Expanding the Reach of the Monitor National Marine Sanctuary

Protecting more wrecks and increasing public awareness

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In a time period when the United States is wrestling with proposals to remove several Civil War monuments, there is one monument the federal government and charitable investors are struggling to preserve. It is a symbol of that historic internal conflict, and of the valiant service of those brave men who fought and served within her iron hull.

However, it is also a symbol of American ingenuity that prompted a new era of sea-fighting technology. Over the past 150 years, the USS *Monitor* has bridged the gap between military and civilian cultures, carrying the mantles of strategic innovation and tactical advantage on one hand, and of cultural and historic touchstone on the other.

USS Monitor, Civil War Ironclad

The USS *Monitor*, designed by John Ericsson, a Swedish-American engineer, was built at Greenpoint, New York, at a total cost of \$275,000. The *Monitor* was the prototype for a new class of American ironclads. She claimed a revolving gun turret, an anchor that could be raised or lowered from below deck, forced-air ventilation, and a flushing shipboard toilet among her unique features.

Her first battle on March 9, 1862, at Hampton Roads, Virginia, was with the Confederate ironclad ram CSS *Virginia*, formerly known as the *Merrimac*. The four-hour engagement ended in a draw, but marked the first time ironclad ships clashed in naval warfare, signaling the end of the era of wooden war ships. It forever changed the course of naval warfare, setting a new standard in both naval architecture and ship design.

Eleven months after its launch, the *Monitor's* promising career was cut short. The *Monitor* and 16 of her crew were lost while being towed by the USS *Rhode Island* off Cape Hatteras, North Carolina, an area long considered to be the "Graveyard of the Atlantic." The ironclad, unable to weather the heavy gale-driven seas, foundered and sank on December 31, 1862. William Keeler, an officer aboard the ironclad, wrote "The *Monitor* is no more ... what the fire of the enemy failed to do, the elements have accomplished." Her final resting place in the Atlantic Ocean remained unknown for over a century.

In August 1973, scientists conducting a research project using side-scan sonar aboard the R/V *Eastward* located the *Monitor's* remains about 18 miles southeast of Cape Hatteras. Using remotely operated still and video cameras, these scientists obtained the first images of the wreckage. In April 1974, the R/V *Alcoa Seaprobe* verified the ship's identity and produced the first photo mosaic of the wreck.

Making international headlines, Duke University and the North Carolina Department of Archives and History jointly announced the discovery of the *Monitor* on March 7, 1974. Verification that the wreck was indeed the USS *Monitor* created significant concern over how the United States could protect an archaeological site that was, at a time prior to the Law of the Sea Convention, lying in international waters.

USS *Monitor,* America's First National Marine Sanctuary

Title III of the Marine Protection, Research, and Sanctuaries Act of 1972 established the National Marine Sanctuary Program. Under this act, the U.S. Secretary of Commerce



The deck of the USS Monitor. NOAA National Marine Sanctuary Program photo

was granted the authority to designate national marine sanctuaries that "possess conservation, recreational, ecological, historical, scientific, educational, cultural, archaeological, or esthetic qualities which give them special national, and in some cases international, significance." Given this definition, the remains of USS *Monitor* and a column of water one mile in diameter surrounding the vessel was formally designated by the Secretary of Commerce as the nation's first national marine sanctuary on January 30, 1975.

At the time of its designation, NOAA had no existing historical or cultural resources management policy. Since the *Monitor* was one of the most significant historic shipwrecks in U.S. waters, it was imperative that a comprehensive historical context study and resources policy was established. This has since been named "Fathoming our Past" and addresses the historic and cultural resources of all national marine sanctuaries.

The highest-priority management goal for the Monitor National Marine Sanctuary (MNMS) is resource protection through comprehensive and coordinated conservation and management of the wreck and its surroundings. The objectives of the resource protection program are to encourage responsible public access to the wreck site, enhance public awareness of sanctuary regulations and

the permitting process, ensure compliance with sanctuary regulations, and ensure re-engagement of access and permitting policies of the MNMS management plan based upon changing site conditions. Continued education and outreach through public forums, images of the wreck online, and an extensive display of artifacts at the Mariners Museum in Newport News, Virginia, are crucial to ensuring the Monitor site's protection. The sanctuary staff works in concert with the National Oceanic and Atmospheric Administration (NOAA)'s Office of Law Enforcement, the Coast Guard, and other federal, state, and private organizations to provide adequate site surveillance and enforcement, and to maintain active cooperative programs in research and education. In this manner, authorities and stakeholders work together, by sea and by air, to stave off both inadvertent and deliberate actions that can disturb the wreck of the Monitor.

Despite being protected under the Antiquities Act, Sunken Military Vessel Act, and by the National Marine Sanctuary Program, the USS *Monitor* is still susceptible to damage by well-intentioned boaters. In 1991, the U.S. Coast Guard sighted a recreational fishing boat anchored within the sanctuary. NOAA inspections of the wreck showed damage to the wreck, including evidence that an anchor had snagged the *Monitor's* skeg and ripped it loose from the lower hull. This type of damage demonstrates the importance of regulation, monitoring, and enforcement in the protection of this historic wreck.

Some threats to the site are intractable, and the passage of time combined with corrosive and oceanographic processes will continue to affect the wreck, underscoring the need to acquire available knowledge and to deter impacts from inappropriate human activity. Archaeological work at MNMS sheds light on ways to make optimal use of the sanctuary's resources and maritime landscape through inventorying, locating, documenting, assessing, managing, and interpreting the sanctuary's archaeological, historical, and environmental resources.

