

Edited by  
Lelle Malmstöm

Canons on  
the *Blücher*  
wreck are still  
in position.

Text by Mattias Vendlegård  
Photos by Mattias Vendlegård  
and Daniel Kressin

**A joint group of GUE divers from Norway, Sweden and Finland, led by project leader Gunnar Midtgaard, documented the wreck of the *Blücher* in Norway, and its condition, during the summers of 2011 and 2012. Mattias Vendlegård, who served on the photo team during the project, has the story.**



# Blücher Wreck

— WWII German Cruiser in Norway



Historical photo of the WWII German cruiser *Blücher*

We slowly descended through the cold dark water. With every metre, the darkness became more and more dense, and the water slowly got colder and colder. Torchlight beams from our team were all pointing down into the darkness, all of us searching for the same thing—

the thing we knew was down there, the thing that had brought us all together, and the reason why we were here.

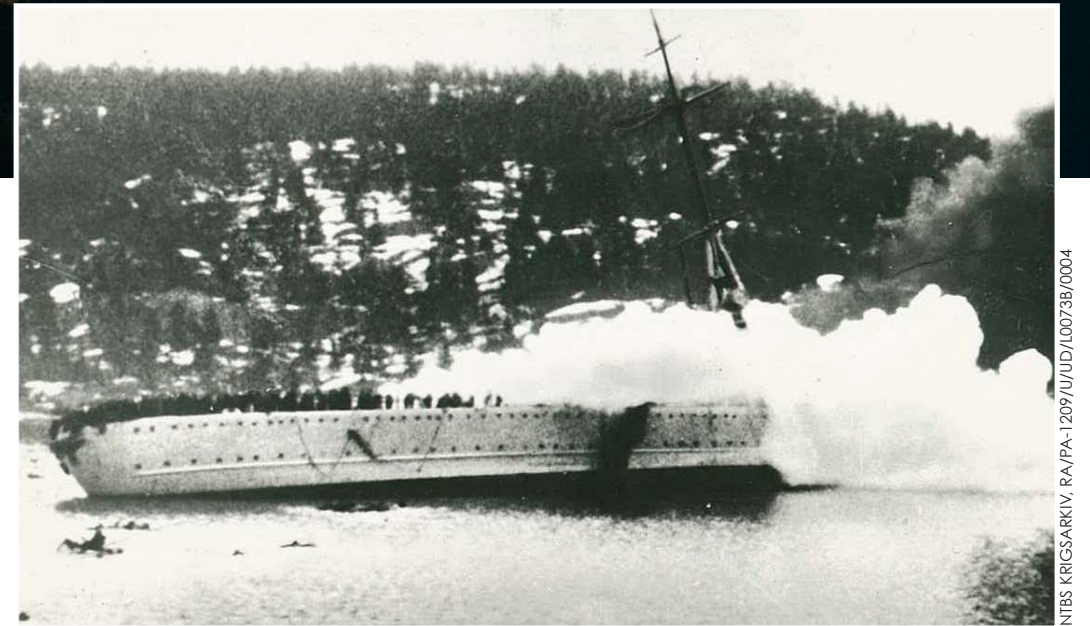
Suddenly, out of nowhere, *Blücher* appeared. Just a few metres in front of us, we saw her as a reflection of dark steel. *Blücher* was trying to hide her size

in the darkness, but we all knew that we were tiny compared to her—just tiny visitors at her final resting place.

When you land on the wreck like *Blücher*, a feeling always comes over you. This machine of war was sunk in battle, and when it landed on the



The dive boat reaches the entry point for diving the *Blücher* wreck (above); Torpedo on *Blücher*, still in position, ready to launch (right); Historical photo of the *Blücher* sinking in 1940 in Oslofjord (lower right); Support diver gathering stages and scooters (left)



bottom of the Oslofjord, *Blücher* did it while fighting, and that is the way she was frozen in time. History never feels as alive as when one dives a wreck that had fought for its very survival. One can see the traces

of the battle: empty shells, guns searching for a target, misshaped metal, and boots of sailors who never made it back to the harbour from which they set sail.

