



Salcombe Cannon Site End of Season Report - November 2006



# South West Maritime Archaeological Group History from the Sea

Salcombe Cannon Site

End of Season Report - November 2006

Surface Recovery License issued 23 January 2006

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## 1 Introduction

This document is the end of season report of the activities and achievements of the South West Maritime Archaeological Group (SWMAG) for the 2006 season, both on and off site, in respect of the Surface Recovery License issued on 23 January 2006 for the Salcombe Cannon Site.

All co-ordinates are given as dd° mm.mmm' WGS84 unless otherwise stated.

Discovered by SWMAG in 1995, the Salcombe Cannon Site was protected in 1997 by Protection of Wrecks (Designation No. 4) Order 1997 - Statutory Instrument 1997 No. 2536. The Statutory Instrument is at position Latitude 50° 12.696' North, Longitude 03° 44.679' West (OSGB36), with an exclusion zone extending for a distance of 250m from that point.

Activity in 2001 expanded the site to the south-east, recovering artefacts now known to be from the Bronze Age. Further work in this area, designated Salcombe B, during 2004 confirmed the site to be Bronze Age in origin.

Figure 1 shows the location of Statutory Instrument 1997 No. 2536 and extent of the exclusion zone overlaid on an extract from Admiralty Chart 1613, together with a multibeam sonar plot of the seabed. The Historic Wreck shown on the chart is the Moor Sand site.

This document is available online at http://www.historyfromthesea.net/sites/scs/documents/reports/200611eos.pdf.

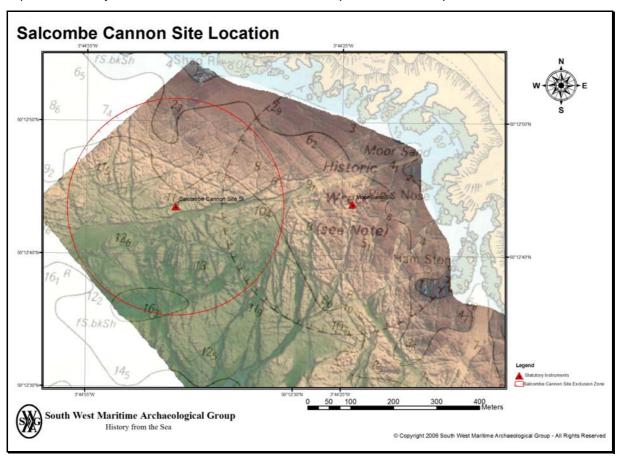


Figure 1 - Location of the Salcombe Cannon Site

## 2 Summary

#### 2.1 Qualified Dive Hours and Research Time

Туре	Hours
Divers Underwater	136
Dry Research (est.)	224

## 2.2 2006 Season Highlights

#### On site

- Continued work in and around E Gully that has provided additional Bronze Age material of significance.
- Survey lines established around known Bronze Age area.
- o Line laid between Salcombe Cannon Site and Moor Sand Site.
- Discovery of gold artefacts with strong similarity to Bronze Age artefacts at Wrexham Museum and Musée de Cluny, Paris.
- Discovery of a stone crucible in context.

#### Off site

- The archaeological significance of Salcombe B site.
- One artefact the strumento con immanicatura a cannone (artefact number 0409050003) – is "the first secure object of Mediterranean origin and Bronze Age date to be found in north-west Europe".
- o Presentation given to the International Shipwreck Conference.
- Ongoing work and co-operation with the British Museum.

#### 2.3 2006 Season Lowlights

- Extensive search to west of E gully did not yield any evidence of Bronze Age material.
- · Weather in second half of season.

## 3 Fieldwork Activity

#### 3.1 Introduction

For reference purposes only, the 17<sup>th</sup> Century site and Bronze Age site, have been designated as Salcombe A or the A Site, and Salcombe B or the B Site respectively; these terms have no meaning other than approximate geographical referencing. Figure 2 shows the approximate boundaries of the two areas for the 2006 season.

It should be noted that part of Salcombe B is within the area formed by the union of the Salcombe Cannon Site designated area, and that of the Moor Sand site.



<sup>&</sup>lt;sup>1</sup> Parham, D., Needham, S. and Palmer, M., 2006, Questioning the Wrecks of Time, British Archaeology, November/December 2006, pp 43-46

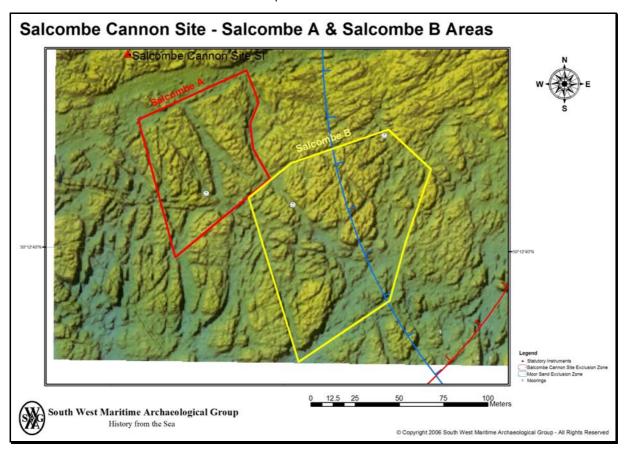


Figure 2 - Salcombe A and Salcombe B Areas

Work in 2006 has concentrated in the Salcombe B area with the laying of datum lines, followed by extensive survey and search operations.

