

Dartmouth Cannons Report

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Supported by the BSAC Jubilee Trust



Photos

Transfer of Cannon to Kingswear Parish Council

Dartmouth College



Table of Contents

	Page
1. Background to Project.....	3
2. Acknowledgements.....	4
3. Legal Status.....	4
4. Introduction.....	5
5. Objectives.....	5
6. Plans and Approach.....	5
7. NAS Training.....	6
8. People involved.....	7
9. Challenges diving the site.....	7
a) Other Wrecks on the site.....	7
10. History of the Area.....	8
11. Previous work on the site.....	9
12. Artefacts from site.....	10
a) Artefacts, pictures and sketches.....	10
13. Research.....	13
14. Magnetometer finds.....	14
15. Finds Disposal.....	14
16. Site Location.....	15
17. Site Plans.....	16
18. Activities.....	17
19. Conclusions.....	18
20. Financial Report.....	Error! Bookmark not defined.
21. Possible future projects on the site.....	18
22. Underwater photographs on cannon site.....	19
23. Some pictures of the team at work training in Torbay & on site.....	20

1. Background to Project

In the late sixties /early seventies, Neville Oldham and Tony Almer discovered seven cannons located on the sea bed in about 6 metres of water in the small bay at the mouth of the River Dart, below Kingswear Castle. The general opinion from local historians was that the cannon had been thrown from the Castle.

Over the years, the site was dived by a few divers and rumours abounded about a sword, pottery and onion-shaped glass bottles being found. Unfortunately, the only object I have been able to confirm is that of a sword which was in such a bad state that it could not be conserved.

In 1992, as part of a project of recording cannon sites in the sea along the South Devon coast, with the assistance of members of Totnes BSAC, we carried out a preliminary survey and located and recorded seven cannon. Unfortunately, we were unable to return and carry out any further work on the site due to pressure of work on other sites but have kept a watching eye on the site since.

A young local diver, Chris Reaves, who was very active in the area at the time, announced in the press that he was going to lift one of the cannons and present it to the town.

The cannon was raised in 1999 and put in a conservation tank at St Barnabas Church, Newcomen Road, Dartmouth, in a solution of caustic soda under the supervision of Mr. Bob Trevatt MBE, who was an antique furniture restorer and a conservation specialist. It was examined by an historian, who put its date around 1690AD

The cannon stayed in his Bob Trevatt's care and Neville would visit it at least four times a year to monitor its condition, and occasionally also taking Lecturer, Dave Parham, and his students from Bournemouth University to look at it.

In the spring of 2005, when driving past St Barnabas Church, Neville observed that Midas Construction was proposing to convert the church into a school and flats. Neville approach the Site Agent and asked him when they proposed to start work on the project. He informed Neville that they would be starting the following Monday and if he wanted to save the cannon, he would have to move it before they started or it would be dumped. With the good offices of RGC Building Services and Chris Jay of Cornworthy, Neville was able to get the Cannon moved to Cornworthy and put it in a passive conservation tank.

While moving the cannon, we discovered the figures "1577" inscribed in the first field of the cannon, which we took to be possibly the correct date. Also, inscribed are the figures "14-1-0", which stands for its weight, i.e. 14 cwt 1 quarter (28lb) zero lb. Colin Carpenter, the leading expert on ordnance, looked at the cannon and he has confirmed that it was Elizabethan and a very rare example. However, he advised that the cannon required more conservation and was very doubtful if it could be conserved satisfactory.

With the help of the local parish council, Kingswear Historical Society and Darthaven Marina, the cannon has been painted and mounted on a new gun carriage. Following a ceremony where all attended, it is now situated in the car park at Kingswear.

2. Acknowledgements

Kingswear Parish Council

Kingswear Historical Society

Darthaven Marina

Kew Records Office

Exeter Records Office

Bournemouth University

Dartmouth Harbour Office

3. Legal Status

This site does not have any protected wreck status

4. Introduction

This report looks at the history of Dartmouth in order to try and establish where these cannons came from. During our diving and research, we did discover that there has been a lot of shipping activity in the area of Kingswear Castle and this has given us some clues as to how these cannons might have found their resting place. Our objectives, plans and approach have been included in the report.

