

North Carolina Shipwrecks



NOAA divers explore the shipwreck of the USS *Schurz* off the coast of North Carolina. Photo: Casserley,

Research on World War I and II Shipwrecks

NOAA divers from Monitor National Marine Sanctuary (MNMS), the National Centers for Coastal Ocean Science (NCCOS), and the NOAA Ship *Nancy Foster* partnered this summer as part of a multi-year study of World War I and World War II shipwrecks off North Carolina's coast.

The goal of the partnership is to characterize the archaeological and biological status of shipwrecks and rocky reefs in proposed expansion areas of MNMS, by using high-resolution video and acoustic imaging, remote sensing equipment, and visual assessments. This was the first year of the study, and divers dove off Beaufort, North Carolina, on selected shipwrecks, including USS *Schurz*, *W.E. Hutton*, U-352, HMT *Bedfordshire*, and *Ashkhabad*.

Divers conducted biological and archaeological surveys, including videography, installed time-lapse video cameras and sound recorders, and conducted benthic and archaeological assessments of the sites.

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Over the years, Monitor NMS and NCCOS have collaborated, and the addition of the NOAA Corps officers on the *Nancy Foster* was essential to the diving team. They served as safety divers and contributed photographic documentation of the sites.

The numerous WWII shipwrecks off North Carolina's Outer Banks have become thriving artificial reefs and a huge economic benefit to the local recreational fishing and diving communities. Data and visual documentation of these important shipwrecks will be used to educate the public about the resources contained in their coastal communities and the benefits of protecting the shipwrecks for their historical and biological significance.

Learn more about the work Monitor National Marine Sanctuary does to survey and document North Carolina shipwrecks at <https://monitor.noaa.gov/shipwrecks/>.



The HMT *Bedfordshire* with an abundance of marine life.
Photo: Casserley, NOAA



Bow of HMT *Bedfordshire*, World War II, British anti-submarine patrol ship lost off Cape Lookout, North Carolina, on May 12, 1942, when torpedoed by U-558. Photo: Casserley/NOAA



NOAA maritime archaeologist documents the remains of the U-352's pressure hull and surveys the marine life that now calls the German U-boat home. Photo: Casserley, NOAA



NOAA maritime archaeologist documents the bow of the tanker *W.E. Hutton*. Photo: Casserley, NOAA



NOAA diver mapping the *Ashkhabad*, a tanker sank by U-402 on April 30, 1942. Photo: Sassorossi, NOAA

Baseline Assessments of Maritime Heritage Sites

In collaboration with the Bureau of Ocean Energy Management (BOEM), baseline assessments were made this summer on suspected maritime heritage sites near Frying Pan Shoals, North Carolina. The project, the North Carolina Collaborative Archaeology Survey, brought together archaeologists and divers from BOEM and NOAA, as well as East Carolina University, University of North Carolina Coastal Studies Institute, and University of North Carolina Wilmington.

The goal of the collaboration was to evaluate the significance of known and potential shipwreck sites within and near areas under consideration for wind energy development. The project focused on collecting measurements and observations, along with video and photographic surveys of each site, with an emphasis on photogrammetric modeling.

Photogrammetry uses a camera as a survey tool by combining thousands of images into a scalable 3-D model and extremely accurate mosaics. Photogrammetric models provide a complete picture of the wreck site and help with interpretation and identification. The models are particularly useful on unknown wrecks as they give accurate dimensions and record features that help researchers identify and determine the site's significance. Even though the field work has ended, work continues with archival and historical research to learn more about unidentified shipwrecks.

To learn more about the work Monitor NMS has done since 2008 to document North Carolina shipwrecks, visit <https://monitor.noaa.gov/shipwrecks/>.