This is history in its most real and naked form. There are no signs or posters, tour guides, restoration plans or souvenir shops on wrecks. Wrecks are a frozen moment in time, a moment of panic and dismay. When the rest of the world moved on, time on *Blücher* stood still. Here it is still the 9th of April 1940. But nothing lasts forever, and slowly, this magnificent piece of history is disappearing.

Eventually, the harsh environment, which surrounds *Blücher*, will defeat her. *Blücher* was not made to be here; yet

again, she was fighting a losing battle. One day, nothing will remain of *Blücher*. That was why we were here, and that was why what our team did at this site was important.

### April 1940

It was the night of 8 April 1940. World War II had started only seven months earlier in Poland, and Norway was just about to realise that it was next on the list for Hitler's forces. As part of *Operation Weserübung* (code name for Germany's assault on Denmark and Norway), Germany's newest and most modern heavy cruiser, *Blücher*, was ordered to enter the Oslofjord together with the "pocket battleship" or Deutschland-class cruiser *Lützow*, the light cruiser *Emden*,

three torpedo boats and eight minesweepers carrying a total of 2,000 troops.

The plan was to invade the Norwegian capital, Oslo, in a surprise attack. This was *Blücher's* first mission, and the commander on board, Oscar Kummetz, believed that the heavily disarmed Norwegians forces would not have the guts or power to stand up against his modern heavy cruiser and the ships that followed her.

In the fjord, the Norwegians had Oscarsborg Fortress, but its commandant, Birger Eriksen, did not have much at his disposal to defend the capital. The fortress had only three 28cm Krupp canons

dating back from 1892, and north of the fortress, he had the Kaholmen torpedo battery, which was equipped with only a few 45cm Whitehead torpedoes made in 1906.

The fort was understaffed, and the few men they had were neither trained nor

experienced in combat. They were a mix of conscript recruits, chefs and medics, and none of them had ever seen or heard a Krupp canon in action before, and definitely had never fired one themselves. Commandant Eriksen's lack of manpower meant that he

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The torpedo battery on the starboard side, where the teak deck is still in good shape

could not even run all three of his cannons and had to settle with just two.

“Incoming warship with lights off at Filtvedt!” This report reached Eriksen early in the morning, and he knew that the enemy now was just six nautical miles from his fortress. Eriksen knew that the fortress was more like a museum than a modern fort, but the sense of duty and loyalty to his country made him shout out the order: “Fire with full power!”

With Eriksen himself working on one of the canons, they fired as soon as they had *Blücher* in range. The first round fired hit *Blücher*. One of the shells hit an ammunition storage, causing a massive explosion that set the heavy cruiser on fire. Despite this

hit, a ferocious battle broke out between the fortress and the advancing *Blücher*.

But *Blücher* did not know about the torpedo battery at Kaholmen, and as soon as she came in range, they fired. Despite their age, the torpedoes did their job and hit her hard. At this point, *Blücher*'s rudder had stopped working, and she had begun to keel. About 1,000m after she passed Oscarsborg Fortress, *Blücher* went down into the fjord forever.

The faces and screams of wounded sailors swimming for their lives in the mix of cold water and burning oil were terrible. The pocket battleship *Lützw* and light cruiser *Emden* now had the full attention of the Norwegians

and started getting bombarded. The emergency command of full speed astern was given, and the ship reversed away from the shelling, as they believed that *Blücher* had hit mines.

The sinking of *Blücher* caused a delay of the German attack on Oslo. Thanks to this delay, the king of Norway and members of the Norwegian government were able to escape, and so the Norwegian government therefore never surrendered to Nazi Germany.

### Present day

Today, the massive wreck of *Blücher* rests on the bottom of the Oslofjord at 90m deep. During the summers of 2011 and 2012, a joint group of GUE divers from Norway, Sweden





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and Finland, under project leader Gunnar Midtgaard, documented the wreck and its condition.

