Nautical Archaeology

The Quarterly Publication of the Nautical Archaeology Society Autumn 2026 Volume: 2026-4



A specialised water lift system being used to clear sediment from the fragile shallow stratigraphy of the Sunken Basilica of Iznik, in Turkey. (Image © iznikbazilika.uludag.edu.tr) – see pages 5-6 for the full article.

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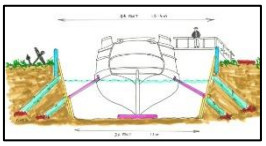
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Editorial: The ancient art of rightin, spelin, usin gramma & punktuation!

(The Quarterly Publication of the Nautical Archaeology Society)

The earliest known script so far discovered, was found in the Middle East, and dates from the early Bronze Age (*c.*3,400 - 3,200 BCE). However, until the 15th century, writing remained the preserve of scholars, scribes, and religious practitioners, who maintained custodianship of the art, closely guarding their skills.

From the earliest printing presses churning out the governmental and religious propaganda of the day, through to the earliest reproductions by the general proletariat, which steadily evolved from scratching on tablets and slates, through to mastering the typewriter with its quirky qwerty keyboard. Reading and writing was steadily embraced as a way forward for people to become educated members of society.

Communicating using the written word, rapidly evolved from the domain of the educated few, to a skill taught at the earliest possible opportunity to the young as soon as they start school. Today this highly honed and finely tuned art, with all its rules, exceptions and mysterious foibles & idiosyncrasies, appears to be in serious decline, with humanity seemingly striving to degenerate to a crude written pigeon language of text speak.

Thumb typing on a keyboard the size of a matchbox (remember them?) is an amazing skill, and although this is around 25% slower than using all your digits on a proper keyboard, this is now the accepted norm, and the way most writing appears to be produced today. How legible and understandable this writing has become however, with all its acronyms, emojis, predictive text, abbreviations and slang, isn't just debatable, it's frankly appalling.

So, why is this editorial talking about this? Well, during my short term as editor, I have become increasingly aware of how crude texting has slipped into the e-mails I have been receiving, and regrettably often also into the accompanying articles being attached for the ***'Quarterly'***.

I know your smart phone has become as addictive as any class 'A' drug. It's probably the first thing you reach for when you wake up, the last thing you put down when you go to bed, and ask yourself, how often in between do you use it. If that's not a drug, orchestrated by modern day drug barons masquerading as wily manipulative marketing companies and un-sociable media platforms, I don't know what is.

Giving things up for Lent is rather a long-lost tradition, as was raising money by scouts during Bob-a-Job week, but we do still have a multitude of new ways to raise money for good causes. From Comic Relief's Red Nose Day, to Children in Need, together with Movember and many other inventive ideas. However, if doing things, like running a marathon, or as trustee Alex Denny recently undertook, paddling his canoe for the NAS, isn't your thing, and with the possibility of coming up with a New Year resolution being just around the corner, why not contrive an imaginative idea of your own? When a relative asks 'what would you like for Christmas?' instead of dreaming up something you don't really need, why not ask them to sponsor you to not do something? Something like, not using your mobile phone for one day a week during January? Or not viewing or posting on social media for a month? And donate the money raised to a charity, like the NAS.

Oh, and while you have all this extra spare time in January, why not write an article for the ***'Quarterly'***, using proper words, phrases, paragraphs and punctuation (remember them?). Ed

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Wales – Pembroke Dock

Franklin's lost expedition: HMS *Erebus* exhibition showcases never-seen-before artefacts recovered from the shipwreck

Pembroke Dock Heritage Centre - Press Release

Many know the shocking true story of the ill-fated Franklin expedition, on which HMS *Erebus* and HMS *Terror* set off to the Arctic in 1845 in search of the Northwest passage and never returned, with the loss of all 129 crew members amid tales of desperation and cannibalism. *Erebus'* wreck was finally found below the Canadian Arctic's icy waters in 2014.



The bell and windlass on the upper deck of Erebus, 2014.
(Image © T. Boyer, Parks Canada; 89M00523EF)

It is less well known that HMS *Erebus* was built and launched at the Royal Dockyard at Pembroke Dock, in West Wales, in 1826. Originally a bombship, *Erebus'* powerful construction singled her out as perfect for polar exploration.

To celebrate the 200th anniversary of her launch, and thanks to a National Lottery Heritage Fund grant, the town's independent museum the Pembroke Dock Heritage Centre has created: "HMS *Erebus*: From Dockyard to Discovery" to display artefacts recovered from the ship's wreck for the first time. They are housed in a recreation of a ship's cabin, below a "holographic" image created from detailed 3D scans of the ship's bell. Undersea video footage shows divers exploring the wreck site. There's an immersive Antarctic diorama with scale model, and digital interactive touchscreen displays exploring every aspect of this most compelling maritime mystery story. All displayed text is in Welsh and English.



"HMS Erebus: from dockyard to discovery"
(Image © Daniel Smith)

The Pembroke Dock Heritage Centre is open 10am to 4pm Monday to Friday (including bank holidays) from April until the end of October. See: https://pdht.org/hms-erebus-from-dockyard-to-discovery/

England – Portsmouth – Langstone Harbour

The *Withern* 100 Project

Riley Conway



Over the last 6-months, a team of volunteers from the Nautical Archaeology Sub-Aqua Club (NASAC), have been diving the wreck of the *Withern*, a dredging vessel that foundered on its moorings in Langstone Harbour Portsmouth, in 1926. The original goal of this project, was to work with Portsmouth city council as part of their centennial anniversary commemorations, and to celebrate the history of this local dredging vessel, highlighting underappreciated local history. By diving on the site and investigating historic archives, we aimed to produce resources such as a virtual dive trail, photogrammetry model, short film and written report, in the interest of making more of Portsmouth's unseen maritime history accessible to local inhabitants. This also provided the perfect opportunity for volunteers to gain greater practical experience.



NASAC RIB Honor travelling to the Witham site in Langstone Harbour.
(Image © Riley Conway).

I referred to the 'original goal', because as the project progressed, it became clear to us that our goal had transformed slightly after discoveries during the research phase. Initial archival investigation into the *Withern* was disheartening, besides modern references to the site, we were unable to find any historic reference to the dredger or the event of its sinking. However, after broadening our investigations, we were able to uncover an almost comprehensive history of a dredging ship named the *Witham*, which also foundered on its moorings in approximately the same position in Langstone harbour 14 years prior, in 1912. This ship however lacked any modern references, and is unmarked on current charts. It is the belief of our team that these two ships are likely to be one and the same. Potentially there has been an error or miscommunication in the historic record, that caused the name and sinking date of the vessel to change from *Witham* and 1912, to *Withern* and 1926.



Diver on the site with a large upright wheel assembly in the background.
(Image © Alison Mayor)

The *Witham* was an iron centre ladder bucket dredger, constructed in 1893 in Whitehaven, Cumbria. The vessel was stationary and so would have been moved in place via a tugboat, however, it does have a steam engine at the bow used to drive the bucket ladder. Before its service to Portsmouth the vessel had been refitted twice, once after it sank in 1889 following an incident where the hull was pierced by a bucket, and a second time after the ladder and buckets broke free in 1899 and the vessel was left derelict for 6 years. A comprehensive timeline of the life of the *Witham* is currently being produced and will be available in the future.

We are approaching the end of the fieldwork season now, and have had 40 dives on site over the course of 9 visits. A number of artefacts were identified during our dives, some modern in context but others that appeared to be contemporary to the sinking of the ship. Only one artefact was recovered and reported to the Receiver of Wreck, with the rest being left in situ. The artefact in question being a Codd bottle still containing the marble. Inscriptions and manufacturing techniques evident on the bottle indicate an approximate production date of 1895-1915.



The Codd bottle in situ, and after being recovered and cleaned.
(Image © Riley Conway)

Unfortunately, the end of the project draws near, and it's time to write everything up and finish all our data processing. At this moment in time the virtual dive trail is live, and can be found on the NAS website under the *Witham* 100 project page. It consists of interactive 360° videos at various points around the site, and features our divers undertaking tasks such as large-scale photogrammetry, artefact recording, and measurement taking. Additionally, our photogrammetry model is having the finishing touches applied to it before we make it freely available online. The timeline of the *Witham* is almost complete, the project report is underway, and the short film is being edited.



