

The Mary Rose Highlight Tour

Keep an eye out for these signs around the museum. They will tell you which object we are talking about.

If you have any questions about the artefacts in the museum, ask any of our volunteers.



1. The Ships Bell (the bell is located in our reception. If you miss it when you enter, you can see it at the end of your visit)



The first object in the museum is the Mary Rose bell.

This was one of the first objects on the ship. The writing on the bell is in Flemish and says 'I was made in the year 1510'.

Henry VIII ordered the building of the ship in January 1510, so the bell was on the ship from 1510 until the day she sank in 1545.

The bell was used by the sailors to tell the time on board. It is made of bronze and is smaller than later ships' bells that have the name of the ship on them.

1545 Experience - Please make your way through the curtain when instructed to by our staff.

As you stand in front of the image of the ship sinking,

Dame Judi Dench narrates:

When their world ended our story began.

In 1545 a disaster struck The Mary Rose and she sank in the Solent, only a few miles from where you are now standing.

She lay undiscovered for hundreds of years, entombed in the seabed, until her wreck was finally located by a group of divers in 1971.

After years of careful planning, on a cold wet day in October 1982, the hull of the Mary Rose was raised from the seabed that had protected the ship and its contents for over 437 years.

This transition from obscurity to fame was witnessed by a global television audience of over 60 million people. Perhaps you were one of them, I certainly was.

Today, the Mary Rose and her thousands of artefacts provide a unique insight into life on board a Tudor warship but do you know how her story began?

Please turn to your right and walk towards the screen with

Henry VIII

It all began in 1509, when I, Henry VIII, became King of England.

Come closer everyone, come hither. That's it, come beside me, I'm not as scary as I look. Come closer, I have much to tell. I was near 18 when I came to the throne. Yes, that's me up there, hard to believe isn't it.

A great king should seek glory in just war and rightful conquest. By ancestral right I was also King of France - but I could not enforce this unless I waged war on the French – and to do this I needed ships to carry my armies across the Narrow Seas. When my father died I inherited just five Kings' Ships, now I have near 60. The first ship I built was the Mary Rose and I paid for her out of my own purse within ten-months of my accession to the throne. She was named for the Blessed Virgin

Mary and our Tudor Rose, she proudly bears this emblem high atop her forecastle.

I loved to hear how she sailed and my first Lord Admiral, reported “Sir she is the noblest ship of sail at this hour... as fast and manoeuvrable as a vessel a quarter of her size”.

I viewed her myself many times, indeed I went aboard her with the Holy Roman Emperor when we inspected our ships before my second war with France in 1522.

My army by sea, my navy royal, has been one of my chief delights. I have built great dockyards and gun foundries to arm our ships and fortify our coasts. My greatest ships have bellies bursting with guns set at ports with lids which can close. Many guns bear my titles and the marks of our Tudor rose and the fleur-de-lys. When fired these roar and breathe smoke, causing fear and dread among mine enemies.

My wars at sea have seen no great battles. In fact our re-capture of Boulogne a year ago was fought on land, not at sea. But now my spies inform me that more than 200 French ships are close to England, their fearsome war galleys harassing my ships and raiding our coast. Against this I have but 80 vessels anchored here at Portsmouth haven.

Anticipating fierce battle I have gathered my captains for a council of war on my flagship, and placed men atop the masts to keep watch. My gentleman Carew has served me well, and I am making him Vice Admiral in my Mary Rose

(sound effect of door knock)

What news?

(voice of servant off screen)

“...the enemy is sighted by the Isle of Wight”

Captains to your ships, tarry not. I will hasten to my army by the South Castle. Godspeed, and with God's Grace the winds will favour us.

(Henry's voice only)

The battle is upon us. The Mary Rose sails for the French fleet, join her now. Sound drums and trumpets, and cry god for Harry, England and St George!

The next room shows a video of the battle and sinking. If you don't want to watch this video, press the green button by the exit door to continue into the next gallery.

2. The Cowdray Engraving



This gallery has a large picture showing the Battle of the Solent. The battle took place over 3 days in July 1545. The Mary Rose sank on the 19th July 1545.

On the left is the French fleet with over 230 ships and more than 30,000 men on board, ready to invade England.

Some of the French troops can be seen burning a village on the Isle of Wight.

On the right is the English fleet coming out of Portsmouth Harbour. They are defending the coast of England and are stopping the French landing troops.