A site plan has been created showing the layout of the cannons and also includes other artefacts found in the immediate area.

Included are various images of the cannon and the team at work.

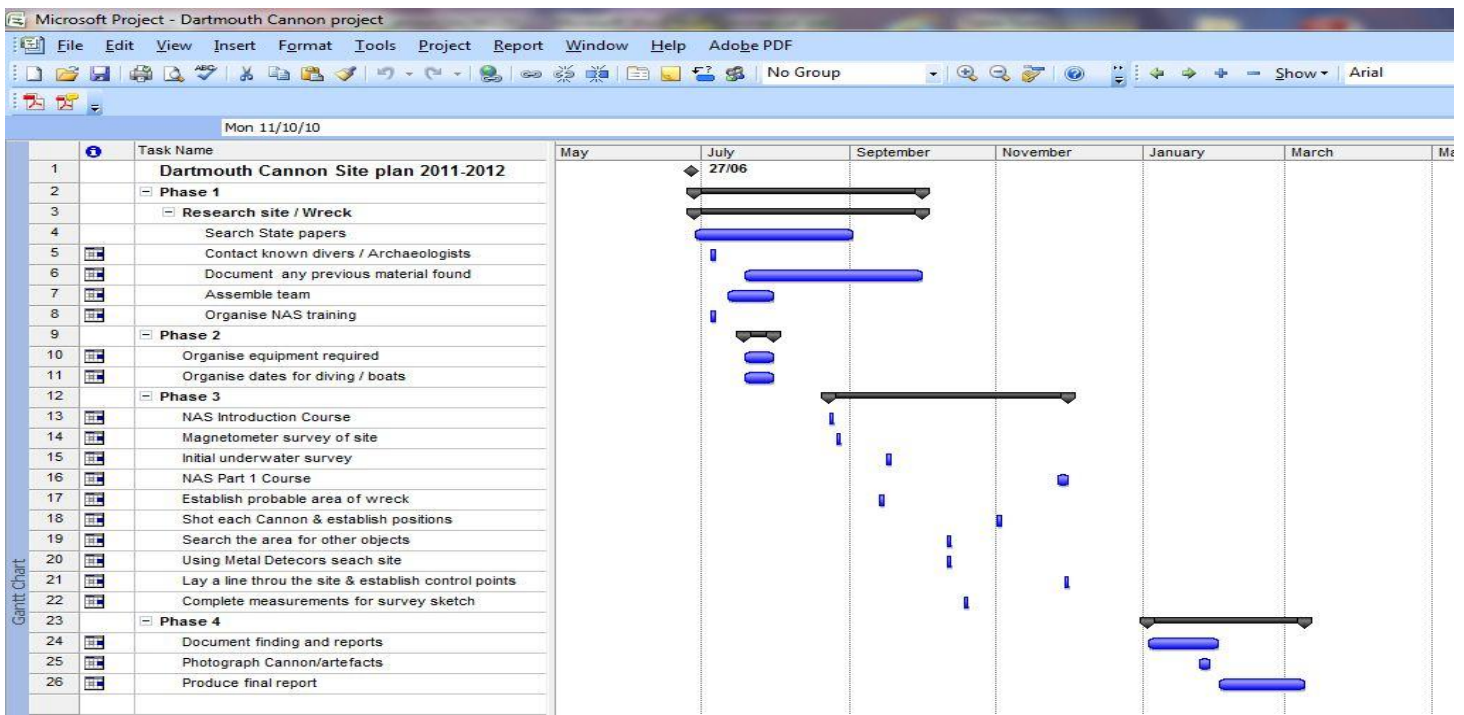
5. Objectives

The objectives of this project were to:

- Locate and identify what was left of the cannon site and produce a site survey.
- Research what ships sank in the area and get some idea of how they came to be there.
- Train a number of divers in marine archaeology.