The NASAC team on the pontoon at Southsea Marina Portsmouth. (Image © Riley Conway).

It has been incredibly valuable to me personally taking on this project and I am grateful to all those who helped me get it off the ground. More than that, it was an absolute pleasure working with everyone on the team and I look forward to working on other projects with them in the future.

Turkey – Iznik

The Sunken Basilica of Iznik: An Independent Researcher's Perspective on a Byzantine Underwater Jewel

Gülçin Pehlivan Tezdiker

A Byzantinist and art historian shares academic insights from a recent site visit to Lake İznik, Turkey, examining the 1,600-year-old submerged basilica, its historical context, and the innovative technological adaptations of its ongoing excavation.

Southampton, UK, June 2026

During my recent field research focusing on Byzantine material culture and small arts in the historic region of Nicaea (modern İznik), visiting the site of the famous submerged basilica was both an academic and personal priority. Located just fifty metres from the shore in the shallow waters of Lake İznik, this remarkable 4th-century monument was discovered accidentally during an aerial survey in 2014. It was subsequently named one of the top ten archaeological discoveries of the year by the Archaeological Institute of America. Standing on the modern lakeshore today, an independent observer can easily perceive the alignment of the submerged foundations shimmering just beneath the surface. The systematic underwater excavations are currently being conducted under the institutional direction of Professor Mustafa Şahin from Bursa Uludağ University, whose extensive work has brought this forgotten layer of Byzantine history back to light.

Historical Context and Traveller Accounts

As a Byzantine specialist, what fascinates me most about this site is how long it existed purely as a phantom in historical literature before its physical confirmation by modern archaeology. For centuries, both Ottoman and Western archival sources hinted at monumental structures hidden beneath the lake's shifting waters. In the 16th century, the Ottoman historian Hoca Sadettin recorded in his *Tâcü't-Tevârih* that during exceptionally dry months when the water levels receded, large structural remains became visible to the naked eye.

In the 18th and 19th centuries, Western travellers documented similar local accounts during their tours of Asia Minor. Paul Lucas in 1705 and Joseph von Hammer-Purgstall in 1804 both noted that local divers routinely retrieved metallic artefacts, ancient coins, and kitchen utensils from the muddy lake bed. In 1826, Comte de Laborde was told by a local Greek guide that the actual site of the First Council of Nicaea—the historic 325 AD ecumenical council—lay submerged outside the ancient city walls. While 19th-century visitors like Charles Fellow dismissed these remains as mere ancient pier foundations, modern underwater excavations have proven that these archival texts were tracking a genuine archaeological reality.

Architectural Significance and Saint Neophytos

The structure itself is a classic three-nave basilica covering roughly 600 square metres, oriented on a traditional east-west axis. Architectural evidence gathered by the excavation team suggests that the church may have been built directly over an earlier Roman Temple of Apollo, constructed in 183 AD during the reign of Emperor Commodus.

Following the Christianization of the Roman Empire, the site was dedicated to Saint Neophytos, a local youth martyred on the shores of Lake İznik during the Diocletianic Persecitations around 304 AD. Following the Edict of Milan in 313 AD, the basilica was erected directly over his tomb. Neophytos was subsequently venerated as a *Promakhos*—a protective saint guarding Nicaea from maritime threats and earthquakes. The monumental and religious importance of the site remains highly relevant today; the Turkish government recently finalized an official expropriation decree to establish the area as a protected archaeological site ahead of the upcoming visit by Pope Leo XIV to mark the 1700th anniversary of the Council of Nicaea.



Aerial perspective of the 4th-century submerged basilica in Lake İznik, clearly displaying its three-nave structural layout from above. (Image © iznikbazilika.uludag.edu.tr)

Engineering in the Shallows: The Waterlift System

The basilica collapsed during a major earthquake in 740 AD and was completely submerged by the 1250s due to rising lake levels and tectonic shifts. While the ruins were under six metres of water when recorded in 2014, recent droughts and regional climate shifts have caused the lake levels to drop

significantly. During my own observation of the site from the shore, the practical challenges of this environment were immediately obvious: major portions of the architectural foundations now sit just below or right at the water's surface, heavily impacted by wave action and seasonal water clarity.

This shallow environment created an unusual technical problem for underwater archaeology. Standard excavation methodology relies on airlifts to remove silt, which require a minimum depth of 10 metres to create sufficient suction pressure. To overcome this operational limitation, the excavation team pioneered the use of a specialized water lift system.



An underwater archaeologist utilizing the specialized water lift system to clear sediment in the fragile shallow stratigraphy of the site.
(Image © iznikbazilika.uludag.edu.tr)

By using pressurized water instead of air to clear sediment, the team successfully uncovered early Roman mosaics, structural tiles, and several intramural burials containing well-preserved human skeletal remains without disturbing the fragile shallow stratigraphy of the lake bed. The ongoing osteological analysis of these bones provides crucial insight into the burial practices, demographics, and health profiles of the basilica's ancient community.



Sediment bought to the surface from the lakebed being sieved for any recovered finds.
(Image © iznikbazilika.uludag.edu.tr)

Digital Preservation and Future Methodologies
Following its official opening on October 28, 2025, the İznik Lake Basilica Archaeological Site Museum offers visitors a comprehensive experience, combining an on-shore visitor centre for historical contextualization with dedicated observation platforms to view the submerged remains. However, because shallow-water visibility in the lake can be highly variable due to seasonal algae blooms and changing weather conditions, the project integrates advanced digital accessibility as a core curatorial and archival tool.

The excavation and museum project is actively translating photogrammetric 3D data into a Metaverse environment. By processing thousands of high-resolution underwater photographs through digital mapping workflows, researchers have created precise digital twins of the architectural remains. This methodology allows for the permanent digital recording of fragile structural features facing continuous erosion from the shallow water's wave action, while simultaneously making the data available on interactive displays within the museum. Ultimately, this virtual infrastructure allows researchers, students, and the public worldwide to virtually navigate the three naves via VR technology, completely by-passing the physical constraints of diving in variable lake conditions.



Drone capture of divers surveying the perimeter of the ancient foundations just beneath the surface of the lake.
(Image © iznikbazilika.uludag.edu.tr)

For the global maritime archaeology community, the İznik basilica serves as an important case study. From the perspective of an independent researcher visiting the site, it clearly demonstrates how historical text analysis, specialized technical adaptation, and digital documentation can come together to preserve a critical piece of Byzantine cultural heritage that sits right on the delicate boundary between land and water.

Acknowledgements: I would like to express my thanks to the local researchers and guides in İznik who provided valuable context regarding the current visibility, water levels, and conservation efforts during my visit to the lakeshore.

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America – Lake Union, Seattle, Washington

A City's Underwater History: People Powered Connections

Evan Weber (Shipwreck City's Digital Archivist)

Lake Union is one of Seattle's most familiar landmarks. Sitting in the shadow of the South Lake Union District and the world-famous Space Needle, this area has float planes skimming across the water, boats scurrying between working docks and marinas, and houseboats lining the shores. It is a place of recreation, industry, transportation, and everyday life.

But another Seattle exists beneath the surface, one that few locals and tourists fully grasp. Across the bottom of Lake Union, below the *Paddle Raves* and shoreline machinery, rest sunken vessels and debris representing generations of the lake's history. Some can be identified; others remain largely unknown. Together, they form a submerged record of the people who lived and worked around one of Seattle's most important waterways.

Shipwreck City is a volunteer effort with an ambitious mission: *to find, film, archive, and share every sunken vessel in Lake Union*. That means documenting what survives underwater, but it also creates an opportunity to ask a larger question: what stories can these objects still tell us about the people who came before us?

Consider *Kahlenberg*, Lake Union site LU012. Unlike many submerged vessels, *Kahlenberg* comes with a substantial trail of evidence. Historic photographs show the vessel above water and at work. Previous researchers, divers, and filmmakers, with the help of archival records, have collected different pieces of its history. Today, Shipwreck City brings those pieces together. Partnerships with Coastal Sensing Survey, DCS Films, and the Lake Union Virtual Museum, all who helped pave the way in local underwater exploration and discovery, foster a greater lake community searching for what stories remain. The resulting tales are more than the dimensions of a wreck or the depth at which it rests.