Baitfish swarm around the intact Bow of *Raritan*, a freighter that ran aground near Frying Pan Shoals in 1942. Photo: Hoyt, NOAA



East Carolina University Diving Safety Officer, Jason Nunn, encounters a sand tiger shark amongst the wreckage of *Raritan*. Photo: McCord, UNC CSI



Left: Joe Hoyt, Monitor NMS, prepares to release a recently rehabilitated loggerhead, Coletta, who hitched a ride on the expedition, while Mellissa Hall from NC Wildlife Resource Commission (NC WRC) supervises. Photo: Sassorossi, NOAA



Above: Melissa Hall, NC WRC and Will Sassorossi, Monitor NMS, prepare to release Puck, a juvenile Hawksbill. Photo: Hoyt, NOAA

Monitor NMS's Volunteer of the Year



Gerald Hanley was named as Monitor NMS's Volunteer of the Year! Since 2004, Gerry has volunteered at The Mariners' Museum in the Batten Conservation Lab donating hundreds of hours in the preservation of USS *Monitor* artifacts. He has provided invaluable support to the long-term artifact conservation program through research and advocacy. Please join us in congratulating Gerry and thanking him for all his dedication to preserving the *Monitor's* legacy!

Photos: The Mariners' Museum

Postcards from the Field

This summer, the 2016 Battle of the Atlantic Expedition was highlighted by NOAA in their series of Postcards from the Field. To see this and other Postcards, visit <https://sites.google.com/a/noaa.gov/postcards/?pli=1>. To learn more about the expedition, visit <http://oceanexplorer.noaa.gov/explorations/16battlefield/welcome.html>.