6. Plans and Approach

The plan is to try and establish whether or not this is a wreck or discarded cannon. We will research the state papers in order to identify the ships that had sunk in the area. We will then carry out a magnetometer site survey of the site in order to establish the area of the site to be surveyed. The site survey will be done by placing a shot line at the centre of the site and, using a circular sweep, measure the location of the cannons and their orientation. This will be followed by a search between the cannons using underwater metal detectors.



7. NAS Training

As the majority of the divers involved had not been trained in marine archaeology, various theory and practical sessions were given to 10 of the divers during the project. They all plan to follow this up with NAS courses during the summer.



8. People involved

The project has involved divers from various BSAC clubs, including Reading , Cheshire, and Torbay, with 10 divers actually diving the site.

Those involved in the project are shown below:-

NEVILLE OLDHAM	East Cheshire BSAC	Project Leader
STEVE CLARKSON	Reading BSAC	
DAVE PARHAM	Bournemouth University	
DAYKIN-LLIOPOULOS	Bournemouth University	
TOM COUSINS	Bournemouth University	
MICK JACKMAN	Torbay BSAC	
CATHY JACKMAN	Torbay BSAC	
MARK HEDGES	Torbay BSAC	
RICHARD BLAIR	Torbay BSAC	
NIGEL WINNEN	Torbay BSAC	
TERRY BLACKMORE	Torbay BSAC	
JOHN KEYES	Torbay BSAC	
DAVE PAYTON	Torbay BSAC	
ALAN CHESHIRE	Torbay BSAC	
TERRY BLACKMORE	Torbay BSAC	

9. Challenges diving the site

a) Other Wrecks on the site

The following photograph shows the shoreline next to the cannon site. Over the years this has been used for anchoring ships and as a means of protecting the harbour with a boom and chain, part of which has been discarded around the cannon site. The hut-like structure in the picture was used as a torpedo launching station in the Second World War and the Americans were known to have discarded some equipment into the sea, including railway lines, before they left. The magnetometer survey indicates a considerable amount of debris in the area around the site. Many of these anomalies are beneath the sand.



Other challenges were that permits had to be obtained for each dive, as the site was in the jurisdiction of the Dartmouth Harbour Master. The area is also subject to a great deal of shipping, including large cruise liners, as well as having considerable tidal streams during spring tides.

The site was also illegally potted with very small buoys just under the surface, making navigation during magnetometer runs a particular challenge.

Due to the often poor conditions the Training of the divers had to be done in the more sheltered Torbay. The site of HMS Venerable was used.

10. History of the Area

Located on the River Dart in Devon's South Hams, Dartmouth is a popular town, with its narrow streets, medieval houses and has always been frequented by visiting ships and yachts

Dartmouth started to expand following the Norman Conquest when the French saw its strategic position as a safe haven for fighting ships. In 1147, it was used as a base for over 140 ships for the second crusade, hence the names of some of the anchorage areas such as, 'Warfleet Creek'.

The King awarded the town a Charter of Incorporation in 1341 at a time when local merchants were getting rich from trading of local goods such as wine.

The port was well known for its local pirates, including the local mayor 'John Hawley', who had a fort constructed at the mouth of the river which was completed in 1400. This was connected by a chain across the river to Kingswear and this chain probably remains in the river, crossing the cannon site being investigated.

In 1404, a 2000 strong Breton force attacked Dartmouth having landed at Slapton Sands, thus avoiding the chains across the entrance of the River Dart.

During the Armada of 1588, it was the British ships that sailed from Dartmouth that captured the Armada payship 'Nestra Senora del Rosario', commanded by Admiral Pedro de Valdés. This payship which was brought back and used to house its crew who were put to work as labourers on the nearby Greenway Estate, which was the home of Sir Humphrey Gilbert.