Story by story, the vessel begins to regain life. As of now we know that the *Kahlenberg* was built in 1913 as a wooden vessel approximately 50 feet long and 11 feet wide. Historical research describes the vessel as serving with the U.S. Navy as a tender before later being used by Kahlenberg Industries as a demonstration vessel. Years later, Captain Franz Nelson brought her to Puget Sound, where she entered the local commercial shrimp fishery.



Wreck of the Kahlenberg. (Image © Shipwreck City)

There's even a local feature in the Seattle Times that includes photos from *Kahlenberg's* working era. And to that point, while *Kahlenberg's* wooden remains slowly erode into the lakebed, her life story is cemented in history.

We turn our attention to another wreck: the Bowsprit Boat, LU024. It rests no more than fifteen hundred feet from the *Kahlenberg*, yet it lies in a different kind of silence: a wooden hull with a prominent bowsprit, still in relatively good condition, but with much of its past seemingly buried alongside it. Beyond sonar scans and ROV footage, there are few photographs, records, or firsthand accounts to tell us who used this vessel or what work it performed. We are determined to document it, follow the clues it has left behind, and bring its purpose into clearer view. In doing so, we hope to return one more piece of Lake Union's working past to the city that grew around it.



Wreck of the Bowsprit Boat. (Image © Shipwreck City)

These unanswered questions are not a weakness of underwater archaeology. They are part of what makes it exciting. Someone built these vessels; someone maintained them; someone admired them. For others, a boat or barge on Lake Union may simply have been where they went to work every morning. That human connection is what transforms documentation into interpretation.

As Shipwreck City continues its work, the goal is not simply to create a list of sunken remains. It is to build a living record of Lake Union: gathering what is already known through historical photographs, archival records, previous research, and earlier dive footage; updating that record with new video and findings that connect disconnected records to the hulls below; and adding entirely new wrecks and discoveries as they come to light. With the help of our team and Finn, our ROV, we continue this volunteer effort to tell a fuller story of the lake and the people who shaped it.

Lake Union's sunken fleet spans those we know well, others whose stories are only beginning to emerge, and vessels still waiting to be uncovered… undoubtedly prompting questions we have never thought to ask.

Shipwreck City believes that writing this chapter of Seattle's maritime history requires taking a deep dive beneath its surface, see: https://shipwreckcity.org

Bali – Sanur

A Search for Survivors: Bali's Traditional *Jukung Pelasan*

Sarah Ward (Dalian Maritime University)



In June (55.1), the *International Journal of Nautical Archaeology* (IJNA) published my study documenting a traditional Balinese *jukung pelasan*. The article presents the archaeological recording of a remarkable double-outrigger sailing canoe, examining its construction, decoration and significance as a surviving example of Indonesia's rich maritime heritage.



Beached Jukung at Sanur, Bali. (Image © Sarah Ward)

Yet, as is often the case in archaeology, the published article tells only part of the story.

Behind the measured drawings, construction analysis and archival research lay a growing realisation that these boats were disappearing far more rapidly than I had anticipated. What began as documentation of a traditional watercraft in a private collection became an encounter with a maritime tradition on the verge of vanishing.

For centuries, the beaches of southern Bali were lined with timber *jukung pelasan*. Characterised by their graceful hulls, double outriggers and distinctive carved *gajah mina* (elephant-fish) prows, these boats were far more than fishing vessels. They embodied generations of accumulated knowledge, customs, traditions and spiritual beliefs, serving as both practical working vessels and powerful expressions of status and community identity.

When I began fieldwork in Indonesia, I expected to find examples in various states of preservation scattered along Bali's southern coastline. Instead, the survey became a search for survivors.

Beach after beach revealed the same story. Fibreglass boats now dominate the shoreline, while the traditional timber vessels that once defined these coastal communities have almost disappeared. Across the surveyed areas, only six intact timber *jukung pelasan* remained.

Finding those boats was only the beginning.

One of the great privileges of working with traditional boats is that the archaeological record extends well beyond the vessel itself. Unlike shipwreck excavations, where interpretation often relies primarily on surviving material remains, traditional boats still exist within communities whose knowledge can enrich our understanding of the archaeological evidence.

Conversations with former fishers and boatbuilders proved just as valuable as the recording of hull remains. Sailing the vessel proved even more so.

Bali's 'last' boatbuilder explained that there is now little demand for traditional timber fishing boats. Many fishers have moved into Bali's tourism economy, taking visitors on sunrise cruises in fibreglass replicas rather than fishing offshore. Even if demand returned, he said, rebuilding the boats in the traditional way would be difficult. The large trees needed for hull construction have long since disappeared from the surrounding landscape, while the large bamboo suitable for masts and outriggers has become increasingly scarce and, if available, prohibitively expensive.

The boats are not the only things disappearing from Bali's beaches.

As archaeologists have long recognised, vessels are products of the environments, economies and communities that produce them. A boat embodies relationships among available materials, technological knowledge, traditions, ideology, purpose and patterns of use.

The decline of the timber *jukung* reflects the erosion of an entire maritime system: the forests that supplied the construction materials, the boatbuilders who transformed them, the fishers who understood their capabilities, and the coastal communities that gave these vessels their identity.

This is precisely why documenting traditional watercraft remains such an important part of nautical archaeology.

Recording a vessel's dimensions, construction sequence, and hull form creates a permanent archaeological record, but it cannot, by itself, preserve the knowledge required to build another. Construction techniques, local terminology, methods of selecting timber, tree-cutting ceremonies, the skills needed to shape hulls and lash outriggers, and the intimate understanding of winds, tides, and fishing grounds constitute intangible cultural heritage, passed down through the generations by practice and apprenticeship rather than by written instruction.

Without recording the boatbuilding practices alongside the vessels themselves, much of what gives these vessels their meaning risks being lost forever.

This distinction matters because preserving a vessel is not the same as preserving the tradition from which it emerged. Since Bali's tourism boom in the 1970s and 1980s, its boats have entered museums and private collections around the world. Yet, removed from the beaches, communities and maritime practices that produced them, they inevitably become disconnected from the living cultural systems of which they were once a part.

This raises an important question for nautical archaeologists: what exactly are we trying to preserve? Is it the boat itself, the technology it represents, or the wider cultural system from which it came?

I believe the answer is all three.

The IJNA article presents one vessel in considerable detail, creating an enduring record of its construction and its assessed significance. However, the broader project reinforced the importance of integrating archaeological methods with oral history, ethnography and community engagement.

The surviving *jukung pelasan* are not merely material culture. They are a key component of a living, breathing maritime cultural landscape undergoing profound social, economic and environmental change.

That perspective has significant implications for maritime archaeology more broadly. Around the world, traditional watercraft are disappearing as communities adapt to new technologies, evolving economies and shifting coastlines.

Nautical archaeology therefore has an opportunity—and perhaps a responsibility—to document living maritime traditions before they pass beyond living memory.

For me, the Balinese *jukung pelasan* perfectly illustrates that challenge. The most significant discovery was not the six remaining boats, but the realisation that they constitute a rapidly diminishing archive of traditional maritime knowledge.

The published measurements, drawings and photographs preserve one chapter of that story. The conversations held beside the boats, the memories shared by their builders and owners, and the recognition that these traditions continue to evolve remind us that maritime archaeology is ultimately about the people as much as it is the boats.

As archaeologists, we often work with the remains of lost worlds. In Bali, however, that world still survives—just. The challenge now is to document it before the last *jukung pelasan* quietly vanishes from the island's shores, taking traditional knowledge systems with it.



Fixing the Spar to the Mast. (Image © Sarah Ward)



Setting the Sail, Sanur, Bali. (Image © Sarah Ward)



Junkung launching, Sanur, Bali. (Image © Sarah Ward)



Getting underway, Sanur, Bali. (Image © Sarah Ward)

An overheard anecdote recounts that: Someone recently asked their virtual assistant, *'Will English ever become the world's number one language?'* To which the response received was *'English already functions as the dominant global lingua franca'*.

If AI has evolved to have this sort of sense of humour, then we are probably all doomed!
But in the meantime, why not write for the ***'Quarterly'***, or at the very least,
sign up to receive a hard copy every 3-months, instead of having to squint at the pdf version on your phone.