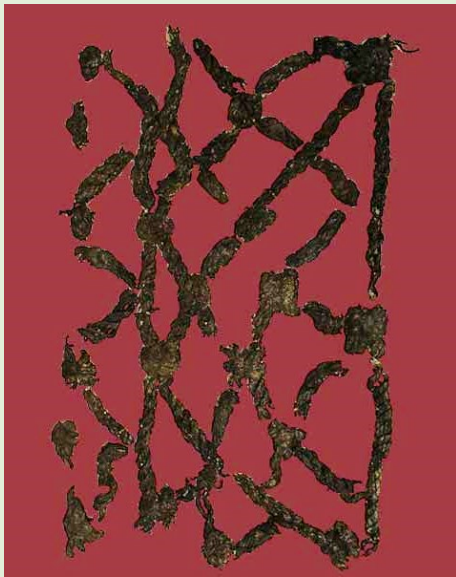
In the centre, the ships have already started to fight and the Mary Rose is sinking. Only two masts can be seen above the water.

King Henry VIII is on a black horse on Southsea Common. He is next to Southsea Castle, which he had built in 1544 to defend the coast of England from invasion by France.

The man behind Henry VIII on a white horse is Sir Anthony Brown. He had the painting made to show his friends that he was employed by the king.

If you want to know more about the painting, you can use one of the three screens located in front of the picture. Many items in the picture are very rare and our museum has the only examples of these objects in the world.

3. Anti-Boarding Netting



On the back of one of the cases there is a display called “Why did the Mary Rose sink?”

This lists some of the possible causes of the disaster.

To the right of that graphic display is a small fragment of the anti-boarding netting which was above the Main and Castle decks.

You can see the netting on the Anthony Roll painting of the Mary Rose and the painting by artist Geoff Hunt showing the Mary Rose sinking.

The anti-boarding netting was put in place to stop the ship being boarded by enemy soldiers when fighting a hand-to-hand battle at sea. During the sinking, it stopped many of the crew escaping.

4. Ship's Dog



In the doorway to the Carpenters' cabin we found the skeleton of a dog.

The dog was about 1½ to 2 years old and would have been

extremely good at catching rats on board the ship. He is cross breed between a terrier and a whippet.

The dog's skeleton reinforces that the Mary Rose was not only a warship but also a working and living environment.

As the dog was found in the doorway, he has been named Hatch by the museum team.

In this display case you can also see the beautifully preserved backgammon set which was also found in the cabin.

5. Gunner's Chest



Also found on the Main Deck of the Mary Rose was a chest belonging to a gunner.

The objects next to the chest were found inside the chest.

The Master Gunner's personal items include coins, dice, the ends of his shoelaces and even his finger rings and a small Maltese cross.

In the chest we also found items to do with gunnery such as a reamer, the item which looks a bit like a hat pin. This was used to clean out the touchhole and puncture the cartridge containing powder before firing the guns.

We also found a linstock - a long wooden stick with a carved end which held a smouldering cord. The gunner used this item to light the gun.

Woodworking tools were also found in this chest because the Master Gunner also had to repair the wooden gun carriages that the guns were mounted on.

The chest is very decorative, with carved details on the front including a shield which looks like it is upside-down. It is just below a lock so the Master Gunner could keep all his belongings safely locked away.

Behind the chest is a 1 gallon flagon, which was found close to the chest on board the Mary Rose. 1 gallon (nearly 4 litres) was the daily ration of beer for each man on board. This tankard was probably used for sharing the beer amongst a whole gun crew, not for one person to drink from. The Latin inscription on the lid says "If God is with us, who can be against us".

It is a quote from the Bible, but perhaps it is also very appropriate for the Master Gunner and his gun crew who wanted to be kept safe during battle.

6. Syringe/Surgical Instruments



In the surgeon case, you can see a syringe.

It was found inside the chest recovered from the surgeon's cabin on board the Mary Rose.

It is made of pewter, a material that only rich people in Tudor England could afford – meaning that its owner must have had money to spend on his professional equipment and was likely to have been well educated.

Syringes were used for treating infections like syphilis and gonorrhoea and for applying lotions or to flush out wounds to prevent infection.

A number of the surgical tools had blades which did not survive the conditions underwater. But we have been able to identify

what they were used for by looking at Tudor illustrations and at other similar examples.

They included a saw, knives, cauterising instruments (which were heated and used for searing body tissue) and trepanning instruments (used for drilling a hole into the skull to treat head injuries and diseases). A range of these surgical instruments can be seen in the nearby wall case.

People practicing medicine in the 16th century believed that the human body contained four distinct types of bodily fluid called the humours. These were Blood, Yellow Bile, Black Bile and Phlegm.

If someone was ill, it was believed that this was caused by an imbalance in the humours which was treated by releasing the surplus fluid from the body.