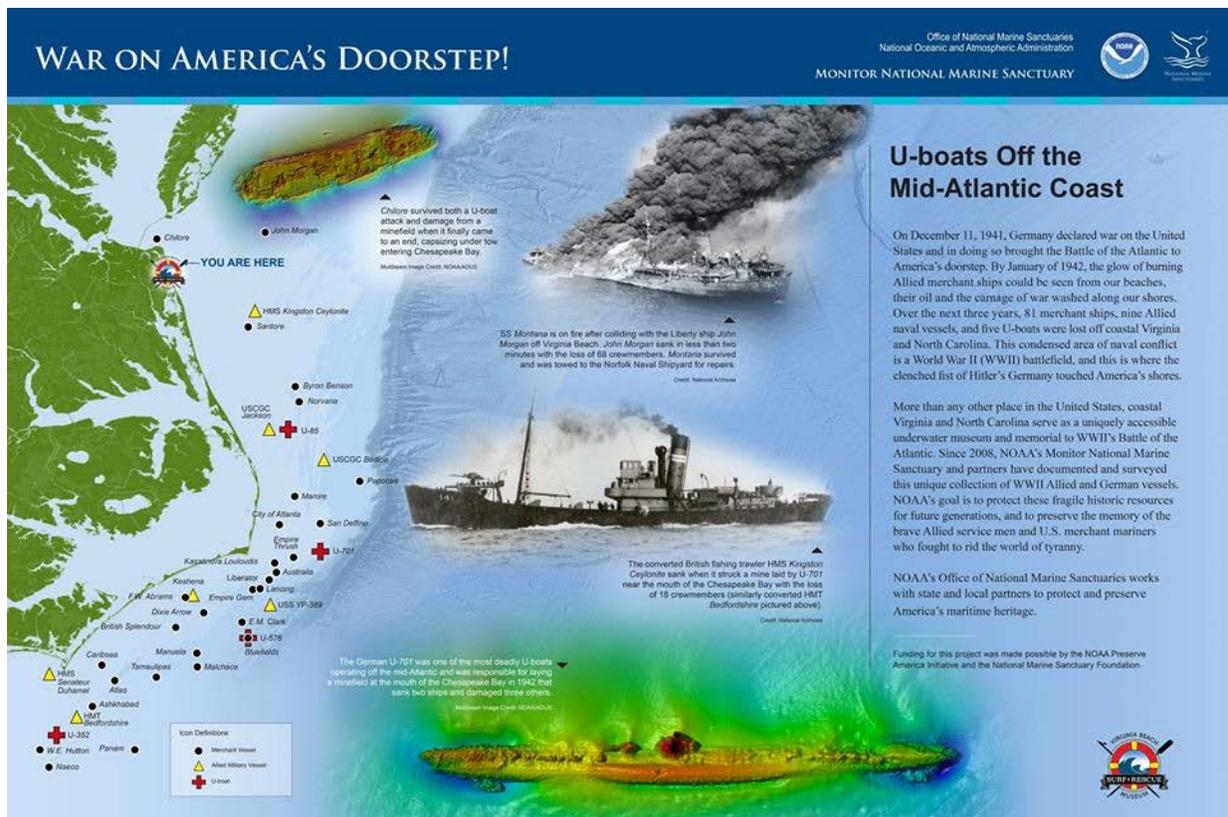
POSTCARD FROM THE FIELD

Rare look at historic battlefield

A photograph showing a diver in a submersible looking at a large, rusted metal artifact underwater. The diver is wearing a cap and a blue shirt. The artifact is a large, cylindrical object, possibly a part of a ship's hull, and is covered in rust. The scene is illuminated by blue light, and the water is dark. The text "POSTCARD FROM THE FIELD" is written in a blue banner in the top left corner, and "Rare look at historic battlefield" is written in a blue banner in the top right corner.

One year ago, NOAA's Joe Hoyt (with cap) and Robert Carmichael, of Global Underwater Explorers, became the first people to see this 220-foot German U-boat up close since it was sunk off NC's coast in 1942. Lying in a rare WWII battlefield in U.S. waters, the U-boat is among the over 90 estimated WWII vessels near NOAA's Monitor National Marine Sanctuary. Diving 690 feet in a submersible, the team collected data to build 3D reconstructions to help preserve the history of this era.

New Trail Sign at the Virginia Beach Surf and Rescue Museum



A new trail sign was installed at the Virginia Beach Surf and Rescue Museum honoring World War II's Battle of the Atlantic. The sign is the final piece of a World War II exhibit that tells the story of the tremendous damage done by German U-boats off the mid-Atlantic coast. It honors the brave men of the U.S. Merchant Marine and Allied naval forces who fought and died to help rid the world of tyranny. The exhibit also highlights the work of the Monitor National Marine Sanctuary to document these fragile resources and our efforts to preserve them for future generations. The exhibit was made possible through the generous funding provided by NOAA Preserve America. To learn more about the Battle of the Atlantic off the mid-Atlantic, visit <http://monitor.noaa.gov/shipwrecks/>.



Left: Kathryn Fisher, Executive Director, Virginia Beach Surf and Rescue Museum and Tane Casserley, Research Coordinator for Monitor NMS, pose in front of the newly installed trail sign. Photo: NOAA Right: Exhibit panels inside the Virginia Beach Surf and Rescue Museum made possible by the generous funding of NOAA Preserve America. Photo: NOAA

Sketchfab – NOAA’s Monitor NMS

With a commitment to preserving and protecting our nation’s maritime heritage, Monitor NMS has worked with several organizations to create 3-D models of shipwrecks and USS *Monitor* artifacts. On our Sketchfab site, you will find 10 models that include the wrecks of USS *Monitor*, U-85, USCGS *Jackson*, and *F.W. Abrams*. In addition, through a partnership with The Mariners’ Museum, the “USS *Monitor* Virtual Artifact Collection” is on the site. The collection includes models of *Monitor* artifacts, such as a gun sponge, the condenser, a *Monitor* sailor’s boot, and more.

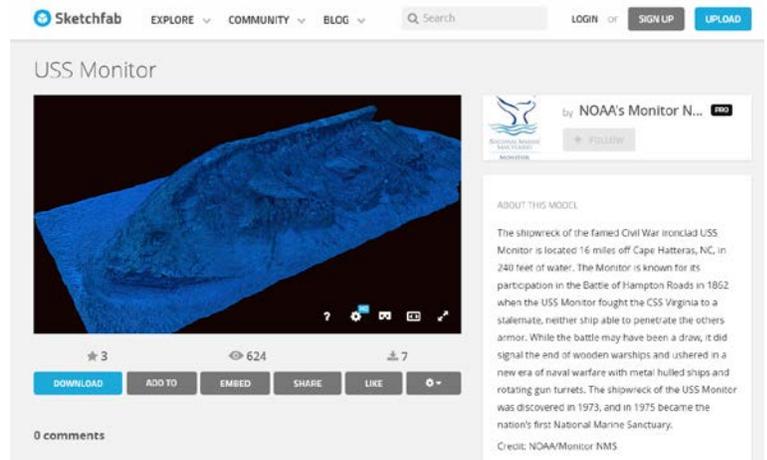
Once you click on a model, it uploads into a 3-D model that you can manipulate and study in detail. Remember, when you download some of the *Monitor* artifacts, they are upside down because the ship inverted when it sank!