England –River Roach, Paglesham, Essex

Paglesham Mud Dock for HMS *Beagle* 1851-1870.

(including a FREE A4 poster of 'The Voyages of HMS Beagle 1820-1870')

Mike A.W. Salter (Independent Researcher)



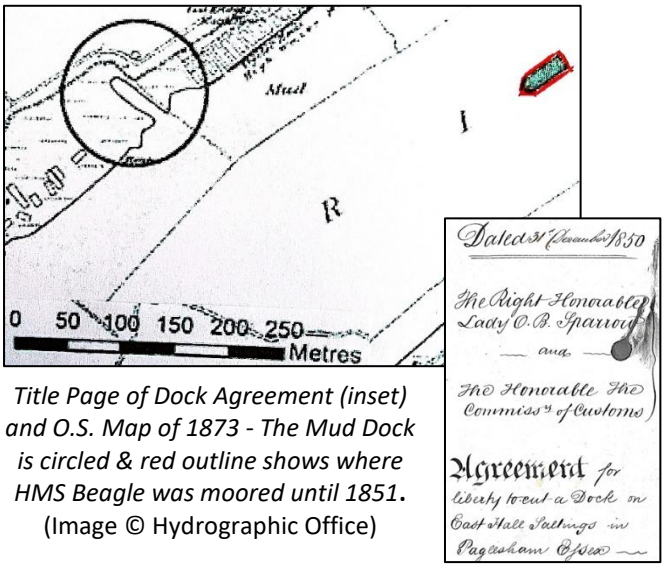
Context.

After three global voyages, the second (from 1831 to 1836) with Charles Darwin on board and Robert Fitzroy as Captain, the *Beagle* was paid off in October 1843 at Woolwich, where she was built in 1820. Many books and articles together with the internet have details. Two of the best books are "*The Voyage of the Beagle"* (James Taylor, 2008) and *"HMS Beagle"* (K.S. Thomson, 1995). These cover, not only Darwin's findings, but modifications to HMS *Beagle* for survey duty and developments in hydrology, charting, meteorology, navigation using meridian distances and longitude at various places in the world, and safety (e.g. lightning conductors on ship's masts). Fitzroy also made barometers, set up weather stations and produced some of the first weather charts. Sadly, he took his own life as his weather forecasts were inevitably wrong much of the time and he was pilloried.

It has been known for many years that the small warship, HMS *Beagle*, converted to a survey vessel by the Navy was stationed in the River Roach when her Navy duties ended.

After minor repairs (she was on a list of navy ships in generally good condition) and after re-coppering of the hull at Sheerness Naval dockyard, she was dismasted and towed in July 1845 to her station as a static Coastguard Watch Vessel at Paglesham, piloted by a Revenue cruiser skipper, George Wrake. Her role was to help suppress prolific smuggling in the many creeks and inlets of the remote Essex coastline.

Initially she was moored mid river in the Roach, at a point where there was sufficient depth of water (c. 4m) at low tide. However, after a petition in June 1850 by the Burnham oyster dredgers asking for removal of the obstruction she caused, a Mud Dock was cut in the East Hall Saltings, on land owned by Lady Sparrow. An Agreement between her and the Customs Commissioners was found in the Hunts Archives catalogue.



Title Page of Dock Agreement (inset) and O.S. Map of 1873 - The Mud Dock is circled & red outline shows where HMS Beagle was moored until 1851.
(Image © Hydrographic Office)

HMS *Beagle* in the Community.

Coastguards were not always welcomed with open arms in view of their duty to suppress smuggling in which many locals were involved, either directly or by providing hiding places, horses or victuals. Even the church was said to have harboured contraband, as well as cellars and hollow elm trees. A local magistrate was himself involved. Personnel were moved frequently and lived many miles from their home towns in an effort to avoid corruption.

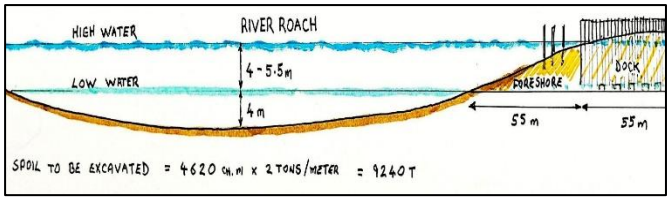
There are Census, Coastguard, Customs, and Parish records which confirm the *Beagle's* presence at Paglesham from 1845-1870, as well as many small artefacts and an anchor, possibly one of the *Beagle's*. Thirty "*Beagle*" children were also baptised in the local St. Peter's church between 1845-1870.

Dock Agreement.

The Agreement for the dock has some interesting features:

- The cut is always referred to as a Dock, rather than a Berth, although the Historic England listing is "Mud Berth for CGWV No 7, formerly HMS *Beagle*", but "mud berth or dock" is also used in the description. The Schedule No. is 1467785 of 13th Mar. 2020.
- It was some 55 meters (180 feet) long, and 11-13 (36-43 feet) wide, as shown on the 1873 O.S. and later maps, up to at least the 1950s.
- HMS *Beagle* was 27.4 meters (90 feet), with a 7.8 metres (25.6 feet) beam and 3.8 metres (12.5 feet) draught. Other Navy vessels could therefore also be berthed in the dock.
- A large quantity of spoil was dug out from the clay subsoil and marsh. Any "not wanted for forming an approach to the Beagle" was to be spread on the rills (rivulets in the marshy soils) and broken ground on the Saltings.

Whatever the amount of spoil excavated (and it is not known whether this was all by hand or steam) this was wet clay and silt. It was a large project in a difficult remote terrain. At one ton/cartload, some 9,000 loads would have been carted or spread.



Cross Section of the River Roach and Dock
(Image Colin M. Baxter © Mike A W Salter)



HMS Beagle and a Navy ship in Paglesham Mud Dock.
(Painting Colin M. Baxter © Mike A W Salter)

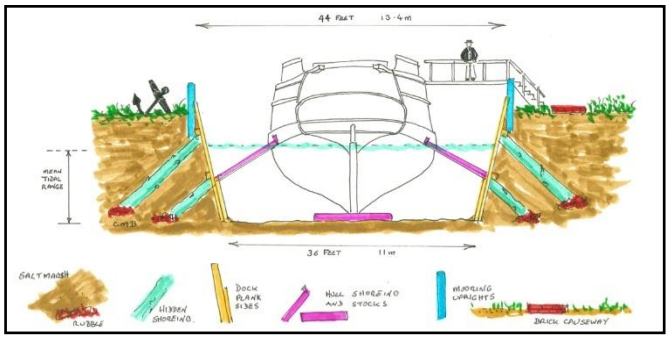
The Mud Dock: Construction and Location

- The dock was tidal, with a range of c.5 metres, with the hulk resting on stocks (heavy wooden beams) laid in the mud across the dock under the keel.
- Wooden shoring held her up as the tide ebbed.
- The dock walls were also of wooden timbers as for the shoring, with a batter (incline from the perpendicular) of c. 2 metres bottom to top.
- The location was next to a sea wall with a brick causeway leading to the low tide mark, making access possible for goods and personnel at all states of the tide.
- There are said to be very few of these docks remaining, which were once common in England, and Paglesham dock today lies buried in the silt of the marsh.

Other docks listed by Historic England include:
The Grove Quay wall at Bristol, is Grade II listed (No.1202622) and "probably the oldest surviving tidal harbour preceding the floating harbour". Old and New Mud Docks are referred to in 1773 Newspapers, and when new docks were built, a large tidal basin was created where ships could wait to enter the wet or dry docks with the tide.

The *Grace Dieu* and possible site of the *Holigost* (Maritime Wreck No. 100006) are associated with medieval mud docks in the River Hamble at Bursledon near Southampton. Dr Ian Friel wrote an article "The Graveyard of Great Ships" on these two large royal ships of Henry V's reign and their docks.

There was a Mud Dock at Chepstow, a major port for South Wales, mentioned from 1761 in newspaper reports, but is not listed. The Mud Dock at Sheerness was lost when the Dockyard was redeveloped in 1821. One dock in China was sealed from a river with a mud bund wall during winters to protect ships from ice floes.