The wreck is almost completely upside down and rests on the port side and the bridge. Her mighty 2x20cm front canons are hidden in the sea bottom, and today, only the back corners of the canons can be seen. The two 2x20cm canons from the stern have fallen off the upside-down deck and now lie also upside-down on the seafloor.

All twelve of the 10.5cm canons, as well as all the anti-aircraft guns, are still in their original place on the ship. It is easy to get the feeling that there are canons and guns everywhere one looks when one

dives this mighty war machine.

*Blücher* torpedo batteries are still in place with some of the torpedoes that never got the chance to spread their destructive power. Here, you can also see that the teak deck is still in good condition despite spending more than 70 years in the waters of the fjord.

### The project

The goal of the project has been to document *Blücher* and its current condition. As mentioned earlier, the project has been run as a joint project with GUE divers from Norway, Finland and Sweden. The diving within the project was conducted in the summers of 2011 and 2012, with deep dive teams that took video footage

and photos of the wreck. The deep dives were conducted with teams of three to four divers, including two HMI lighting divers, one underwater photographer/videographer and a dive model.

All the deep dive teams were supported by a dedicated team of support divers in the water, assisting the deep dive teams with gas, nutrition and equipment. Fjords Underwater Explorers (FUE) from Norway hosted the project and managed the logistics, with boats and gas fills. The gas fills were a critical part of the project, and all dives were done with 12/65 and open circuit. This gave the deep dive teams a 25-minute bottom time, with a total runtime of 2.5 hours. Each



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Support diver picking up stages and scooters during a shallow decompression stop (above); Anti-aircraft guns on the *Blücher* wreck (left)

deep dive team did three dives, spread out over three days.

Even though all the dives were done during summertime, water temperatures at the bottom never rose over 5°C, or 15°C in the shallower depths of the decompression stops. Diving to these depths, for so long, in such cold waters, demanded a lot from the divers, their equipment and routines. All of the divers involved in this project were experienced in both cold-water diving and deep diving, a crucial requirement in order to keep the diving safe, while at the same time, producing the results that the project was aiming for.

There was no daylight present at the 90m depths in the Oslofjord, and *Blücher* lay in complete darkness. Even with two HMI lights per team, the visibility was never more than 5 to 10m, something

which demanded great team awareness and navigation skills from all the diver who tried to dive the wreck.

It is important to remember that *Blücher*, and the context in which she was sunk, is an important piece of history, as well as a gravesite for several hundred sailors. Anyone who dives this wreck should keep this in mind and always dive with respect.

To everybody interested in this project or the history of *Blücher*, we are very proud to announce that a documentary video was launched in 2013. The release date is not yet set but keep your eyes peeled, as it is well worth watching for anybody interested in diving and maritime history. ■

*Special thanks go to Fjords Underwater Explorers (FUE) who managed all the logistics of the project.*

### DIVERS OF THE PROJECT:

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SUPPORT MANAGER  
Ronald Larsen

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Bjørn Opperud, Norway  
Martin Nålsund, Norway  
Hallvard Opheim, Norway  
Jørgen Birkhaug, Norway  
Anders Bertelsen, Norway

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Erling Hoydal, Norway  
Kacper Rybakiewicz, Norway  
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Garm Sätre, Norway

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Daniel Kressin, Sweden  
Erik Hultén, Finland  
Fredrik Gestranus, Finland  
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## Dyngökoggen: Rare Centuries-Old Wreck in Sweden

— Interview with marine archaeologist Staffan von Arbin

Interview and text by Mimo Moqvist  
Translation edited by G. Symes

**Last autumn, maritime archaeologist Staffan von Arbin and his team discovered a very old wreck outside Dyngö, just outside Fjällbacka in Bohuslän (Bohus County). It later turned out to be a real find, but in fact, they were looking for a different wreck.**

“Yes, it is actually a slightly special story. We were really looking for a completely different wreck, from the 16th century. As early as 2005, I got in touch with a man whose father had found a wreck outside Dyngö when he was fishing for trout,” said von Arbin.

