Forgotten Wrecks of the First World War

Lord John Roberts
Site Report

Maritime Archaeology Trust

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FORGOTTEN WRECKS
OF THE FIRST WORLD WAR

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Report
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MAT staff involved in the fieldwork and reporting: Grant Bettinson & Julie Satchell.

ii Copyright Statement

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1 Project Background

Forgotten Wrecks of the First World War is a Heritage Lottery Funded project dedicated to raising the profile of a currently under-represented aspect of the First World War. While attention is often focused on the Western Front and major naval battles like Jutland, historic remains from the war lie, largely forgotten, in and around our seas, rivers and estuaries.

With over 1,000 wartime wrecks and dozens of coastal sites along England’s south coast alone, the conflict has left a rich heritage legacy and many associated stories of bravery and sacrifice. The underwater memorials represent the vestiges of a vital, yet little known, struggle that took place on a daily basis, just off our shores. The study and promotion of these archaeological sites presents a unique opportunity to better interpret them and improve physical and virtual access.

The project focuses on underwater and coastal sites from the Isle of Thanet in Kent, to beyond the Isles of Scilly, and over half way into the English Channel. The sites include merchant and naval ships, passenger, troop and hospital ships, U-boats, ports, wharfs, buildings and foreshore hulks. These sites, under water and on the foreshore, have been degrading and deteriorating due to natural and human processes for approximately 100 years and, as a result, are extremely fragile. In many cases, this project represents a final opportunity to record what remains on the seabed and foreshore before it is lost forever.

The project aims to characterise the nature and extent of the maritime First World War archaeological resource surviving on the south coast’s seabed and around the coast. This will enable an understanding of the record of maritime activity created during the conflict and provide a window onto some of the surviving sites. While it will not be possible to visit and record every site dating to the First World War along the south coast of England, a representative sample of sites have been selected for more detailed study, analysis and interpretation.

With particular regard to coastal, rather than fully submerged archaeological remains, it has been noted in wider commentaries on England’s coastal heritage (Murphy, 2014: 94) that there are relatively few surviving sites because of subsequent reuse and/or destruction during or following the Second World War. As a result, from the perspective of identifying coastal research priorities an emphasis has been placed (Murphy, 2014: 119) on the need to differentiate First World War sites from those of the Second World War. With all of this in mind, the following report addresses one of the coastal sites dating to the First World War: the possible site of the Lord John Roberts (Figure 1), the hulk of a wooden trading vessel situated near Saltash in Cornwall.

2 Site Background and Context

The site was chosen for inclusion in the Forgotten Wrecks project as an example of a wooden trading vessel active during the First World War. The site is representative of the ships undertaking local commerce in and around Plymouth Sound during the First World War, it is an example of a vessel type particular to Cornwall and Devon.

The site has been interpreted multiple times as different vessels and never firmly identified. All previous reporting identifies the remains as a flat bottom barge likely used in and around Plymouth Sound for the transport of cargo. The vessel was likely being built in the late 19th Century/ early 1900’s and actively trading during the First World War.
This site provides an opportunity to examine what would have been a common type of vessel plying waters around England in the First World War. The barge is the workhorse of its time and is a type of craft that were common in the estuary during the 1900’s.

The site, potentially the Lord John Roberts, demonstrates aspects of regional shipbuilding and use. Working vessels such as this were designed to fit the requirements of the estuaries in which they were employed, leading to regional differences in working boats such as the Thames barge, Brixham trawler and in this case, a Tamar barge.

The site is located in Forder Creek a tidal inlet off the River Lynher connected to the River Tamar estuary making up part of Plymouth Sound. The site is located close to the town of Saltash and can be easily accessed. Forder Creek and other estuaries in the area were frequently used for the dumping of vessels after their working lives. Other sites in close proximity include the trawler Boy Eric and the remains of the old stone quays for unloading and loading the barges.

Survey work on the site aimed to examine construction characteristics of this working vessel in order to clarify its identity. Other sites situated nearby were also surveyed, including the remains of the steam pinnace Paris and the torpedo training school HMS Defiance.

2.1 Site History
Confusion over the identity of the site comes from the identification of the site as five different vessels within available sources. All the vessels where active during the First World War period in the Plymouth area. They are:

- Lord John Roberts
- Elizabeth Jayne
- George Murray
- Saltash
- Village Belle
Out of these five possibilities the three most likely to be represented by the remains are the Lord John Roberts, Elizabeth Jane and George Murray. Previous work and historical research has ruled out the vessel as the ‘Saltash’ or ‘Village Belle’. The identification of the remains as these vessels has been derived from conversations with local residents. Local knowledge can be particularly informative in helping identify hulk remains, although there can be issues when differing stories are attached to the same site. The Sections below examine the various identifications of the vessel, with particular similarities being noted within the oral histories collected during research.