Another Armada ship which was captured was anchored in the mouth of the Dart and stripped, but there is no record of it being taken ashore or sunk.

During the 17th century, the harbour became a haven for visiting ships and the ideal spot to carry out ship repairs. It also had famous residents such as Thomas Newcomen, who invented the first practical steam engine in 1712. As with similar towns in the 18th century, sailing ships were now being built with steel and produced elsewhere, causing a decline in Dartmouth's ship-building growth.

The Navy came to the town's rescue in 1863, when it decided to base its training ships in Dartmouth and eventually transfer most of the training to the new Naval College, built in 1905. The Kingswear railway was also built, enabling coal to be brought into the area more effectively as well as bringing more tourists to the area.

The Americans took over the Naval College during the Second World War as a base for their planning of the D Day Landings and used Dartmouth as one of the assembly points. The Slapton area was evacuated to allow practising for the D Day landings. Unfortunately, German torpedo boats caught the Americans off guard and nearly 1000 servicemen were killed at Slapton Sands.

Following the war and the decline of the shipbuilding industries, the area has been transformed into a tourist area and has retained its attraction to visiting yachtsman.

You can see from this history that many ships have anchored and a considerable number have been sunk in the River Dart over the years.

11. Previous work on the site

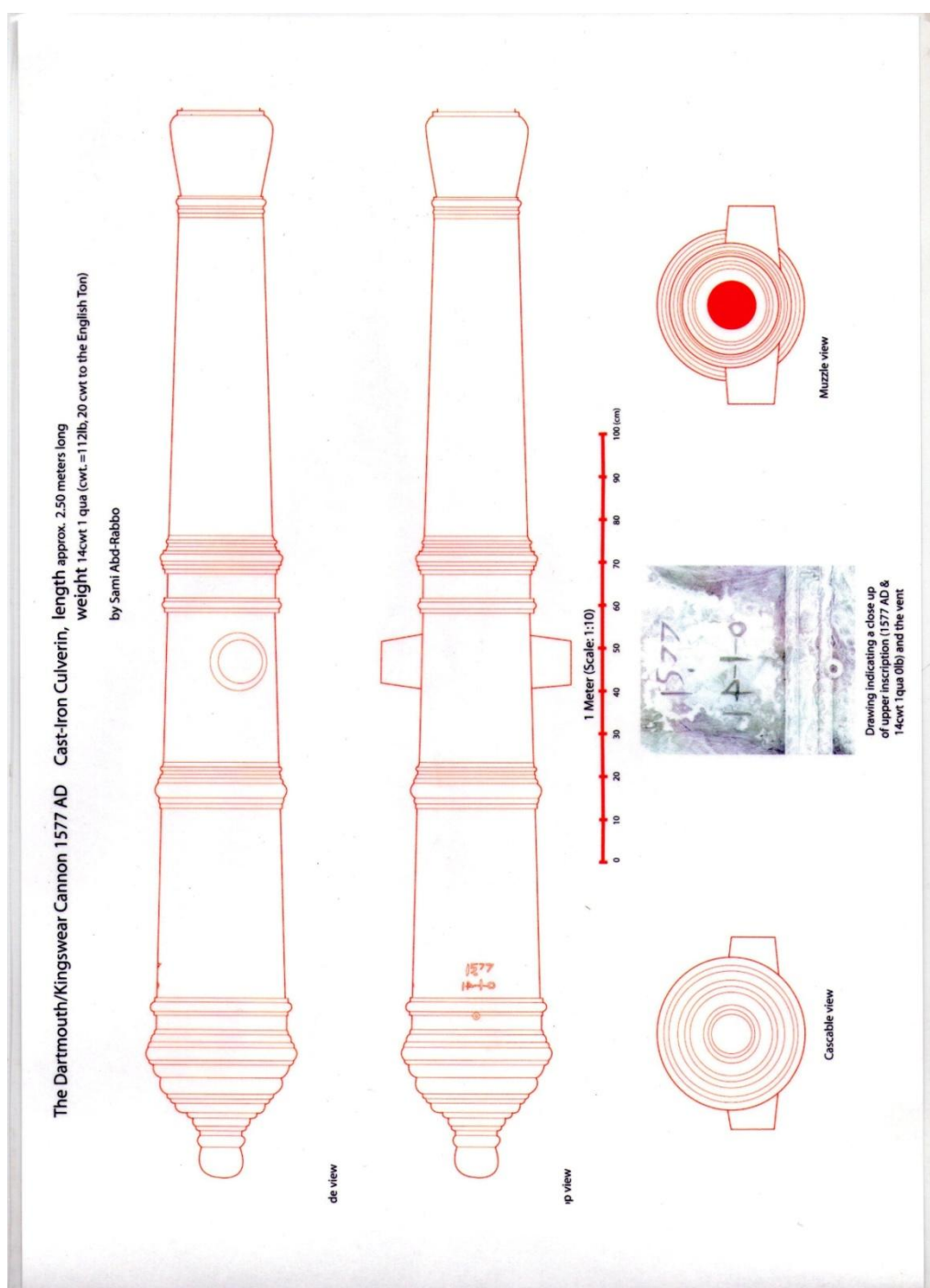
The only known previous work carried out on the site was the raising of cannon in the 1970's. A steel sword was also found near the cannon but we believe it disintegrated soon after it was found.