The father who found the wreck was no longer alive, but the son tipped off von Arbin about the find and told him that he had material that von Arbin and his team could see.

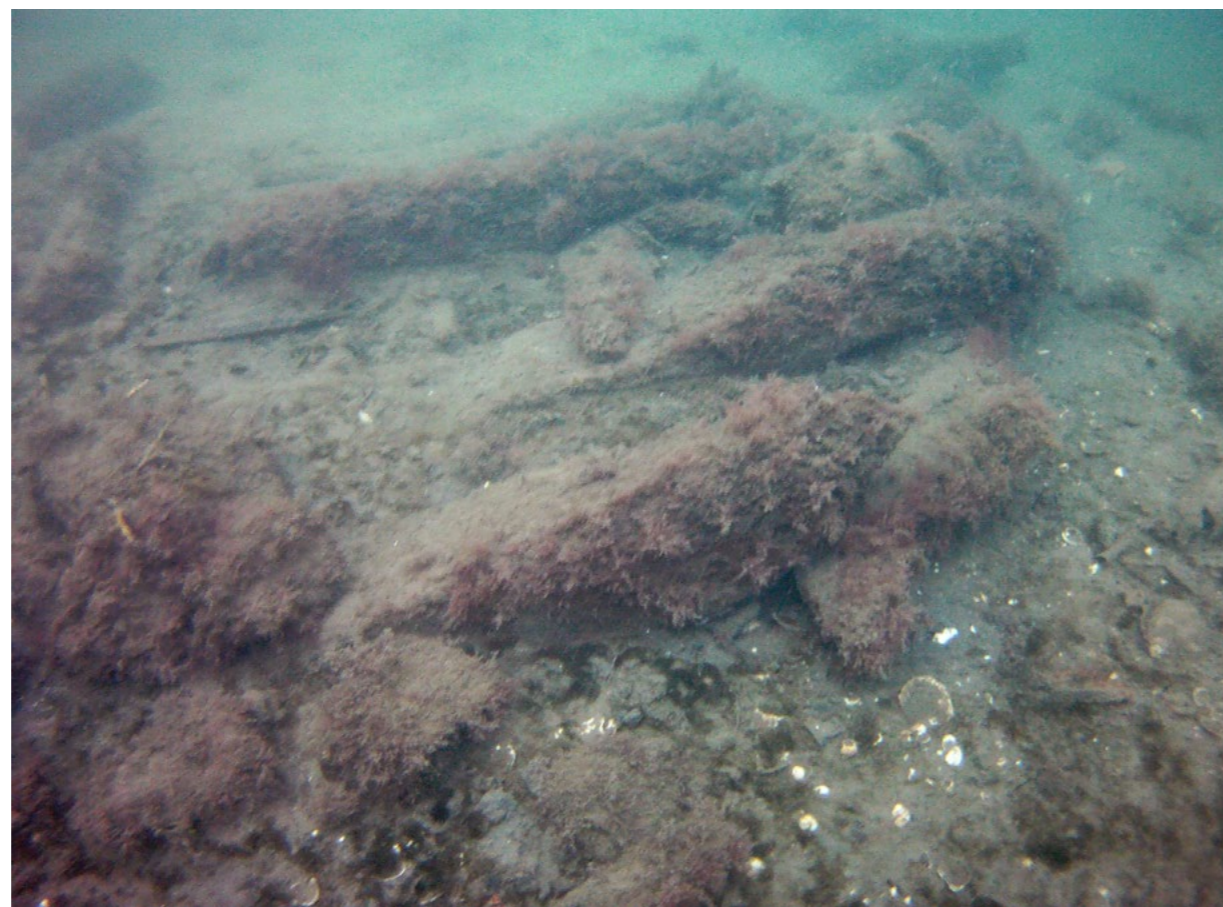
“His father had salvaged a large frame, which was lying under a tarp in the garden. We did a tree-ring dating of the wood, which indicated that it was from the early 16th century,” said von Arbin.