2.1.1 Lord John Roberts
The identification of the vessel as the ‘Lord John Roberts’ comes from an infamous and well respected book ‘Lost Ships of the West Country’ by Martin Langley & Edwina Small (Langley & Small, 1988). The text has provided a starting point for many intertidal archaeologists studying sites in the South West region.

At the time of writing in the 1980’s the vessel’s identity was shrouded in some confusion, making reference to the site as ‘Erroneously identified as the Saltash or Village Belle’ both barge type vessels of a similar size.

The identification of the vessel as the ‘Lord John Roberts’ comes from the singular source of Jack Crosley a former ferryman, boat proprietor and river pilot who is a ‘most reliable authority on nautical matters concerning the Lynher’ and knows the barge well. There is no reason to question his testimony at the time however as can be seen in this section taking local accounts at face value has led to the site being assigned different ‘firm’ identifications.

The vessel was described as a single masted sailing barge possible smack or lugger rigged built in 1900-02. The text also puts forward a vessel from the Mercantile Navy list (ON 121645) as a possible official source. Lord Roberts (33 tons net) built at Sandhaven, registered and owned at Lerwick. This is likely not the vessel in question as all locations are in Scotland.

The vessel had made its way to the Devonport dockyards and by the 1930’s was working consistently in the Devonport area never venturing outside of Plymouth Sound. Sold to the Sea Scouts in the 1950’s the vessel was dismasted and brought to Forder Creek to serve as a headquarters and training vessel. The scouts made little use of the vessel and its fell into disrepair in its current position.

2.1.2 Saltash
This identification comes from ‘The Shipping and Trade of the River Tamar’ (National Maritime Museum, 1980) where the hulk is referred to as being the Saltash. This has been discredited by both Langley and Small, local historians and archaeologists (Plymouth Hulks, The Forgotten Ships around Plymouth, 2011).

The hulk of the Saltash is believed to have been identified further down the estuary in Tamerton Lake by a local enthusiast responsible for a fascinating and well researched website that details his research into the hulks (Plymouth Hulks The Forgotten Ships around Plymouth, 2011).

In Tamerton Lake the keel of the vessel is visible and measured to an approximate match with the Saltash. Saltash was built in 1864 is stated to have been altered from a sharp keeled yacht to an almost flat bottomed cargo vessel used in the local trade of stone. Saltash ended its working life as a houseboat for the Tamerton Boy Scouts (Plymouth Hulks The Forgotten Ships around Plymouth, 2011).
It is interesting that the account of the end of the ships working life is similar to that of the Lord John Roberts, which has perhaps resulted in the confusion between the two vessels.

2.1.3 Village Belle
There is no mention of the vessel as the village belle in any source other than in the text of lost ships of the West Country and this has now been discounted due to a lack of evidence (Langley & Small, 1988).

2.1.4 Elizabeth Jayne
This identification comes from the historic shipping website referencing another personal account of a local unnamed man who identified the vessel. The man remarks that his mother owned the vessel before immigrating to Australia and it is called ‘Elizabeth Jayne’. He also remarks that the vessel was used as a Scout hut for two years (Plymouth Hulks The Forgotten Ships around Plymouth, 2011).

An image of the Elizabeth Jayne appears in ‘The Shipping and Trade of the River Tamar’ (Merry, 1980), this shows a Tamar barge, it shows a vessel with a sharp bow and low freeboard. Within the publication there is some contradiction as it references the remains at the site as ‘Saltash’. The text provides the details of Elizabeth Jayne as a 50 ton barge based in St Germans that was sold in 1950 for £60 running out of Devonport for 2-3 years carrying cargoes of wood for the docks before falling into disrepair and presumably hulked.

2.1.5 George Murray
The identification of the vessel as the George Murray comes from Martin Read (Plymouth University). Between 1998 and 1999 student and local archaeologists undertook various surveys in the Cornwall and Devon area focusing on Tamar barges. Details of the survey of 50 hulks is available via a website outlining the findings (Read, 2000). The text suggests the vessel is the George Murray a Tamar barge, however, it is not stated how this identification was ascertained.