12. Artefacts from site

The following are a list of declared artefacts that have previously been taken off the site:

1	Cannon dated 1577
2	Portuguese Pottery

a) Artefacts, pictures and sketches



The following section shows photographs of some of the artefacts as well as sketches .

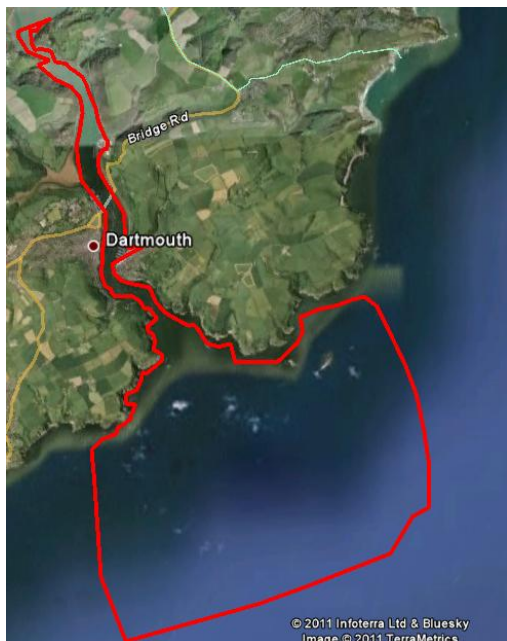
The date on the cannon has been highlighted.



The pottery recovered has been identified as Portugese.



13. Research



Bournemouth University carried out a desktop survey identifying all recorded shipwrecks sunk in the area shown on the adjacent chart. In total, 120 wrecks were identified with six being possibilities for our cannon site. The brief was to identify any wrecks between 1577 and 1710. The majority of those researched either fell outside the time period or their positions were known. The following sources were consulted during the research.

- The National Monument Records
- The UK Hydrographical office
- The Devon Historic Environment Record
- Published sources
- Historical Maps and Charts

