partners, such as Newport News and Virginia Beach Public Schools, Nauticus, The Mariners' Museum, Graveyard of the Atlantic Museum, North Carolina Aquarium, NASA, and Jeannette's Pier, these programs offered a variety of learning experiences.

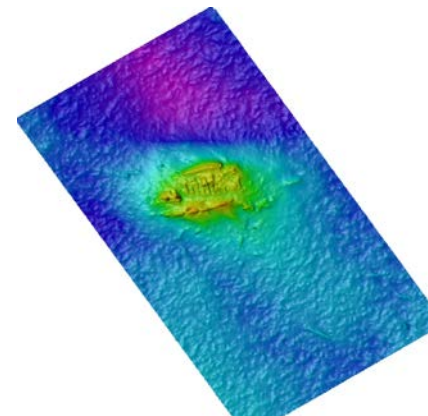


### Sanctuary Advisory Council gains new seats

2011 brought exciting changes to the Monitor National Marine Sanctuary Advisory Council. New seats added to the council included those of the North Carolina Department of Environmental and Natural Resources, Economic Development and Youth, and an additional Recreational Diving Seat and Commercial Fishing Seat. The addition of new seats expands the sanctuary's reach to its constituents and offers greater representation in sanctuary management. The council met three times during the year, alternating locations among Newport News and Norfolk, Va. and Beaufort, N.C.

### 2011 USS *Cumberland* Survey

In collaboration with the United States Navy's History and Heritage Command, NOAA's MNMS supported a survey to study the remains of *USS Cumberland*, one of the union vessels lost during the famous Battle of Hampton Roads in 1862. A private company, Advanced Underwater Surveys Ltd. (AUDS), partnered with NOAA and the Navy to carry out a detailed multibeam sonar survey of the site, as well as another Civil War shipwreck in the vicinity, *CSS Florida*. This survey was the highest resolution survey ever conducted on these important historic resources and will function as an analytical tool as well as a foundation for planning future site assessments.



Martin Dean, Advanced Underwater Surveys, Ltd.

### 2011 USS *Monitor* Conservation Accomplishments

NOAA and its partners at The Mariners' Museum (TMM) reached significant conservation project milestones in 2011. Archaeologists and conservators completed excavation of *USS Monitor's* revolving gun turret, including interior and exterior sediment. They recovered personal items such as, engraved silverware, a monkey wrench and other unique artifacts. They also began the disassembly of *Monitor's* 25-ton composite steam engine in support of more thorough treatment. This process will be ongoing for the next 18-20 years. Conservators completed treatment of personal artifacts associated with human remains recovered from the turret in 2002. The remarkably well-preserved wool sack coat and associated buttons are a chilling reminder of the 16 men who sacrificed their lives aboard the *USS Monitor* on December 31, 1862. In 2012, NOAA and TMM will celebrate the 150<sup>th</sup> anniversary of the Battle of Hampton Roads and the *USS Monitor*.



The Mariners' Museum