### Finding the wreck

In the fall of 2021, von Arbin and his colleagues dived at Dyngö to try to

find the wreck. By surveying the area with drones, they found a structure in the water that looked promising. They showed up at the scene and found a wreck.

“We understood quite quickly that it was not at all the ship we were looking for, but that it was at least as interesting as the 16th-century wreck—if not even more interesting,” said von Arbin.



Protruding ship timbers are heavily infested with shipworm, but under the sediment, the wood is well preserved. Photo by Staffan von Arbin, University of Gothenburg

### Permit and carbon dating

Shipwrecks dating before 1850 are ancient remains and may not be moved without a permit, so von Arbin contacted the county’s administrative board to get permission to take samples for a preliminary age assessment—which they received. A carbon-14 dating indicated that the ship could be as old as the 12th or 13th century. The method gives a rough

dating, so they applied for a new permit to do a more accurate tree-ring dating.

The sampling was done at the end of November and von Arbin got a little more data on the ship, as they got more samples. But they had to wait a few months before they got the carbon-dating results, which came in February this year. It turned out that the ship was built between 1233 and 1240, with wood from northwestern Germany.

“Tree-ring dating, or dendrochronology, is a very good method for finding out the age and origin of a ship. There exist reference chronologies to compare with, and in general, there are very good references for oak, and to some extent pine, which is very fortunate, as most old ships are built of just oak,” said von Arbin.

“The whole wreck is full of charred wood, so evidently, it had been subjected to a fierce fire. Maybe that is why it is there. Shipworm has been hard on the parts of the wreck that are exposed, but it is a lot more preserved in the bottom sediment. The wreck is about 10 by 5 metres, but

A diving archaeologist examines the sea bottom at Dyngö. Photo by Staffan von Arbin, University of Gothenburg