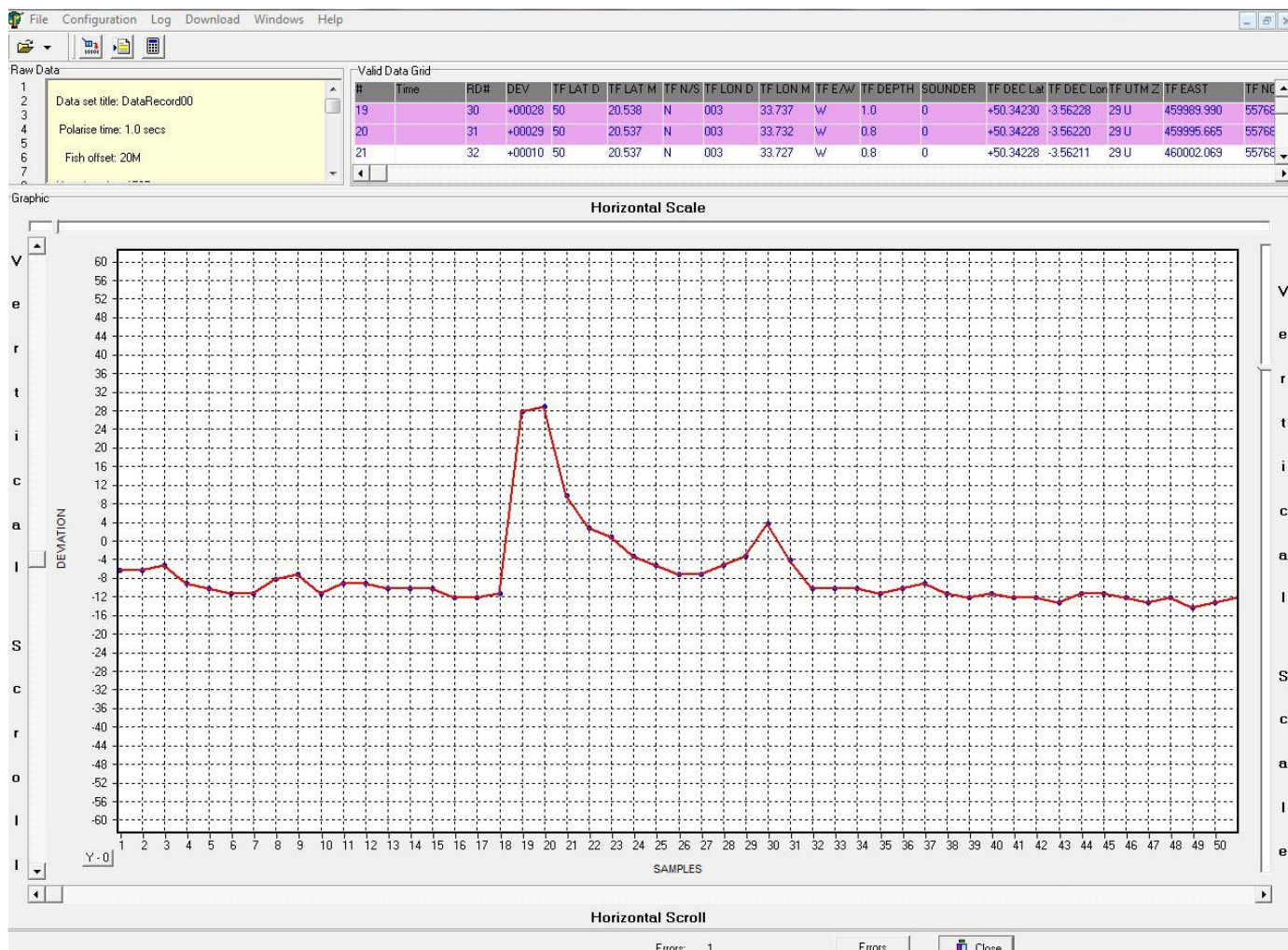
The possible ships are identified in the following table:

Name	Source	Description
Madre de Dios	Collinson 2010	A Portuguese carrack that was captured and brought back to the Dart. The vessel was looted and later stripped before being left to disintegrate in the Dart.
Unidentified vessel	NMR - 1329570	Contextual documents record this vessel as having “run away” and had become “ungovernable” during the British civil war and she is reported to have sunk near Dartmouth. There is also a report that there was salvage work conducted on the wreck during this period, furthermore, the dates are very close to that of the salvage work completed by Jacobs Johnson.
Unidentified sailing vessel's	Larn 1997, NMR – 1324946	Two vessels collided in 1638 but remain unnamed. The incident was recorded in contextual documents, which are detailed in Larn’s Text.
Unidentified cannon cargo vessel	Larn 1997, NMR – 876448	A cargo vessel was stranded and lost, carrying a cargo of cannon.
<i>HMS Seahorse</i>	UKHO, Larn 1974, NMR 876450	Ran aground beneath Dartmouth Castle having been caught in the Range during a storm. The vessel was a 6 th rate Man O’War carrying 14 cannon (Larn & Larn 1997).