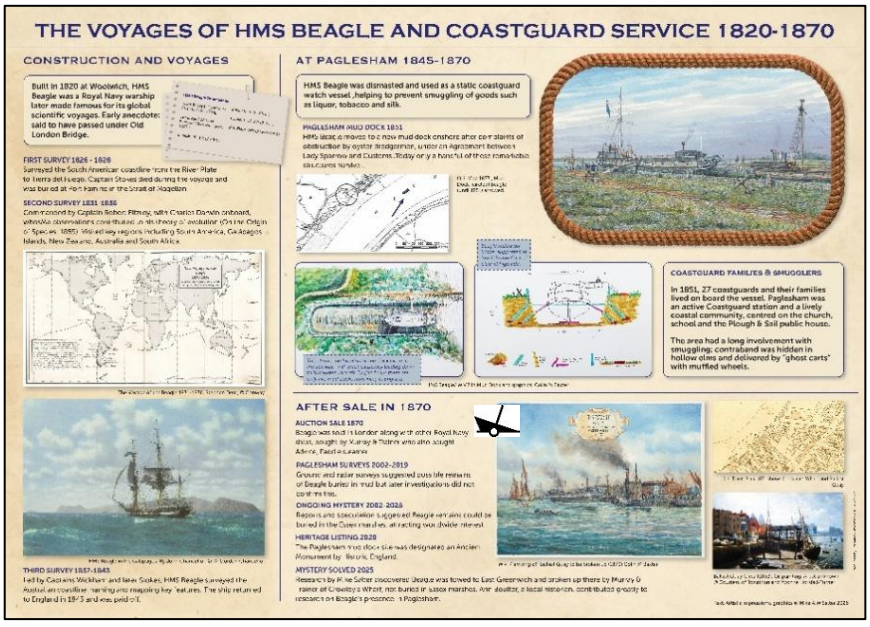


Section showing dimensions and gangway to the sea-wall.
(Image Colin M. Baxter © Mike A W Salter)



Location by the sea -wall and brick Hardway to low water.
(Image Colin M. Baxter © Mike A W Salter)

Legacy: It is sad that the location of the dock site in which the *Beagle* spent her last 19 years cannot be excavated and preserved. Historic England is content that the dock itself is well protected under the saltings. The Victoria Museum on the Chilean side of the Magellan Strait, opposite Tierra del Fuego, by contrast, has found the finance and energy to build a full-scale replica of the *Beagle*!



To better reflect the whole of HMS *Beagle's* career and eventual demise, it is hoped that one day copies of the Interpretation Board Poster (shown left), will be installed adjacent to the old Mud Dock at Paglesham on the River Roach in Essex, and at the riverside Greenwich, close to the *Cutty Sark* tavern, where HMS *Beagle* is thought to have been broken up (see the authors previous article *The Mystery of HMS 'Beagle'* in *Nautical Archaeology*, Spring 2026.

The Interpretation Board Poster
(Artist's impressions by Colin M. Baxter.
© Mike A.W. Salter 2026)

Sweden – Stockholm

Trip to the *Vasa* and the Vrak Museums

Steven Humphrey



Steven Humphrey started his NAS training in the 1990s and after a bit of a hiatus, has recently come back into the NAS community with a vengeance! He finished off 2025 which had been a busy year of diving and training courses, with a trip to Stockholm. Here, he tells of his adventures.

Having landed in Stockholm we had a little bit of a wait to get through immigration (courtesy of Brexit) and then took a very nice train down to the main station. It was a pleasant walk through the old part of the city via damp streets, with all the Christmas lights on to our hotel in Gamla Stan.

Once sorted, we went out for a lovely Italian meal, and a walk around the old cobblestoned streets in this part of the town.



Old Stockholm
(Image © S. Humphrey)

Saturday's excursion would be a visit to the Vrak - Museum of wrecks, and we needed to negotiate the city's ferry service to get there. Local advice suggested a thirty-minute walk to a neighbouring island would allow us to catch a ferry for a five-minute crossing to Vrak. What we didn't know was that the ferry we got on actually took us on a triangular route back to our hotel's island, before returning to Vrak twenty minutes later. Not a good start.

Finally in the wreck museum, three guides led us through each part of the exhibition. Instead of cases of finds, the museum uses immersive CGI and digital visualizations of 3D models to allow visitors to experience being under water or inside a ship, and to examine found objects. The wreck room of the *Resande Man* with its unique carpet and display was fascinating. Such a great guide led us through the Viking display, we were all laughing from start to finish. He even looked the part.



Resande Man wreck room. (Image © S. Humphrey)

Continuing through the rest of the dynamic museum, we saw many details of other wrecks, that the current museum archaeology team are working on.

A tasty lunch in the museum's café, preceded a brief meeting to discuss what we had seen, and then a decision on the time for the evening meal later on at 'Under the Chestnut Tree'. Food and drinks at this fantastic restaurant, with great company, was like long lost friends meeting back up again.

Sunday was an early start, with tape and pencils at the ready for work on the *Vasa*, (be aware that the ferries do not run early on Sundays).

We were greeted by Fred Hocker, head of research at the museum, and given a brief talk on the early part of the wreck's journey to where he stands today. Fred explained the new cradle that is being built to replace the old structure which will allow the wreck to be moved, re-levelled and also they can weigh him to see if their sums are right! While this is being done they are installing a grid of very small targets on the wreck, so new laser scanners can keep a detailed eye on any movement that may occur.



Vasa Port/Bow. (Image © S. Humphrey)

Fred then got his whip out and put all of us sea dogs to work scrubbing the seaweed off the ship's hull! Well we crawled under the hull and did some detailed recording of the Dutchman patches, plus any new items installed that needed recording. Work finished when the museum opened to the public at ten a.m.

On a related note, the way ships are named in Sweden is steeped in tradition. Whether a vessel is referred to as 'he' or 'she' depends on its name and the local customs. For instance, ships with male names are often called 'he', while those with female names are referred to as 'she'. This practice reflects the cultural significance placed on ships and helps to personalise them, making each vessel feel unique to its crew and visitors.

As the word *Vasa* is masculine in Sweden, the ship is a 'he'. And if it's an item like a sword then it's an 'it'.

Fred took us on a tour of the displays and talked about the remains of the crew who were still on board when the ship was raised.

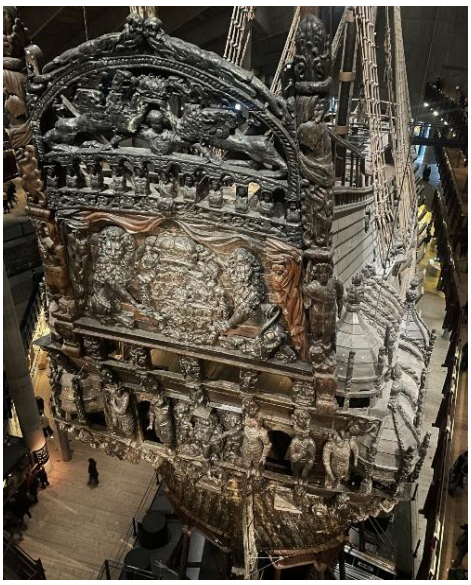


Replica of Vasa Gun on Display. (Image © S. Humphrey)

The lunch break was followed by a walk around the rest of the museum and then a chat about the day. There was still time for a look around the glass factory and a pint or two of beer.

The final dinner was in one of the many great multinational restaurants to be found within a stone's throw from the hotel.

And that was the end of a great weekend run by the NAS crew, and we can't wait until the next!!!



Vasa stern - also known as its face. (Image © S. Humphrey)

NAS will be returning to Stockholm on 14th - 15th November: Contact: education@nauticalarchaeologysociety.org

England – Dulwich College, South London

Ernest Shackleton and the *James Caird*

Jane Davies



We all know the story of Ernest Shackleton's ship *Endurance*, lost to the Antarctic ice in 1915 and the subsequent heroic escape and rescue of the entire crew. But did you know that the tiny whaler (actually a lifeboat) that carried Shackleton and 5 of his crew from Elephant Island to South Georgia to summon help, is called the *James Caird* and can be viewed for free in South London?

3 of the ships' whalers were used to escape from the ice to Elephant Island. Carpenter Harry McNish modified the *James Caird*, adding extra timbers (from another whaler) to raise the gunwales, 'decked in' most of the vessel and added over a ton of stones as ballast. Thus began the 800 nautical miles journey to South Georgia, with Frank Worsley navigating by sextant. Shackleton subsequently returned to Elephant Island to rescue the remainder of his crew.