In other publications from local history groups and internet discussion boards (Atkin 2018) the vessel George Murray is described as a ‘London barge’, presumably a Thames barge.

This identification was then further validated by a local dog walker encountered during initial site inspection in 2017 who claimed the vessel was the George Murray. It is unclear where this identification has come from and if it is based on any fact or local history.

2.1.6 Discussion
There are some interesting consistencies in the histories of all these vessels particularly their role in use as local trading craft which were then used as a Scout hut. The Saltash Scouts either had multiple vessels used as huts at different times or, perhaps more likely, stories have become mixed up over time, confusing the vessel name.

Barges and working boats rarely have detailed historical records available, they were often engaged in relatively repetitive and localised trade. Working boats were frequently deposited in estuaries once they had come to the end of their working lives. Local residents at Forder were known to burn the hulks to speed up decomposition and remove scrap fittings.

The descriptions of the form and function of the vessel most frequently indicate that it is a flat bottomed barge, most likely a Tamar barge. These vessels have a distinctive hull form, which shares some similarities to the Thames sailing barges.

Tamar barges were designed for the local trade primarily working within the ports of Plymouth and Falmouth. The vessel type is further subdivided into two sub categories – ‘Inside’ and ‘Outside’ barges.
The larger Tamar barges were engaged in more distant trade, equivalent to local trading smacks and small ketches, these were known as ‘Outside’ barges and they were registered and subject to survey.

Greater numbers of Tamar barges were known as ‘Inside’ barges ranging between 20 -30 tons, and between 30ft to 60ft in length with a very similar hull form to the larger Outside barges. The Inside barges were usually unregistered working only around the Plymouth area.

Tamar barges were wide beamed vessels with a shallow draft and external keel. They had a broad flat transom. A key characteristic of the smaller ‘Inside’ barges was the small, often completely non-existent, bulwark (railings) on the main deck. The mast on these smaller vessels was often stepped in a tabernacle in the main deck. The vessels where often constructed from local wood built in a number of local ship yards (Greenhill & Mannering, 2013).

They commonly ran with a two man crew transporting a range of cargoes. Ian Merry author of ‘Shipping and the Trade of the River Tamar’ identified 130 vessels in use on the river in the 19th Century, considering that very few where registered it is likely to be a conservative estimation (National Maritime Museum, 1980).

Tamar barges are known to have been used for trade in relatively large numbers up until the Second World War by which time many had been fitted with auxiliary motors. Read (2000) states that this most frequently happened in the 1930’s.

Two Tamar barges Shamrock (Figure 2) and Lynher were restored in the 1950-60’s. Lynher is an example of an Inside barge while Shamrock represents the larger Outside barges and is more comparable to the vessel remains being surveyed.
2.2 WIDER GEOGRAPHICAL CONTEXT

The site is located in Forder creek a tidal inlet off the River Lynher connected to the River Tamar estuary making up part of Plymouth Sound (Figure 3). The site is located close to the town of Saltash and can be easily accessed.

The creek is in the centre of the Forder Community and Conservation Association Area and within the Church Town Farm Nature Reserve. These local area designations are managed by local volunteers. The site is located on the Western bank of the creek in close proximity to the historic viaduct that spans the creek. The creek has steep cliff faces of local stone.

The town of Saltash and Forder Creek itself had a well-established stone trade which was thriving until the middle of the 19th Century. There were a few small quarries worked for building stones, the quay
The vessel is orientated bow to the shore with the transom lying in deep, fine sediment toward the centre of the channel (Figure 5). Because of its location high up on the banks a long tidal window is available to undertake survey allowing up to 4 hours on site. The site can be easily accessed and is visible at high as well as low tide. The stern of the vessel is covered during each tidal cycle and a low spring tide was used to fully survey the site.

2.3 RESEARCH QUESTIONS

Within the available published and online sources there were few detailed depictions of the hull, fixtures or fittings to enable the firm identification of the site from the various possibilities. Although there is reference to the site, identified as the George Murray, within a ‘Survey of Tamar Barges’ (Read, 2000), this is not currently available for consultation.

Un-published work has also been conducted by the Plymouth SHIPS project identifying the vessel as Lord John Roberts but again, questioning its identity. The SHIPS project kindly shared information about their understanding of the site (Peter Holt, pers comm July 2017).

