



Shipwrecks

Introduction

Exploring shipwrecks is a great way to learn about history and science! This unit is broken down into three sections: the *D.M. Wilson* wreck, the USS *Monitor* wreck, and general shipwreck learning activities. Feel free to pick and choose from the videos, VR dives, and hands-on activities below to create your own custom learning experience, or do them all!

Wreck #1: [Wilson](#)

Located in northwestern Lake Huron, Thunder Bay is adjacent to one of the most treacherous stretches of water within the Great Lakes system. Unpredictable weather, murky fog banks, sudden gales, and rocky shoals earned the area the name "Shipwreck Alley." Established in 2000, the 4,300-square-mile [Thunder Bay National Marine Sanctuary](#)



Photo: Nick Zachar/NOAA

protects one of America's best-preserved and nationally significant collections of historic shipwrecks. To date, nearly 100 shipwrecks have been discovered within the sanctuary.

Built in 1873, *D.M. Wilson* was a 179-foot freighter headed for Milwaukee, Wisconsin with a load of coal when it sprang a leak and began sinking on October 27, 1894. The steamers *Hudson* and *Samuel Mitchell* took it in tow, but it foundered in 40 feet of water two miles north of Thunder Bay Island. The crew was rescued by a fourth ship. *Wilson* was broken up by a storm 10 days later, and debris was driven as far south as Tawas, Michigan, more than 80 miles away. Much of the machinery was later salvaged. Most of *Wilson's* hull remains intact today, including a large windlass that rests on the bow. The cold, freshwater of the Great Lakes preserves the integrity of ships sunk hundreds of years ago, making it possible to observe fine details of the ship's structure and cargo, and in some cases, even the personal items brought on board by the crew.

Explore

Watch [this short video of the D.M. Wilson wreck](#). Which parts of the ship can you recognize in this dive?

Take a [virtual dive in Shipwreck Alley](#) to visit *D.M. Wilson*, one of the hundreds of shipwrecks protected in Thunder Bay National Marine Sanctuary. Don't forget to pause the video and "look around." Record observations of the appearance of the shipwreck and any living things you see on or around it.

Wreck #2: USS [Monitor](#)

The USS *Monitor* is one of the most historic warships of all time. The Civil War ironclad was the Union's first iron ship and fought on March 9, 1862, in the Battle of Hampton Roads against the CSS *Virginia*. Just before dawn on December 30, the USS *Monitor* began to take on water due to a storm. Throughout the night and into the next day, the situation below deck grew serious. Water reached the coal bunkers, and the coal became too wet to keep up the steam in the engines. Mountainous waves crashed over *Monitor's* deck as the storm intensified. Shortly after midnight, the water overcame the engine and *Monitor's* pumps stopped, and with them went any hope of saving the ship. Forty-seven men were rescued from the USS *Monitor* before it slipped beneath the waves. Sixteen were lost—either washed overboard while trying to reach the rescue boats or trapped inside the foundering vessel.

In 1973, an interdisciplinary team of scientists led by John G. Newton of the Duke University Marine Laboratory proposed using geological survey equipment for underwater archaeological investigations to locate and salvage the USS *Monitor*. After nearly a year of exhaustive historical research, the scientists narrowed the search region down to an area of high probability where *Monitor* likely sank. They developed sonar images and looked for specific patterns, such as the turret, armor belt, and the nearly flat bottom, that would indicate the wreck was the *Monitor*. The survey located 22 shipwrecks. Intensive study of the visual evidence over the next seven months led to a tentative identification of one of the wrecks as *Monitor*. A second visit to two of the wrecks in April 1974 confirmed the identification of *Monitor*, resting in 230 feet of water approximately 16 miles off Cape Hatteras, North Carolina. On January 30, 1975, NOAA designated the wreck of the USS *Monitor* as the nation's first national marine sanctuary. Over 45 years later, [Monitor National Marine Sanctuary](#) continues to protect this famed Civil War ironclad.

About 300 miles northwest of Monitor National Marine Sanctuary, you'll find one the newest national marine sanctuaries, Mallows Bay-Potomac River. This sanctuary is most renowned for the remains of over 100 wooden steamships known as the Ghost Fleet, part of America's engagement in World War I. Check out [the website to learn all about the shipwrecks found in Mallows Bay-Potomac River National Marine Sanctuary!](#)

Explore

Take a [virtual tour of the USS *Monitor*](#) and discover what the remains of the ship look like today.

- After completing the USS *Monitor* virtual tour (but before watching the video below!), fill out the "Know" and "Want to know" columns of [this KWL chart](#). As you watch the video, fill in what you learned in the "Learned" column.

Travel back to 1862 in [this 18-minute video to learn about the USS *Monitor's* role in the Civil War, the discovery of the shipwreck, and the site's designation as the first national marine sanctuary](#). Don't forget to fill out the "Learned" column of [your KWL chart](#) as you watch!

Check out [these interactive maps of *Monitor*](#) created by NOAA's National Centers for Coastal Ocean Science to study fish who now call the shipwreck home. Turn on the map legend to see the schools of fish around the wreck and their tracks!

Learn more about the [origins of the *Monitor*](#), life on deck, the storm that sank the ironclad, and what we've learned from the shipwreck.

- Afterwards, test your knowledge with a [fun USS Monitor crossword puzzle!](#)
- Create your own replica of *Monitor* by printing out [this USS Monitor model](#) and following [these directions](#).
- Or, create an origami replica of *Monitor* using [this origami folding guide sheet](#).

General Shipwreck Activities: Become a Maritime Archaeologist

Learn how archaeologists use photo mosaics to document and interpret shipwreck sites by trying it yourself in [this photo mosaic activity!](#)

[Wreck detectives hands-on activity](#): Create a model of a shipwreck, use a grid system to document the location of artifacts left in the wreck, and get creative by crafting a story to explain how the artifacts came to be on the ship!

Curious how a national marine sanctuary is created? Watch a [short video on the designation of the new Wisconsin Shipwreck Coast National Marine Sanctuary!](#) Check out [the Wisconsin Shipwreck Coast website](#) to learn more.

Want to dive deeper into shipwrecks? Take a look at this [list of shipwrecks from the Civil War through World War II](#).



Photo: David J. Ruck/NOAA

[Download the ParkPassport App](#) to learn more about national marine sanctuaries. Take virtual tours, view live webcams, earn digital badges, and more.

All information in this document was adapted from the NOAA Office of National Marine Sanctuaries' resources. This collection was developed in partnership with the National Park Trust in support of the 50th anniversary of the National Marine Sanctuary System. *The inclusion of links in this guide does not imply endorsement or support of any of the linked information, services, products, or providers.*