Shackleton was educated at Dulwich College in South London and the *James Caird* eventually found its way back to the college in 1922, via a circuitous route and now sits proudly on display in the new Science building.

The boat can be viewed for free, though viewing times are very limited. Viewing is possible on most Fridays throughout the year and other occasional but random days of the week. Tours are usually 1115 – 1215 or 1230.

Bookings can be made online at:
https://www.dulwich.org.uk/about/history/the-james-caird

The nearest railway stations are West Dulwich (a 10 minute walk) or North Dulwich (a 30 minute walk / P4 bus).

Why not combine your visit with a trip to the 'Ramses and the Pharoah's Gold' exhibition which has been extended until January 2027. It's at the Battersea Power Station which is worthy of a visit from an industrial heritage perspective in its own right. Enjoy.



The 'James Caird' on display at Dulwich College, South London. (Image © J. Davies)

International

40 years protecting, recording and researching our Nautical Heritage

Karen Moule



As this year marks the 40th anniversary of the Nautical Archaeology Society (NAS), it's an opportunity to look at how it began and to understand what has changed over the years.

History of the Society

Starting in 1964 as the Council for Nautical Archaeology (CNA) with a remit to "act as a channel of communication between divers and the appropriate learned bodies to share discoveries within the field of marine archaeology", the council membership included the British Museum, the National Maritime Museum, The Institute of Archaeology at London University, the Council for British Archaeology, the Society for Nautical Research, the Society for Post Medieval Archaeology and the British Sub Aqua Club (BSAC).

In 1972 the CNA launched the International Journal of Nautical Archaeology (IJNA) and played a key role in the creation of the Protection of Wrecks Act 1973. The Nautical Archaeology Trust was established to publish research and advance public nautical archaeology training and education. Then in 1984 when the CNA was incorporated into the Council for British Archaeology as one of its research sub-committees, the Trust voted, in July 1986, to change its name to the Nautical Archaeology Society (NAS) to reflect the change to a membership organisation.

The Society formally established its mission 'to research, record and protect our threatened underwater and coastal heritage for the benefit of everyone'– a Mission that has continued to this day.

Training for All

The NAS was the only organisation offering any kind of training in the discipline of maritime archaeology, initially to train the huge number of recreational divers, wanting to help with the excavation and recording of the *Mary Rose* during the 1970s and 80s, while still on the seabed. The aim was to deliver a set of skills and knowledge to aid the professional archaeologists, ensuring everyone was working in a consistent way to accurately record the artefacts before retrieval.

Christopher Underwood, former Training Officer for the NAS, and current President of the ICOMOS International Committee of Underwater Cultural Heritage, reflected on the changes over the years.

Evolution

In terms of the equipment to conduct nautical archaeology at that time, Chris chuckles as he thinks back to his original dive kit, *"No depth gauge, only one style of wet suit. Mary Rose supplied 6-7mm semi dry suits, which was a revelation! When dry suits arrived, that was a whole new universe for improved comfort.*

"Diving equipment has not only evolved since the SCUBA kit – every aspect of diving equipment from dive suits in different materials, for different water temperatures; dive computers that didn't exist until 1983 for recreational divers, buoyancy compensators in a wide range of configurations, fit and functionality, to endless fin designs – nowadays there is definitely a better variety and more versatility, but possibly too much choice.



Chris Underwood. (Image © Self)

"In terms of the archaeology equipment, which started with a slate covered in permatrace and a pencil, again the advent of digital technology has transformed the discipline. Underwater cameras creating 3D photogrammetry models of wrecks and underwater sites allow archaeologists to study wrecks for a longer time period above the water than below.

"It has also enabled non-divers to enjoy the underwater world through digital Diver Trails on popular and protected wreck sites, and Augmented Reality has been able to show what a wreck looked like originally compared to what is on the seabed now".

Yet, despite these developments, core skills remain unchanged. *"A slate and pencil are still essential,"* Underwood notes, particularly in environments where technology is limited or fails.

The NAS training programme is not limited to divers. Non-divers, archaeological students, terrestrial archaeologists, coastal protection agencies, police units, heritage professionals and community volunteers all use NAS training to develop survey skills and gain a better understanding of underwater cultural heritage.

Chris continued, *"Communication has always been central to nautical archaeology and to the NAS. Margaret Rule, the pioneering marine archaeologist, set new standards in public engagement by involving the Blue Peter team from the outset, when she led the excavation and raising of the Mary Rose. Her foresight generated significant public awareness for nautical archaeology".*

From individual face-to-face talks in the early years, the NAS built a small team of dedicated NAS members to visit dive

clubs, provide in-pool basic skills training, and run demonstrations at dive shows. From these time-intensive activities, the digital delivery channels now available, allow a much wider audience globally to engage with nautical archaeology, through weekly e-newsletters, a quarterly printed publication, the website, and numerous social media platforms.

The Future

Things are under greater threat now than 40 years ago due to marine / offshore developments, and ships that have been underwater for hundreds of years, that are now very much at risk of collapse. Global climate change is increasing the localised changes to our weather with more, and bigger storms, which wreak havoc on coastal communities, exposing ancient settlements and damaging fragile shipwrecks.

Mark Beattie-Edwards notes, *"Looking forward, as a sector, we continue to look at why nautical archaeology matters, how we can keep it relevant and of interest to the public. We want to be able to inspire people to get involved in their heritage".*



Students recording the Star of Hope on Ainsdale Sands. (Image © MADU)

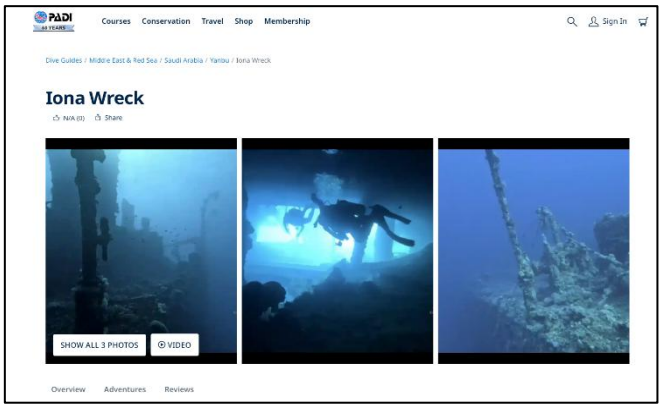
Saudi Arabia – Yanbu, Red Sea

The Shi'b Ash-Sharm Reef Wreck Project

Jan Ziolo (DO - Groupers Sub-Aqua Club, BSAC Branch No. 1600)

In late 2020, after the lifting of the first big COVID-19 lockdown in the Kingdom of Saudi Arabia (KSA), one of our dive club members was able to join a dive trip to the Red Sea and do both shore and boat diving out of the old and historic ports of Jeddah and Yanbu.

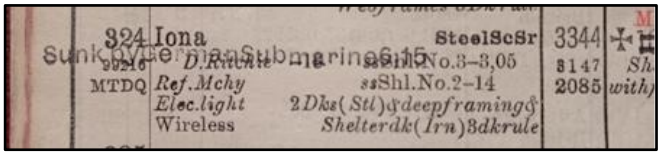
The offshore coral reefs off Yanbu hold arguably the most well-known wreck dive site in the KSA, the so-called SS *IONA*.



Extract of the Iona Wreck. (Image: PADI web site)

The identity of this wreck is however contested. It is almost certain that the wreck was first dived by international migrant workers in the 1970s and 1980s, when there was a large population of these workers present during the building of the Yanbu oil refinery and pipeline complex, among other megaprojects in the area. This would appear to be when the only piece of evidence that supports the SS *IONA* theory we have been able to find dates from. On the scuba diving chatroom 'Scubaboard', there is a short thread dedicated to the wreck, which features a transcript of a letter written by one of the divers from this period. The wreck is referred to as both the *'IONA'* and *'IONIA'*. The letter refers to the abundance of artefacts found by the diving community on the wreck at the time. She lies within recreational diving depths, only 15 nautical miles from the port, in often calm, clear tropical waters. The wreck has been stripped clean of anything that can be taken from it, either by marine salvage or by divers taking artefacts.