Based on research and available data on the site a number of research questions were formulated to focus the survey approach. They were:

1. What are the extents of archaeological remains at the site?
2. Is there evidence of the vessel being refitted with an alternate form of propulsion?
3. What are the main characteristics of the vessel that can be inferred from the remains?
4. Can the characteristics of the site rule out any of the possible identifications for the site?
3 Fieldwork Methodology

Forgotten Wrecks Project site visits and fieldwork aimed to:

- Provide opportunities for volunteers to access and take an active role in the recording and research of a range of different types of maritime First World War site.
- Record extant remains for heritage records.
- Record extant remains for public dissemination, enabling ‘virtual’ access for those not able to achieve physical access.

Intertidal/coastal fieldwork comprised a combination of the following (depending on the nature and extent of the site): initial site visit and sketch, characterisation of remains through detailed inspection, full site survey including measured and photographic survey and/or creation of 3D model.

For further information about methodologies employed, please refer to the MAT’s Forgotten Wrecks of the First World War: Project Methodology Report.

4 Site Results

An initial site inspection took place in June 2017 during a walk over survey of Forder Creek. The site survey took place on the 27th July 2017 from 14:00 – 19:00 utilising a spring tide to allow a long working window.

A baseline was established down the centre of the vessel along the keelson. Work completed included a detailed sketch plan, site record form and a full photographic survey which has been used for 3D modelling. The survey recorded the full extent of the site and has enabled details of construction to be analysed.
The vessel is orientated East - West with the bow towards the shore. The remains of this flat bottomed barge measure 21.6m from stem to stern with amidships beam of 5.15m. The vessel is intact amidships from the base of the bilge up to the gunwhale. The transom has become largely detached and is now held at a single point where it is scarfed to the keel and keelson.

The full freeboard of the vessel is shown by the iron knees on top of which the deck would have situated. The five pairs of iron knees also show the positioning and size of the main central hold combing.

The knees show the height of the main deck, the knees extend down across the bilge as riders giving strength to the transition between the vertical sides of the hull and the flat bottom (Figure 7). The knees have been fitted around the bilge riders and also show evidence of an internal stringer which supported the deck. The iron knees have been fixed to the framing using large iron fasteners.

The bow and stern of the vessel have collapsed in and the debris has been removed by either tidal action or human interaction. The stern has collapsed outwards, however the 1982 survey images (see Figure 12 below) show this had a severe vertical rake, which would have made the vessel 2m shorter than the extent of the remains today as the stern has fallen outwards.
The framing is squared off oak, which is regularly spaced intervals of 0.4m centre to centre, with a 0.27m gap between sides. The vessel has a hard chine with bilge stringers lining the port and starboard sides maximising and reinforcing the hold space. The vessel is fastened together using large copper alloy bolts and treenails with the planking additionally fastened with iron tacks.

**Figure 8 - Scarfs of Planking, Second Layer of Planking**

**Figure 9 - Close Up of the Bow on the Port Side**
The vessel has a shallow keel which is mostly buried and is clearly flat bottomed, the lower hull has been reinforced with a secondary layer of planking and then the keel and hull sheathed with an unknown metal, which clearly has some iron content judging from the corrosion present.

The planking is attached with a series of flat scarves shows in Figure 8, that also shows remains of metal on the far right and the secondary layer of planking. The strakes of the siding are currently well preserved, however, they are eroding out rapidly. Only three or four are present on each side which, compared to the condition seen in recent years, is a rapid loss. Three sets of matching eyebolts are present, these relate to the chain plate and rigging in general. Two of the matching pairs are eyebolts of a similar form, the most forward placing set of eyebolts are different in form to the others.

Towards the stern the two pairs of eyebolts are fixed into the framing. These are presumed to correspond with the position of the mast and deadeyes (see Figure 10). The eyebolt strapping has been bent around to accommodate the gunwhale (also shown in Figure 10).

The gunwale is 10cm in depth and runs flush with the deck. The floor timbers are regularly spaced at 0.4m centre to centre point and with an inter frame spacing of 0.27m. The floor timbers have an average siding or 0.14 m. The remnants of the ceiling planks show that the floor timbers would have been lined, the planks would have lain flush with one another with the exception of the keelson that would have protruded slightly above them.