Research of the Calendar of State Papers also mentioned a letter from Sir John Gilbert to the Earl of Bedford (Surveyor of castles) in 1583. He was recommending that the iron cannon be replaced with brass ones.

14. Magnetometer finds

Due to the debris in the area, it was difficult to isolate specific targets and a considerable number of targets were also found outside the site area. We plan to investigate these at a later date. The output shown below identified the DC3 Cannon.



15. Finds Disposal

There are no plans to recover any material from the site, other than the pottery and cannon. The cannon raised has been given to Kingswear Parish Council

16. Site Location

The following diagrams show the location of the site off Kingwear Castle near Dartmouth in South Devon. It is in position 50:20.519 03:33.634 just off Kingswear Castle in the mouth of the River Dart.

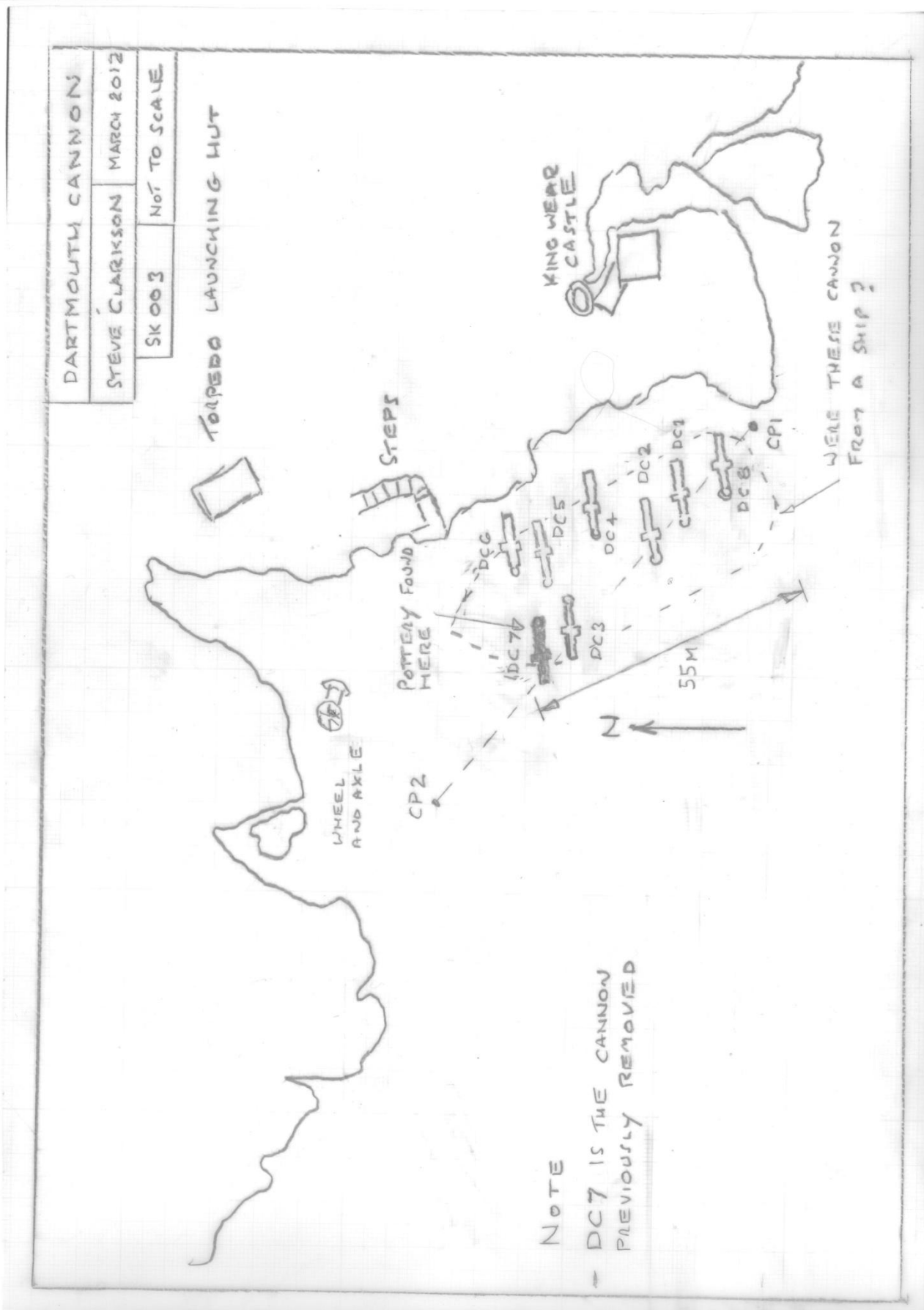
Location of
Dartmouth
Cannon Site



Between Kettle Point and
Kingswear Castle

17. Site Plans

The following sketch shows how the cannon are laid out on the site:



18. Activities

Date	Objective
24/7/2011	Initial boat Site survey
20/8/2011	Magnetometer survey
1/10-2011	Magnetometer survey
1/2/2012	Removal of floating lines causing navigation hazard
26/2/2012	Practice measuring and using metal detectors in Torbay
1/3/2012	Practice measuring and using metal detectors in Torbay
3-4/3/2012	Re-locating cannons
17-18/3/2012	Measuring cannon/Metal detecting
19/3/2012	Recovery of lines & buoys



19. Conclusions

The layout of the cannons on the site suggest they could well be from a ship. The site has a footprint consistent with a man-o war and the cannons to the south are larger than those to the north, suggesting the southern cannons are from the stern section of the wreck. If it did not sink, one other possibility is that they were discarded to reduce weight when the ship went aground. We have assumed the period of loss was in the 16th century due to the 1577 number on the cannon