In 2025, Groupers Sub Aqua Club (BSAC 1600) began to examine the back story of the wreck's identity as the SS *IONA*/*IONIA*. On accessing Lloyd's Register Heritage & Education Centre (LRHEC) online resources, specifically the Register of Shipping and Casualty Returns, this wreck is unlikely to be either vessel. The SS *IONA* (1892) almost certainly met her end in the North Sea on the 3rd of June 1915, when she was attacked and sunk by the Imperial German Navy U-Boat *U19*. Lloyd's Register data is backed up by both Cairn Line (the owners) and Imperial German Navy records of the event, which will go into our final project report.



Extract from Lloyd's Register of Shipping, 1915-1916 Volume II (Steamers) showing entry 324 and the fate of SS IONA (1892).
(Image: Courtesy of Royal Museum Greenwich)

The SS *IONIA* was broken up in Italy in 1934. Both of these cases were cross-referenced during a visit to the Caird Room archives at the Royal Museum Greenwich in April 2026.

Phase One – Is this the SS *IONA* (1892)?

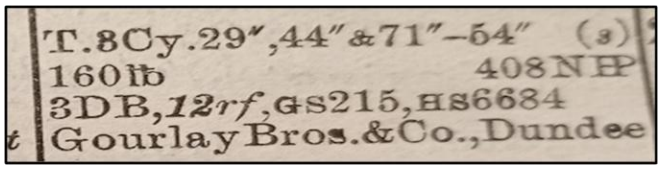
In September 2026, GSAC mounted a brief expedition to Yanbu in order to find physical evidence on the wreck, to confirm her identity as the SS *IONA* (1892), and to triangulate the documentary evidence suggesting otherwise. LRHEC held online high-resolution PDFs of the shipyard drawings, which GSAC downloaded and printed off onto water-resistant canvas sheets prior to the expedition.

During two recreational-depth no-stop dives and a swim-through of the wreck's internals, GSAC asserts that this wreck is not that of the SS *IONA* (1892) based on the following evidence:

***** The vessel's main engine appears to be a two-cylinder steam reciprocating engine – SS *IONA* (1892) was fitted with a three-cylinder triple-expansion engine. The cylinder sides also have a rather thick cross-section, possibly suggestive of earlier designs using less sophisticated metallurgy.

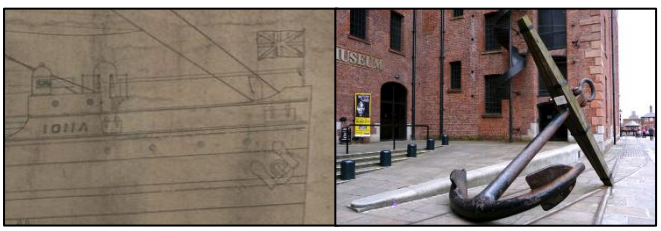


The author diving on the wreck where the engine room skylight would have been in order to count the main engine cylinder numbers. (Image: Courtesy of Nicky Livesey)


T.8Cy.29″,44″&71″–54″ (3)
160lb 408NHP
3DB,12rf,GS215,HS6684
Gourlay Bros.&Co.,Dundee

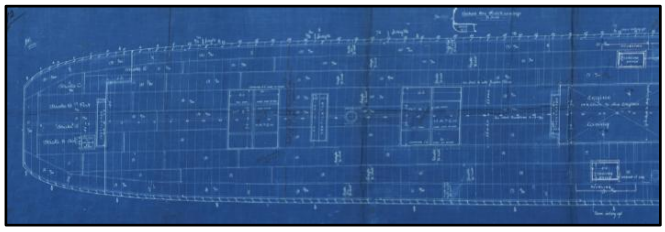
Extract *from Lloyd's Register of Shipping, 1915-1916 Volume II (Steamers) showing entry 324 and SS IONA (1892) engine details – triple expansion 3-cylinder steam engine with High Pressure Cylinder bore of 29'', Intermediate Pressure cylinder bore of 44'' and Low-Pressure cylinder bore of 71'' with a 54'' stroke.* (Image: Courtesy of Royal Museum Greenwich)

* The vessel was fitted with the 'Fisherman' pattern anchor with the stock at right angles to the flukes (Unfortunately, we have no image of this item at this time. After several dives, we only saw this during our safety stop at the end of the last expedition dive, with no means of imaging it. It was pretty frustrating, but we now have one of our first shallow water objectives for Expedition 2!). Drawings and images of the SS *IONA* show a more modern forged stockless anchor.



(Left) *Sectional detail of SS IONA from Gourlay Bros Shipyard Build Drawings, showing the starboard stockless anchor.* (Image: Scubaboard)
(Right) *Image of HMS CONWAY's Admiralty Pattern Anchor, similar to the anchor spotted on the wreck.* (Image: National Museums Liverpool)

***** The 'weather' deck aft of the superstructure lacks the large Numbers 4 and 5 cargo holds indicated on the shipyard plans for the SS *IONA*. Instead, there is 1 cargo hold aft of the machinery spaces, with transverse steel deck beams holding the remains of wooden decking, with a convex camber indicative of a weather deck to allow water run-off. This is indicative of a passenger vessel, and this hypothesis is backed up by the aft 'tween' decks spaces which appear to show remnants of cabins and passageways. The hull between the focsle and superstructure has collapsed and its nature is not fully-known at this time.



Weather Deck Plan detail of SS IONA from Gourlay Bros Shipyard Build Drawings. (Image: Lloyd's Register)

***** The shipyard plans of the SS *IONA* (1892) show a wooden deck house aft, possibly for the engine room ratings and for access to the steering gear flat and aft peak tank. The wreck has a raised, curved steel 'turtle deck' aft, providing shelter for the aft mooring station and an enclosed steel structure with large windows, possibly a wheelhouse for local steering.



View from the port side looking aft showing the aft weather deck and collapsed aft mast. (Image: Courtesy of John Livesey, Chair, Groupers Sub Aqua Club)

On diving the wreck, she is demonstrably an iron-hulled steamship that came to grief when she drove on to the Shi'b Ash-Sharm reef from the West, while almost certainly inbound to Yanbu. She sank slowly enough for some lifeboats to be launched, owing to the outboard position of those lifeboat davits, and for the boilers to be blown down to prevent a catastrophic boiler explosion (such as suffered by the RMS *RHONE* off Salt Island, Virgin Islands in 1867).

Conclusion

GSAC asserts that the answer to the question 'Is this wreck the SS *IONA*?' is a clear 'no', having identified several areas to back up this assertion. The project will now move forward to Phase 2 in order to try and identify which vessel this could be. A research project using primary sources will aim to provide a list of candidate vessels and associated shipyard drawings. Expedition 2 in 2027 aims to cross-reference engineering details on the drawings with that of the wreck structure in order to provide a positive identification of the wreck.

England – Stoney Cove, Leicestershire

Underwater Archaeology: A NAS Foundation Student's Experience of the Course.

Gary Fernandes and Mark Lewis – North Wales Sub Aqua Club





As established divers, my buddy and I set ourselves targets in terms of types of dives we plan to undertake for a given year. This keeps the spirit of adventure alive for us. It was during the period of 2024-26 that we dived the lakes (llyn) of The Snowdonia National park (Eryri). I should say here that many of the lakes require specific permission of both the land owners and the organization Natural Resources for Wales in order to dive them.

During our time diving these lakes, we have come across many finds both big, (Snowdon Star pleasure boat) and small, (pieces of colourful pottery and clay type jars). We recognised the fragility of many of these items and leave them in situ, but it sparked an interest in us as to what they were, how they came to be there and how old they were.

We wanted to know more.

We then recalled that our diving organisation, The Sub Aqua Association (SAA), had ties to a body called The Nautical Archaeology Society (NAS). A phone call to our SAA National Dive Officer, and we were put in contact with the NAS course co-ordinator. They were most helpful in providing information and guidance as to NAS services, including the Foundation course which we saw as something that might help us in answering some of the questions we had around our finds in Eryri: We enrolled.

We found that the course comprised two parts, online study and an in-person two-day practical skills course.

It is important to note that there was plenty of support from the NAS Team to help us through the course. In our particular case, there where difficulties around the basic IT skill level required to undertake the course. Simply by contacting the NAS Education Manager, a workable solution was found and the online course was successfully completed.