One way this was done was by bleeding, or blood-letting, which involved taking blood from the patient. Often this did more harm to patients than being a helpful treatment.

7. Galley/Chaos Case



In the 'Science and the Mary Rose' gallery we tell you the background to the archaeology and science involved in the Mary Rose project, including the conservation of the objects,

and the reconstruction of the faces of the crew.

On the left is a large square case where we show the remains of the ship's galley, the cooking area in the ship. Here we show how the excavation site looked underwater.

The ship had heeled over onto its side so this collection of objects had been crushed by thousands of bricks on top of them and then buried by 3 to 4 metres of silt on top.

You can see a large but squashed bronze cauldron that contained over 350 litres of broth when the ship's cook

prepared food for the crew. It was mounted above a large brick oven.

There is a strange brown object in the corner of the case, which is completely hidden inside a concretion - the heavy iron rust that forms around an object. You can just see the rim of a small cooking pot and the remains of the two handles and three legs underneath the pebbles and sand that have stuck to this iron object as it rusted away.

On the end of the case, close to the lift doors, there is a tile which has an impression of a dog's paw. The print was made as the dog over the tile before it was baked.

Other items in this area included the ash box and even the ash that was found inside the fire box of the oven. We even have the fuel logs that were used to heat the cauldrons. The logs are birch and some of them still have their bark!

On the back of the case are pictures which show how the divers recorded the brick structure underwater and shows the process of experimental archaeology - cooking on a replica oven. This helped us work out how the Tudors could cook a meal for 500 men but also cook specialist meals for the officers and gentlemen on board.

This case shows how we found these items underwater, but when you go into the next long gallery opposite the ship, look out for a reconstruction of a second oven with a cauldron set into the top, all made from the original bricks, showing you how it would have looked on board before the ship sank.

8. Archer/Skeleton



While the Mary Rose was being built, Henry passed a law that meant all boys and men under the age of 60 had to practice using a longbow.

The only exceptions were if you were physically unable to, or a member of the clergy. This law helped Henry, at a time of European tensions and conflict, to make sure that almost all Englishmen were able to use a longbow in case he needed archers during any war.

A forensic study of the remains of the crew, including the skeleton on the far wall of the gallery, revealed that Os Acromiale, a condition in which two bones in the shoulder blade don't fuse, happened more often than usual in the crew members of the Mary Rose.

This condition is sometimes caused by repeating an activity that puts strain on the shoulder bones and muscles. Practicing archery regularly from an early age affected specific bones of the professional archers. The condition is more common on the Mary Rose than on other populations of the Tudor era.

In total, the remains of 179 individuals were recovered during the excavations. This skeleton is the most complete of them all.

The reconstruction standing next to him is based on his skeleton. The face was built up using forensic techniques from an exact replica of his skull. This gives an impression of what this member of the Mary Rose crew looked like.

9. Ny Coep Bowl



As you enter the 'Men of the Lower Decks' gallery you will see the personal case for the cook and his possessions ahead of you.

In the front corner of the case is an example of one of the drinking bowls we found on board. We know it is a drinking bowl as it doesn't have any knife marks on the inside, unlike the plates which have scratches because the crew had used knives to cut their food. The bowl also has concentric rings from the tool marks that were made as this bowl was created on a pole lathe almost 500 years ago.

This drinking bowl is different to the others because it has an inscription on it that reads "Ny Coep Cook". This is a rare find as it gives us one of the very few names of the people who were on board. The only other names we know are Vice

Admiral George Carew, who was the chief captain of the ship and Roger Grenville, who was the captain.

As it says “Ny Coep Cook” we are certain this belongs to the cook on board. This case shows many of his personal possessions and professional equipment that were found just near to the galley. This was the cooking area in the hold of the ship where we found the remains of the cauldrons and ovens that you have just seen.

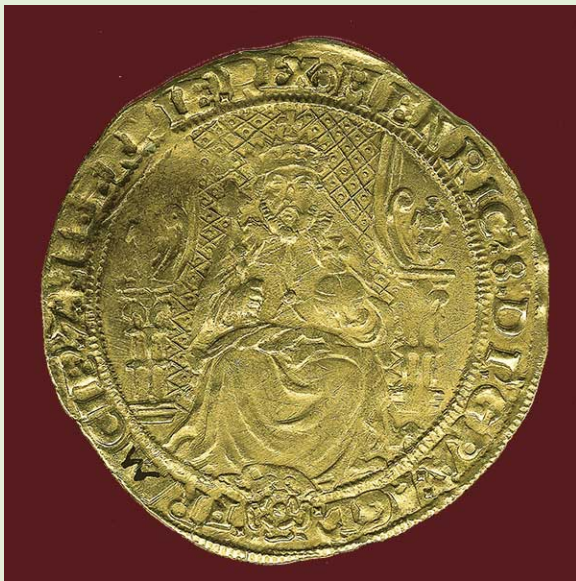
Also in this area was a small wooden stool. This wasn't just used by the cook to sit on, but to also to chop some of the food as we can see the stool has knife marks in it.