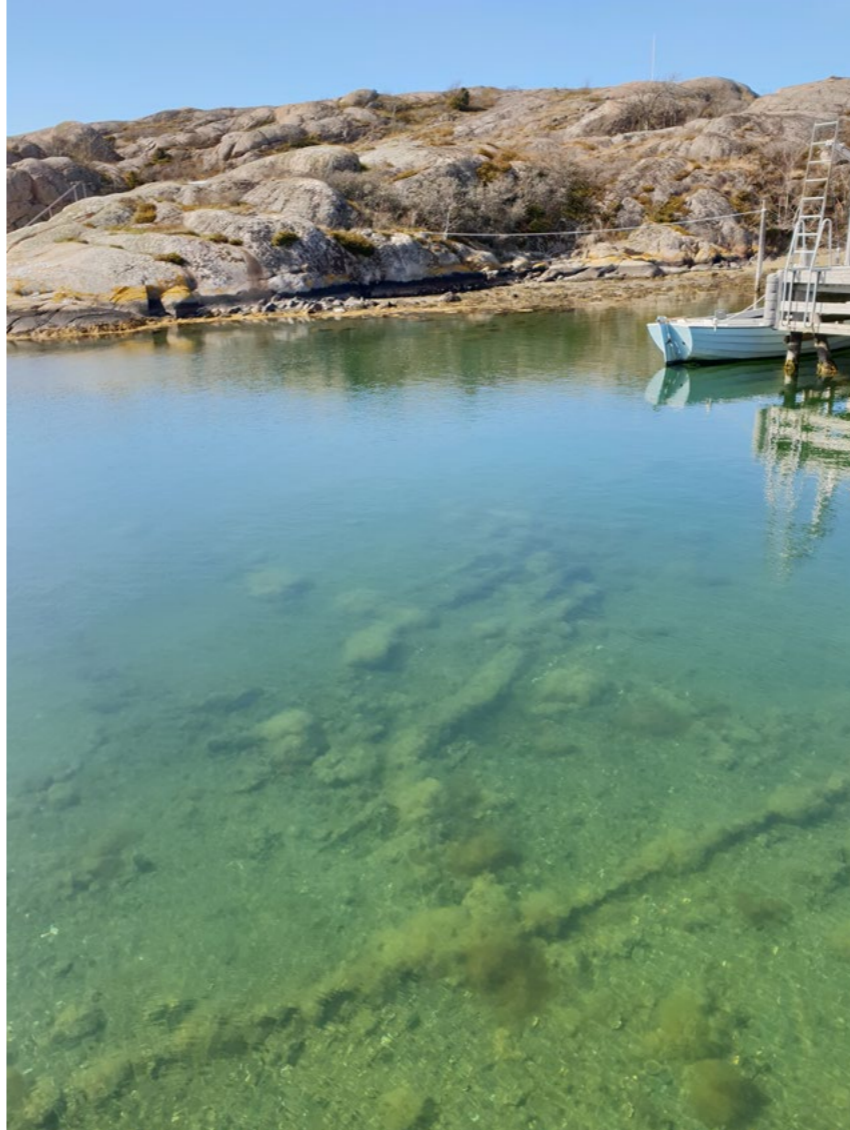


originally, we estimate that the ship may have been about 20 metres long, which is a fairly large ship for that time.”



Medieval depiction of a cog on a seal of Stralsund in Germany

The wreck is located near land, at a depth of only two metres, and can be seen from the surface, in clear waters. Despite this, it was not previously known by the locals. Photo by Staffan von Arbin, University of Gothenburg



## Further investigation

The hope is to eventually be able to make a larger investigation of the so-called Dyngökoggen (Dyngö Cog). But it requires a lot of planning, preparation and financing. It is not only personnel and equipment that is costly; during an excavation, the finds must not only be examined but also preserved. If it can be demonstrated that there is scientific value in an excavation, then

there is financial support that can be applied for.

"It will be an archaeological puzzle we put together, which gives us historical knowledge; we would, in part, get a better knowledge about the type of ship, which can help illuminate the development of the cog, because Dyngökoggen is one of the oldest found, and we might gain knowledge about why it is where it is," said von Arbin. "Even if it has

burned, we may be able to find out what was shipped, and based on that, we can deduce where it came from and where it was going."

Von Arbin has been working in maritime archaeology for more than 20 years but has mainly worked with contract archaeology (or rescue archaeology), which means that he conducts research before, for example, new ports are built, dredged or something similar—just as an archaeological survey is done before any big construction on land.

"But right now, I am also working on a doctoral dissertation,

on medieval shipping in Bohuslän. So, it suited me very well that I found this wreck right now," said von Arbin.

## Significant find

Dyngökoggen is one of his most significant finds.

"I have, of course, found a lot over the years, but never something this old," said von Arbin. "We may not have realized at first that it was so old and that it was a cog, but we understood that it was actually a really old find. These are the moments you live for as an archaeologist—when you get an exciting result or make an exciting discovery. That is what drives one, and to be able to solve this puzzle that I talked about. Then, of course, it was extra fun because it fits so well with the dissertation—to find Bohuslän's oldest wreck!"

The 16th-century ship they were actually looking for has not been found yet either.

"It would be fun to eventually find it too. But right now, the cog feels even more exciting to move forward with, of course," said von Arbin. ■