In 2002, when NOAA archaeologists and U.S. Navy divers worked to raise the *Monitor's* turret, the skeletal remains of two sailors were found. On December 31, 2012, the 150th anniversary of their deaths, the sailors' remains

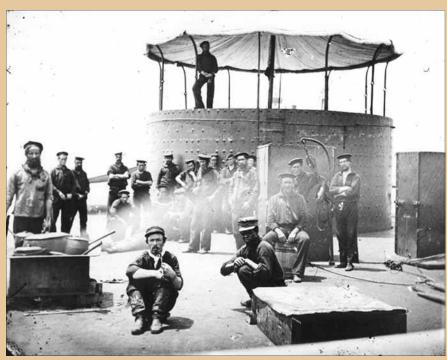
Bring History to Life

Technology has brought the USS *Monitor* and other sunken artifacts like it into the classroom. Thanks to the hard work of the Monitor National Marine Sanctuary's (MNMS) staff, students from all over the country can explore the remains of the ironclad and understand the lives of the men who served on her.

In fact, the MNMS program undertook a project to apply facial reconstruction software to the remains of the sailors

recovered from the wreck. The results allow students and visitors to see a representation of how those men may have appeared in their final days of service to our nation. They can look through the porthole of history and better understand the maritime roots that shaped American grit.

The USS *Monitor* did her duty preserving the Union in the Battle of the Ironclads. Now we have a duty to continue to preserve her.





The USS Monitor in 1862 (left) and the facial reconstruction of the two recovered skeletons. NOAA National Marine Sanctuary Program photos

were interred at Arlington National Cemetery. NOAA continues working to identify these men and to establish a protocol for dealing with human remains if additional remains are found at other underwater archaeological sites in the future.

The sanctuary's current research program continues to ensure the scientific recovery and dissemination of historical and cultural information from the site, and to preserve and manage the remains of the *Monitor* in a manner that appropriately enhances the significance and interpretive potential of the warship. Additionally, resource monitoring programs help NOAA better understand the living and natural resources within the sanctuary and in the surrounding waters.

Expanding the Sphere of Influence

In 2013, after several years of scientific and archaeological assessment and in coordination with the public, NOAA proposed to expand the MNMS to include additional

maritime heritage resources. The proposed expansion would protect a nationally significant collection of ship-wrecks that currently have little or no legal protection, including one of America's only World War II battlefields.

For more than 40 years, MNMS honored the iconic Civil War ironclad and the memory and service of Civil War sailors. The proposed sanctuary expansion provides the opportunity to honor another generation of mariners that helped defend the nation during World War I and World War II. Expansion of MNMS would elevate the maritime legacy of coastal North Carolina, preserve important historic sites for future generations, promote increased access and stewardship, and provide economic benefits to coastal communities.

Coastal North Carolina serves as a uniquely accessible underwater museum and memorial to the nation's rich maritime history. It is also an ideal location to study and preserve historic wreck sites dating back to the Age of North American Exploration, the Revolutionary War,

the Civil War, and perhaps most prominently, World War II's Battle of the Atlantic. With preservation, these resources offer historians, maritime enthusiasts, recreational divers, fishermen, beachgoers, and outdoor adventure seekers the ability to experience this unique region and celebrate the nation's maritime heritage.

The Monitor National Marine Sanctuary Advisory Council and the public were presented four possible expansion models on June 5, 2014:

- The first model only restricted boundaries around select wreck sites, similar to that of MNMS' current boundary.
- The second model established a small area centered around the waters off Cape Hatteras. Boundaries were established to include several wrecks and adjacent waters and culturally significant features in the landscape.
- The third model consisted of a large area centered off Cape Hatteras that included many historically significant wrecks in federal and potentially state waters. This model included sanctuary boundaries around individual sites, and designates a nonregulatory study area.
- The fourth model consisted of three designated areas, each capturing both a representative collection of wrecks of many eras and vessel types in federal and potentially state waters, and the primary historically significant wrecks off of most of the Outer Banks.

The Coast Guard advised the council that if expansion were to occur, the easiest models to use to conduct surveillance and enforcement operations would imitate that of the second model. Receiving enough positive feedback to move forward, the council voted to move forward with expansion.

To date, no further action has been taken to determine what boundary models would be used for the expansion. As an ex-officio member of the Monitor National Marine Sanctuary Advisory Council, the Coast Guard can work directly with the sanctuary superintendent and council stakeholders to balance the objectives of regulations under consideration and the degree to which adopted regulations can be enforced at sea. Once regulations are adopted, this same venue also affords the opportunity to compare the sanctuary's enforcement priorities with the resources that the Coast Guard can bring to bear to address these priorities.

The remnants of historic Naval vessels that lie along the Graveyard of the Atlantic are the greatest links to our



The interment of the two crew members' remains. Coast Guard photo by Steven Tucker

naval fighting tradition and our continued pursuit of sea supremacy. Accordingly, given their standing as a war grave, their historical significance in the perpetuation of our nation, and as cultural resources emblematic of times of turmoil and sacrifice, these wrecks are clearly artifacts worth preserving. Expansion of the Monitor National Marine Sanctuary, its effective management, and the dedicated effort of federal, state, and private partners are critical to safeguarding these important resources now and into the future.

For more information

Learn more about the Monitor National Marine Sanctuary as well as various historical shipwrecks along North Carolina's Outer Banks at https://monitor.noaa.gov/

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