Close to the bowl we found a small knife. This could be the very knife that made the marks on the stool.

Also in this showcase are the other professional tools of the cook – his ash box, bellows for the fire, a ladle, a skimmer and

the mortar he used with a pestle to grind up some of the ingredients for his cooking. The mortar and pestle might have been used to grind up peppercorns, which we also found on the ship.

10. Gold Coins



In total 30 gold coins were recovered from the Mary Rose and some of these are displayed inside the Purser's case in this gallery.

They include coins known as Ryals (minted during the reign of Edward IV), angels (that depict St Michael slaying a dragon on one side and a ship on the reverse), and half sovereigns (with the king on one side and a crowned shield on the other).

The coins were discovered on all decks of the ship and were often found close to the remains the crew. However, one of the largest groups of coins were found in a chest on the Orlop Deck that we believe belonged to the ship's Purser. The Purser was responsible for many things but also for the money belonging to the ship.

The coins give us evidence of the changes that Henry VIII made to the coinage in England towards the end of his reign. In 1542, not long before the Mary Rose sank, the amount of precious metals (like gold and silver) that went into making each coin was reduced. As a result, the value of the coin would fall, but by less than what was gained by having more coins in circulation. By increasing the difference between the nominal value of the coin and the value of the gold, Henry VIII was able to increase the seigniorage which is the profit he made from minting coins.

The changes made to the coinage can be found in the gold coins recovered from the ship. We found coins from the reigns of Edward IV to Henry VII and then Henry VIII. By comparing them we found that the concentration of gold in the coins minted in Henry VIII's reign is lower.

11. Plumstones and Food



In the wall case in this gallery we can see examples of all the different types of equipment used for cooking, preparing and storing the food on board the ship.

This includes the plates and bowls that the crew ate from, the tankards they drank from and even things like a bread trough for preparing bread.

We also found examples of the food for the meals that they never ate. There are plumstones, fish bones, pork bones, beef bones and even some venison bones and peppercorns which were reserved for the officers on board.

Play the game in this case to see how good you would have been at cooking on board the ship.

Some bones of a rat show that the ship's dog would have helped as a rat-catcher.

It is incredible that these tiny aspects of Tudor life have survived together with all the thousands of objects that we found on board the ship.

12. Fighting Top



In a large case near the lift you can see a fighting top that was recovered during the excavations.

Fighting tops were placed close to the top of the masts. The only image we have of the Mary Rose, the Anthony Roll, shows 2 tops on her main mast and one on each of the other 3 masts.

Little of the masts and rigging of the Mary Rose survived as they were either salvaged soon after the sinking or they rotted away.

This fighting top was recovered from the rigging store on the lowest deck of the ship, the Orlop Deck. This means that it was kept in storage as a spare in case a mast top was damaged and needed to be replaced.

This example from the Mary Rose is unique, there are no other 16th century examples. Pictures from the late 15th and 16th centuries show tops with guns, darts, longbows and small swivel guns. An inventory for the Mary Rose includes 2 'top guns' with 20 stone shot each.

The Cowdray Engraving, that you saw earlier of the Mary Rose sinking, shows a survivor waving from one of the tops which is just above the water.

The large incendiary arrow displayed above the fighting top may have been thrown from a top.

The design of the top is similar to other contemporary examples. The Vasa, a Swedish warship that sank on its maiden voyage in 1628, has a top that had a similar construction.

There are some supports on the outside of the top that had traces of what might have been glue. This suggests that there was some form of outer shell to the top, possibly decorative shields.

13. Longbows and Arrows



In the Men of the Upper Decks gallery we display some of the weapons that were used by the men, on the upper and castle decks such as longbows and handguns.

We recovered 172 longbows from the Mary Rose, along with over 2,000 complete arrows.

Over on the wall case behind the archer's personal case are longbows as they had been stored. A large chest is shown in the case and two of these chests are full of all the longbows that were found in them. One had 50 longbows in it, the other had 49.

The chest is made of elm and there are two simple holes in the end panel through which a rope was knotted to make a rope handle.