Be sure to check back often as we add new models.

NOAA’s Monitor NMS Sketchfab site:
<https://sketchfab.com/NOAAMonitorNMS>



World War II Memorial in Washington, DC. Photo: Casserley, NOAA



3-D model of the USS *Monitor* on NOAA’s Monitor NMS’s Sketchfab website. Image: NOAA

World War II Lectures

Over the past several months, Monitor NMS staff have presented and lectured at numerous outreach events, educational seminars, and business luncheons and meetings to bring national attention to when World War II truly came home to America, just off North Carolina’s coast. Staff, as key note speakers at events, such as the National WWII Memorial 75th Anniversary of the Battle of the Atlantic, National WWII Memorial Teachers Conference in Washington, DC, and Virginia’s World War I & World War II Statewide Teacher Symposium, have worked to educate people about the important maritime heritage resources located off North Carolina and the story they tell of the Battle of the Atlantic in 1942. Reaching out to summer camps for seniors, Rotary Clubs, Lions Clubs, teacher seminars, museum lecture series, dive shops, and more, Monitor NMS staff have also showcased the shipwrecks that we and partners have documented since 2008, in an effort to pay homage to the U.S. Merchant Marine seamen and Allied sailors who served aboard these vessels. To learn more about these North Carolina shipwrecks, visit <https://monitor.noaa.gov/shipwrecks/>.

For more information on how to book a speaker, contact Shannon Ricles at 757-591-7328 or Shannon.Ricles@noaa.gov.

Upcoming Outreach Events

Here are some of the dates for future outreach events. Mark your calendar and be sure to join us!

- September 16: Day at the Docks at Hatteras, North Carolina
- October 7: North Carolina Seafood Festival at Morehead City, North Carolina
- November 2-4: North Carolina Maritime History Conference in Corolla, North Carolina

For more information contact: Shannon Ricles at Shannon.Ricles@noaa.gov or visit the [calendar section](#) of our website.

Meet Your Sanctuary Staff

David Dodsworth has served as the IT Coordinator for the *Monitor* National Marine Sanctuary since 2009. Dave has an extensive background in IT management, network administration and computer tech support.

While serving in the U.S. Navy, Dave began working with computers as a Submarine Electronics Technician. After serving 11 years, he left the Navy to start a company that specialized in custom computer builds, computer service, and business network consulting. After 12 years as a successful entrepreneur, Dave sold his company to pursue a career in enterprise level systems administration, which brought him to NOAA.

In addition to handling IT duties at Monitor NMS, Dave is the IT Coordinator for Flower Garden Banks National Marine Sanctuary in Galveston, Texas; Stellwagen Bank National Marine Sanctuary in Scituate, Massachusetts; and Florida Keys National Marine Sanctuary in Key West. He administers the sites remotely and travels to them frequently. Dave also administers the data backup routines for several other Office of National Marine Sanctuaries (ONMS) sites and works closely with ONMS headquarters on Active Directory deployments, security vulnerability mitigation, and technical support.

Dave received formal IT education from St. Leo University and Old Dominion University. He holds numerous industry certifications including A+, Network+, Security+, ITIL and is a Microsoft Certified Professional. Combining his passion for technology and the sea has been instrumental in his success as a key contributor to the mission of the National Marine Sanctuary Program.



Dave Dodsworth, IT Coordinator, does stop working every now and then to enjoy the beauty of the ocean. Photos: NOAA

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