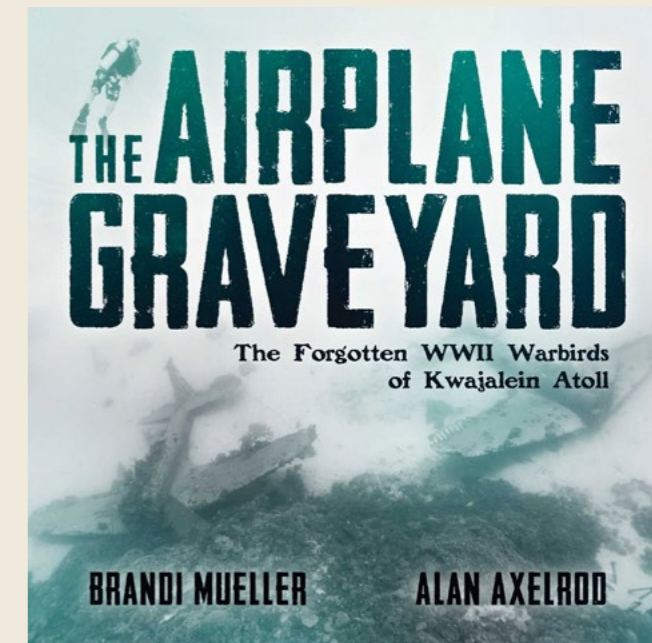
## FACTS ABOUT THE COG

The cog was a type of ship that dominated shipping in Northern Europe during the period from 1150 to 1450. It was characterized by a box-shaped, flat-bottomed and load-bearing hull, upright bow and stern, carvel-built bottom and clinker-built sides, and a square mainsail on the centrally placed mast.

It is often associated with the northern German Hanseatic League's trade successes during the Middle Ages. The type of ship is mentioned in written sources and is depicted on seals and paintings but is also known from about 30 wreck finds from all over Europe. The Dyngö Cog is one of the oldest cogs ever found and the seventh to be found in Swedish waters. ■



Archaeologist Staffan von Arbin with wood samples from the wreck. Photo by Anders Säldemark



Never before published in book form, see extraordinary images of the forgotten American WWII airplanes resting on the bottom of the Kwajalein Atoll lagoon, from award-winning underwater photographer Brandi Mueller. Available on: [Amazon.com](https://www.amazon.com)

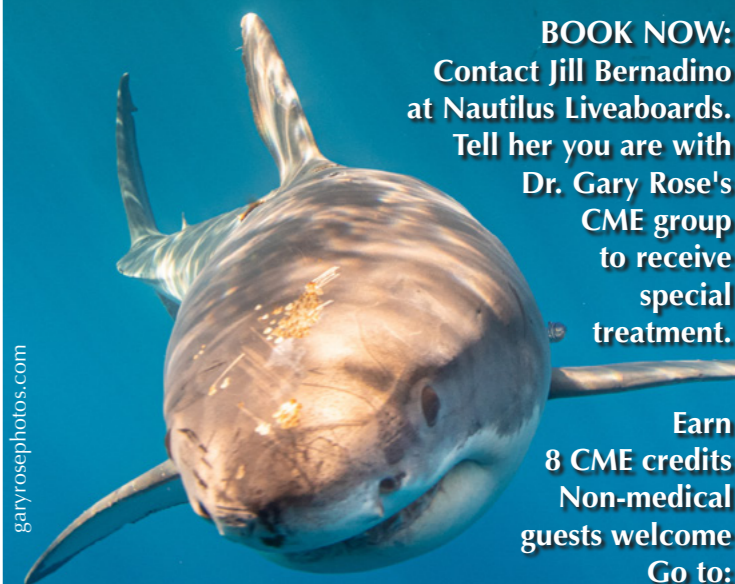
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American 19th-century painting of a schooner

## Shipwreck uncovered on North Carolina beach

**During a very high tide known as a king tide, a shipwreck believed to be from the 1800s was discovered on the beach in front of the Shoals Club on Bald Head Island.**

The club is located in Brunswick County to the south of Wilmington, North Carolina, USA. An archeological team visited the site. They determined that the wreckage was part of an old ship. Excited about the news, the Shoals Club posted on Facebook:

“History has been found on The Shoals Club beachfront! The king tide from earlier this year revealed the remains of a ship from the 1800s. This week, an archeological crew came out to examine and determine that it was a ship. We ask that all beachgoers stay away from these remains as we discover more. We do not have plans to remove it at this time. Stay tuned for updates.”