The stern lying in the channel has become detached with the twisted transom stern post delineating the extent of the site. The stern framing has fallen outwards and the material has become washed away in the tide. The curvature of the stern framing would suggest a relatively gentle stern counter with a flat broad transom and a fairly severe rake in the stern. The gudgeons are still in place on the stern post, however, there is no clear remains of the rudder, this is a change since 1982 when the stern was still intact, as can be seen in Figure 12. The same image shows a clean cut at the bow area which may suggest some deliberate salvage or removal.
FIGURE 12 - THE SITE IN 1982 (PLYMOUTH HULKS THE FORGOTTEN SHIPS AROUND PLYMOUTH, 2011) CC JOHN COTTON

FIGURE 13 - FWFWW THE SITE IN 2017 (27/07/17)
Comparison between the 1982 image (Figure 12) and those from 2017 (Figure 13) demonstrates the relatively rapid rate of degradation at the site. The site is not stable with further areas deteriorating and becoming dislodged. The planking strakes are quickly eroding and rotting with only three of four now present on each side of the hull.

In the bow concrete has been poured internally between framing, it is not known when this was added, but is a relatively common occurrence with wooden hulls as they get older. As the blocks of concrete are large it might suggest it was for weight as well as to help to prolong the life of the vessel. The blocks are 0.27m across and likely 0.14m in depth. The concrete is a fine concrete and can be seen in Figure 14.

The keelson is 0.31m wide and has been reinforced by iron strips down either side. In the forward area there are a series of large copper alloy fastenings protruding through the keelson, which are likely to have fastened deadwood relating to the support structures for the bow.

The keelson has two visible rebates cut into it (See Figures 15 and 16), situated just forward of the main hold hatch. The larger of the two (Figure 15) is made up of two filler pieces used to plug what is a potential mast step, perhaps suggesting conversion or refit. The filler pieces are 1.20m in length and extend across the full width delineated by additional metal banding that reinforces the support for this feature. The other rebate is further forward and considerably smaller 0.3m x 0.15m in width with a depth that does not exceed 0.05m. The purpose of this rebate is unknown, it may be a crutch.
In the port side there is a large cut in the hull interpreted as a gangway with a potential similar cut of the same dimensions on the opposite side. The cuts are 70cm wide and cut though the original framing (see Figure 17).

Internally there are a number of fixtures and fittings relating to the pump, securing cargo and of an unknown purpose. The pump fittings are still extant, with some present protruding outside of the hull (Figure 20), they suggest it would have been a machine driven pump. The housing of the pump mechanism would appear to have been located against the siding close to the seacocks on either side of the vessel (see Figure 18 and 19).
FIGURE 17 - FWFWW 2017 - POTENTIAL GANGWAY.

FIGURE 18 - TRACE OF PUMP HOUSING
Internally there is a mooring ring set on the starboard side into the ceiling planking (Figure 21) presumably this came with a matching pair on the opposite side that has been lost, with the potential for further rings to have been situated in the bow and stern. The logical purpose of these rings is to secure cargo.
There are other various fittings within the hull remains but are no longer attached, that are highly likely to be associated with the vessel. A 20cm x 5cm hook which may have been mounted internally to secure cargo (Figure 22). A possible lodging knee is located in the site which is likely to be from the stern (Figure 23).
5 Discussion & Conclusions

The extent of the archaeological remains and the construction details of the vessel have been established. It is now possible to use this information to review the potential identity of the vessel.

The site shows evidence of changes to the vessel undertaken during its working life. The two entrances or gangways that have been cut into the hull towards the bow of the vessel are likely to have been for access, however, they would have made it very impractical when in use carrying cargo. These gangways could have been added when the vessel was used as a Scout hut.

The site is 21.6m in length and 5.5 m wide with an associated debris field of around 0.5m. The site covers approximately 126.0 m². The overall length of the original vessel would have been up to 2m shorter as the site length includes the stern which has collapsed outwards, making the original vessel around 19.5m long.

Comparison of the vessel remains with the Tamar barge Shamrock shown in Figures 24 and 25 show main similarities in form, although the Lord John Roberts is slightly smaller in length and breadth. The general layout and disposition of the structure would suggest the remain represent an Outer Tamar barge. While the identity of the vessel as the Lord John Roberts is not completely determined, at present time it is the most likely candidate.
FIGURE 24 - SITE PLAN OF THE LORD JOHN ROBERTS COMPARED TO THE DECK PLAN OF THE SHAMROCK TAMAR BARGE

Birds eye view of Site

Deck Plan of the Shamrock
FIGURE 25 - AERIAL PHOTOGRAPHIC VIEW OF THE LORD JOHN ROBERTS COMPARED TO THE DECK PLAN OF THE SHAMROCK TAMAR BARGE

Birds eye view of Site

Deck Plan of the Shamrock
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