What the online course gave us was an introduction to archaeological work flow. More specifically, the legislation around a find, the considerations for assessing and recording, together with thoughts around whether to recover or leave a find in-situ. Funding, storage and curation were also aspects of the course.

The next stage was the two-day skills course, which in our case was held at Stoney Cove, Leicestershire. Here we studied practical ways of taking measurements of an underwater find and recording that data. This exercise extended to an in-water practical on the Gresham shipwreck, followed by classroom work using the data collected to convert it to a meaningful 2D description of some parts of the wreck.

On completion of the online and practical skills sessions, we received our Foundation Certificate in Nautical Archaeology.



Gary & Mark kitting up to dive The Gresham wreck.
(Image © Mark Lewis)



Classroom artefact identification exercise.
(Image © Mark Lewis)

Both my buddy and I couldn't stop enthusiastically talking about the course on our journey back from Stoney Cove to home.

The course had been a fascinating and informative experience, that better equipped us to know where to start in answering some of the questions that motivated us to enrol on the course.

We did appreciate however, that the Foundation course is just a beginning. We could for example, sign up for a dive route of a protected site, or join the NAS diving club. We may attend specialist conferences on underwater archaeology, or continue our learning experience with courses, such as composite ships, or canon identification. The NAS also provide contacts in the UK and abroad for volunteering in field projects. The Foundation qualification opens many doors.

In the meantime, we are returning to our beautiful Welsh llyns in Eryri to see what finds there are under water that will tell us a little more about our past.



Mark & Gary at Llyn Padarn hoping to discover underwater finds that will tell a story from the past. (Image © Mark Lewis)

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Have Your Say and Contribute to the *'Quarterly'*

Have you - attended a Maritime Course, Conference, Fieldschool, or any other event that you would like to review?
Are you - involved with any maritime research you would like to tell us about?
Are you - in need of any Maritime Archaeological help or assistance?
Do you - have a Maritime Archaeological story to recount?

The ***'Quarterly'*** is intended to be **'By Members, For Members'**, but we are happy to receive contributions from anyone with interesting maritime information to relay. Contact us using the e-mail address below, and we look forward to hearing from you.

We are not looking for academic dissertations, just:

- A report or article as a word document.
  - 200 – 250 words = ½ page
  - 450 – 550 words = 1 page
  - 800 – 950 words = 1½ pages
  - 1,100 – 1,250 words = 2 pages
- A minimum of two .jpg images, ideally in landscape and high resolution, with captions, credits and copyright details.
- Your name & title as you would like it to appear, together with details of any organisation you represent.
- A thumbnail image of yourselves that you would be happy to share! (this is purely optional)

Submission deadline for the Winter 2027 edition, will be – Friday 8th January

and we will endeavour to include your contribution in a future edition of the ***'Quarterly'***.

NAS credits are also awarded for articles published. See: https://www.nauticalarchaeologysociety.org/write-for-us

Submissions & Contact Details: quarterly@nauticalarchaeologysociety.org

Hard Copies of the *'Quarterly'* - Are available via the NAS on-line shop, or when your next annual NAS membership subscription comes around, add the ***'Quarterly'*** to your membership and the next 4-issues will automatically be posted to you (see above).

Images of the Quarter: 'Mystery Artefact Identified by AI?'



An e-mail was recently received at the ***'Quarterly'*** having the image shown on the left attached. It was noted to depict an item recovered in 2017 from the Arabian Sea, within the waters of the Sultanate of Oman. It had apparently been reported to the Ministry of Heritage and Tourism of Oman, thought to be of British origin, and possibly having significant historical and archaeological value.

As the name MacGregor appeared to have been cast into the item, a company of that name was contacted, who ran the image through Google Lens which came back as follows:



'The selected object appears to be a heavy-duty forged metal dovetail foundation key or bridge fitting pin used for securing shipping containers on cargo ships or intermodal transport'.

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2026				
November	10/12/15	Digital Illustration for Archaeology	On-line	£40
	14 - 15	Vrak & Vasa Museum Trip	Stockholm, Sweden	£180
	21 / 22	Using Online Archives	On-line	£40
	28	Composite Ship Construction	Cutty Sark, Greenwich, London	£140
December	1 / 3	Potentially Polluting Wrecks	On-line	£40
2027				
Dates: To Be Advised		Protected Wreck Diving Days	Sites: To Be Advised	(TBA)
March	(TBC)	QGIS: Introduction for Total Beginners	On-line	£40
May	8	Photogrammetry of Marine Finds	Portsmouth, Hampshire	£75
	22	Cannon Recording Practical	Portland, Dorset	£50
June	(TBC)	Understanding Metal Wrecks	Southampton, Hampshire	(TBA)
	24 - 29	Farne Islands Fieldwork	Seahouses	(TBA)
July	17 - 20	Investigating SS Salado Wreck	Lundy Island, Severn Estuary	£500

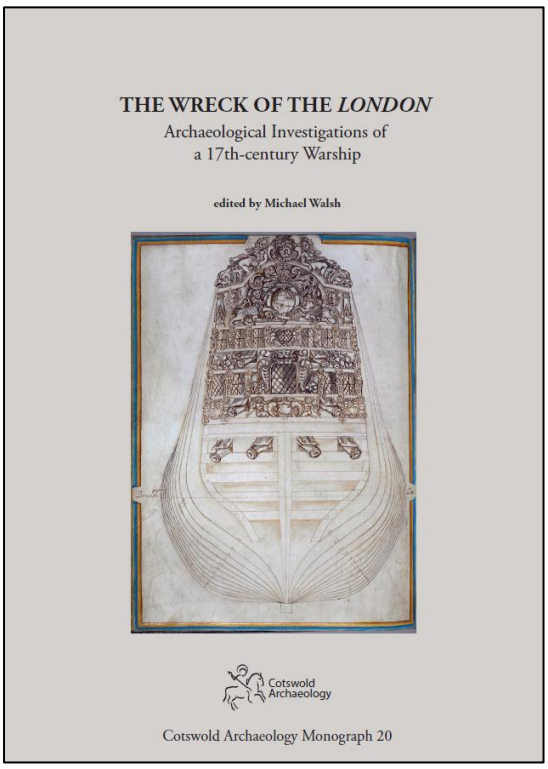
On-line Courses	In person Courses	Protected Wreck Diving	Fieldwork	Heritage Events

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The Wreck of the *London*

(£35.00 - plus postage)

Archaeological Investigations of a 17th-century Warship

Edited by Michael Walsh

Cotswold Archaeology Monograph 20
Published April 2026 by Cotswold Archaeology

ISBN Hardback: 9781999822286

H 297 x W 210 mm / 290 pages / 1.6kg

Archaeological investigations at the site of the *London* wreck reveal the remains of a 17th-century English second-rate warship built in 1656. The *London* served in the Cromwellian and Restoration navies, including the fleet that returned Charles II from exile, before sinking in the Thames Estuary in 1665.

Since March 2014 a programme of archaeological excavation, geophysical survey and finds assessments has been undertaken by Cotswold Archaeology (CA) and its specialist sub-contractors on the site of the London wreck.

The *London* was an English second-rate ship-of-the-line built at Chatham in 1656 during the Interregnum. The *London* served in both the Cromwellian and Restoration navies, saw action during the Anglo-Spanish War in 1657 and participated in the English show of strength during the Battle of the Sound. At the time of the Restoration in 1660 the ship formed part of the fleet that brought the future King Charles II back from exile in the Netherlands.

The *London* sank in the Thames Estuary in 1665 while preparing for the Second Anglo-Dutch War. The ship was blown apart by an explosion, probably of its gunpowder magazine, and, as mentioned in Samuel Pepys' diary entry of 8 March 1665 only 24 personnel survived.

This volume presents a brief summary of the excavations and the results of the assessments of the recovered finds, subsequent analyses and the conservation of the materials. It considers the archaeological, historical and documentary evidence collectively in its local, regional and national context. The remarkable results of the conservation of the broad range and variety of recovered artefacts and material types have presented an ideal opportunity to contribute to the public understanding of the principles, practices and achievements of conservation science through this volume and online resources.

To purchase a copy of the above, or any of the other books from the NAS on-line shop, go to:

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