If you look closely at the longbows, you can see the different features of them and how they were carved from the junction between the heartwood and the sapwood of the tree. This uses the natural qualities of the two types of wood to create the spring in the bow.

There are knots in the wood that have not been carved out so it would not reduce the strength of the longbow.

You can see the lighter coloured tips of longbows which would have been covered with a horn nock. A nock is an attachment that holds the string in place. We only found one of these and it is displayed to the right of the seven longbows on the back wall.

We also found boxes containing up to 960 arrows, stored tip-to-tip. If you look at the arrows carefully here you can see the remains of the silk bindings where the flights (the feather) of the arrow was connected to the shaft. The flights didn't survive because they have decomposed.

It was quite extraordinary to find any remains of this highly successful weapon that had been used by the English for hundreds of years.

14. Bronze Cannon



The Mary Rose was a warship and after its refit in 1536, nine years before the sinking, it acted as a platform for guns, both big and small.

One of the larger guns on board was this Demi-Culverin. The unusual name refers to a specific size of gun that took a certain size of shot.

The gun was made from bronze, which over time oxidises and this has given it the slightly green colour you can see. It is a muzzle-loading gun, which means the gunpowder and shot were loaded from the front of the barrel. This is different to the iron guns which were breech-loading, meaning they were loaded from the back.

The Mary Rose was a state-of-the-art ship when it was built, and the refits it had over its 34 year career ensured it was responding to the rapid developments in technology that went into the design of artillery.

This is one of the most decorated guns recovered from the Mary Rose but the markings served no functional purpose. They do give valuable and interesting insights into the background of the gun and the period in which it was made.

The inscription below the crowned Tudor Rose translates as: “Henry VIII, by the Grace of God, King of England and France, Defender of the Faith, Lord of Ireland and in Earth of the English Church Supreme Head.”

The inscription below this one refers to Robert and John Owen, the brothers who were the gun-founders, based in London.

The gun was positioned at the widest part at the front of the sterncastle, almost pointing forwards. It was put here so that it

could be fired at enemy ships that were in front of the Mary Rose rather than to the side. The transparent gun carriage that it stands on is a replica of the original design and allows you to see the details of internal iron fittings.

Compared to other gun carriages, the supports for the trunnions, the circular parts that stick out of the sides of the main barrel, are higher than they would normally be. This was to make sure that the gun could fire over the ship structure and anti-boarding netting strung across the upper decks.

15. Still Shawm/Musical Instruments



As you enter the Admirals Gallery, on the left end of the wall case you will see some of the 10 musical instruments that were found on board the Mary Rose.

The case includes a fiddle, tabor pipe, tabor drum and a still shawm (also known as a douçaine). The instruments are very important as they help to fill in gaps in our knowledge of the history of evolving musical instruments. Without these finds, we may never have known for certain that such instruments even existed!

The still shawm is particularly interesting as it is the only surviving example of this type of shawm anywhere in the world! It was made in two sections that are roughly equal in length. This would suggest that it was constructed so that the owner

was able to easily store it away when needed. During the dives, the shawm was recovered from within a case. Unfortunately, the case did not completely survive but thankfully the instrument was in remarkably good condition!

16. Rosary



Further along the case from the musical instruments, the display contains many of the highly valuable possessions of the officers on board including the whole pewter 'garnish' - the

tableware of Sir George Carew, the Vice Admiral on board.

Just to the right of the AV screen about music, you can see a wonderful rosary, the set of beads that were used by people to say their prayers.

The first rosary has a circle of 40 small beads split up by 5 large beads and they would use this to count how many "Hail Marys" or "Our Fathers" they had said during their prayer recital. The bottom of the rosary has some more beads in the shape of a cross.

The whole thing is beautifully functional but also very poignant because it is very personal. The owner would hold it in his hands and touch each bead in turn as he said his prayers. It also gives us insights into the tumultuous period of upheaval in religion in Europe at that time.

We found at least 8 rosaries on board the Mary Rose but in 1538 the use of rosaries to say prayers had been condemned. Soon after Henry VIII died, the use of rosaries was completely banned. Yet the sailors on board the Mary Rose in 1545 still used these for their prayers. Were they ignoring the fact that Henry VIII had broken with Rome and passing new laws for the religious reforms? Or were they just using them as good luck charms? If they had prayed in this way for 10, 20 or 30 years, maybe they weren't just going to give up and start a new form of praying.

The rosaries we found were all different and 6 of them can be seen in this part of the case with different shaped beads.

Instead of wood, some of them have beads of silver, brass, bone and even of glass and agate or coral.