recovered. The desktop survey carried out by Bournemouth University identified a total of a hundred and twenty-one vessels that are recorded to have been lost in the area. Of these recorded wrecks, there are five that fit the possible time period and to have possibly been the origin of the cannons found beneath Kingswear Castle.

- The Madri De Dios (Portuguese Carrack) is a possibility but was stripped, so it would be unlikely they did not recover the cannon as well. The Portuguese pottery found on the site does point to this as a probable target.
- The first unidentified vessel was salvaged, so again it is unlikely this was our ship.
- The second unidentified vessel, which was involved in a collision, fits the period of 1638 but no other information is known.
- The third unidentified vessel was carrying cannon but this is an unlikely option due to the layout of the site, which is not consistent with the layout of a ships cargo.
- HMS Seahorse would fit the criteria except for the fact that the cannon recovered did not have the government mark. From our investigation so far this is the most likely, although records suggest it sank off Dartmouth Castle.

There is also the possibility that the iron cannons in Kingwear castle were replaced in 1583 and the site is of the discarded cannon. The period is correct but it would be difficult to see how they were disposed of in this pattern. The easterly guns are 2.9m long making it unlikely they were used in the castle.

20. Possible future projects on the site

During the 2012 diving season, we are planning to see if we can locate any artefacts amongst the rocks which might give us a clue as to the origin of the ship carrying the cannon.

We also plan to widen the search to cover the area where we obtained magnetic hits on the seabed around the site.

21. Underwater photographs on cannon site

Barrel of
Cannon DC8



Some more
modern debris
Teapot & Tyre

Measuring
cannon



22. Some pictures of the team at work training in Torbay & on site