According to the National Oceanic and Atmospheric Administration (NOAA), a king tide is a popular, non-

scientific term that people use to describe an exceptionally high tide. There was a king tide earlier this year, but it is not known precisely when the shipwreck appeared.

“Finding the 12 x 60ft shipwreck on the beach was like finding gold at the end of the rainbow,” the Shoals Club said in a statement provided to *Newsweek*. “It’s a privilege to be a small part of the ship’s story—we look forward to learning more about it as the North Carolina Office of Archeology researches the remains further.”

Kevin P. Duffus, a maritime history expert, said the dimensions of the wreckage indicated that the ship was larger than a traditional fishing boat. Considering the iron fasteners and wooden timber, it appears the vessel is from the late 19th century and is most likely a large schooner.

Duffus stated that a common problem in identifying shipwrecks is that storms can transport the remains far away from where a ship initially sank. ■ SOURCE: NEWSWEEK, SHOALS CLUB ON BALD HEAD ISLAND

## Study reveals more clues to New England shipwreck of 1626

Since 1889, the Pilgrim Hall Museum in Plymouth has had 109 timbers from a shipwreck believed to be the *Sparrow-Hawk* that sank in 1626. In March 2022, an international, multiyear study on the timbers provided the best evidence that the wreckage is from the *Sparrow-Hawk*.

Based on where the timbers were found, it was long believed that they were from the 12-meter (40ft) ship. The *Sparrow-Hawk* is the oldest known shipwreck in British colonial America. Until now, there has always been some uncertainty about its true identity.

### Historical reference

The Plymouth Colony Gov. William Bradford wrote about a small ship bound for Jamestown, Virginia, that was forced ashore by a storm in 1626, near what is now the town of Orleans. The boat had many passengers and carried sundry goods. Bradford wrote how the vessel had been at sea for six weeks, the captain got sick with scurvy, and they ran out of water and beer. Passengers Mr. Fells and Mr. Sibsie had many Irish servants. Although

not by their free will, they were the first documented Irish colonists in New England. The Nauset tribe, who spoke English, helped the passengers. Local Pilgrims sheltered them for nearly a year before they found passage on other boats to Virginia to farm tobacco.

Meanwhile, the ship was buried by shifting sands until a storm in 1863 uncovered the well-preserved wreckage. Since the 1860s, the unknown ship has been referred to as the *Sparrow-Hawk*.



Sampling a crutch timber from the *Sparrow-Hawk* for tree-ring analysis



Central floor timber from the *Sparrow-Hawk*

### Wood analysis

The recent study, published in the *Journal of Archaeological Science: Reports*, was performed by maritime archaeologist Calvin Mires from the Woods Hole Oceanographic Institution in Falmouth, Massachusetts; Aioife Daly, an associate professor at the Saxo Institute at the University of Copenhagen, Denmark; and Fred Hocker, the director of research at the Vasa Museum in

Stockholm, Sweden.

They used wiggle-match dating, which is a form of radio-carbon analysis, and dendrochronology to narrow down when the ship was built. The tests showed that the wood used to make the boat was harvested between 1556 and 1646. Donna Curtin,

executive director of the Pilgrim Hall Museum in Plymouth, said. “But we can say with much more confidence than ever before that what we have is compatible with Gov. Bradford’s journal story.”

More scientific study is planned, and Curtin would like to use digital modeling to construct a 3D image of the ship. The plan is to put the *Sparrow-Hawk* back on public display in 2026. That year will be the 400th anniversary of the wreck.

For more information, go to: [pilgrimhall.org/ap\\_sparrow-hawk.htm](http://pilgrimhall.org/ap_sparrow-hawk.htm) ■ SOURCES: AP, JOURNAL OF ARCHAEOLOGICAL SCIENCE: REPORTS



Historical illustration of *Sparrow-Hawk* remains, 1865

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