#### 3.2 Salcombe B Site Activities

#### 3.2.1 Datum Line Placement

Following surveys conducted towards the end of the previous season, and early this, it became apparent that additional datum lines were required in the Salcombe B. These were laid as shown in yellow in Figure 3, and defined the extremities of the area searched during the season. These lines are tagged at 5m intervals. The green line is the E gully datum line laid in 2004, and mooring points are shown.

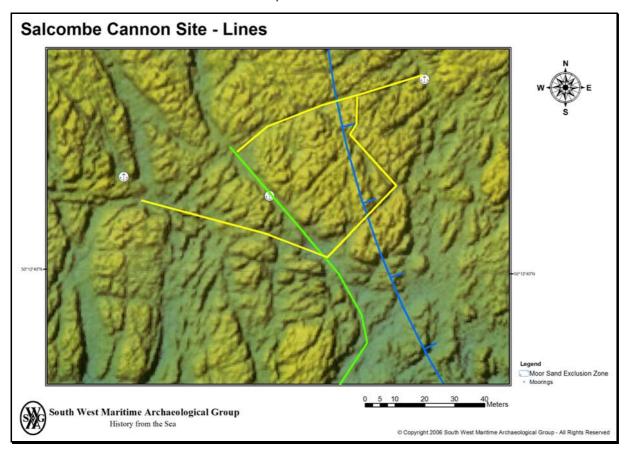


Figure 3 - 2006 Datum Lines

Because of the potential connection to the Moor Sand site, a 100m line has been laid in co-operation with Neville Oldham, Moor Sand site licensee, from the Salcombe B site into the Moor Sand site. This is shown on Figure 4.

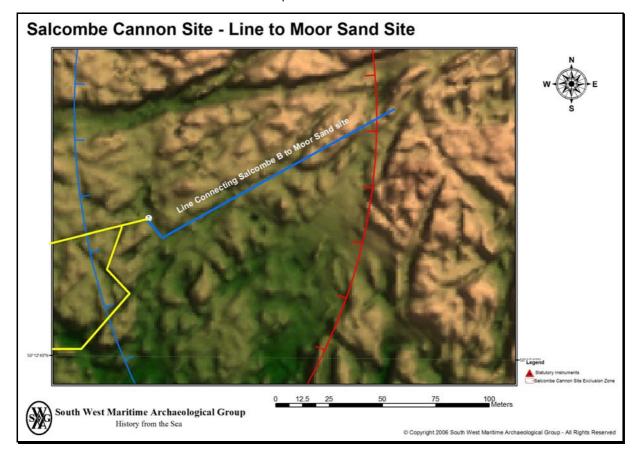


Figure 4 - Line Connecting Salcombe B and Moor Sand

#### 3.2.2 Search and Survey Work

#### 3.2.2.1 Salcombe B Area

Once laid, metal detector searches were conducted using the datum lines as reference.

Searches along the line to the west of E gully and heading toward the centre of the Salcombe A site did not provide any evidence of Bronze Age material, revealing only musket shot. There are two possible explanations why this might be the case: 1) any Bronze Age material is deeper in the seabed than metal detectors being used can register; 2) the E gully represents the edge of the distribution of Bronze Age material.

By contrast, search and survey work to the east of E gully, towards Moor Sand, yielded artefacts of extremely high significance. These include a gold bracelet, a piece of rolled gold, a stone crucible, and a small palstave axe head. The locations of artefacts recovered during 2006 are shown in Figure 5.

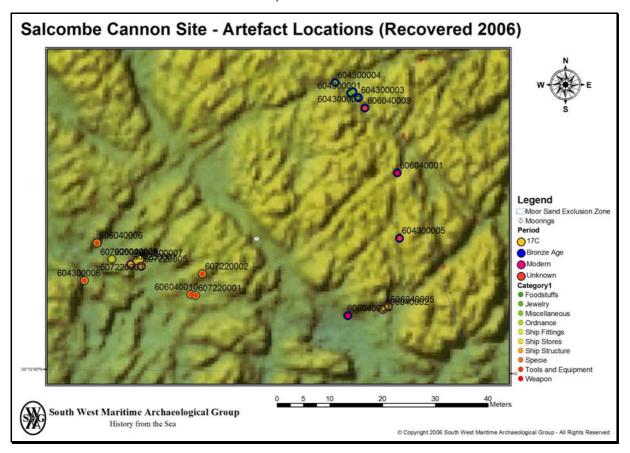


Figure 5 - Locations of Artefacts Recovered During 2006

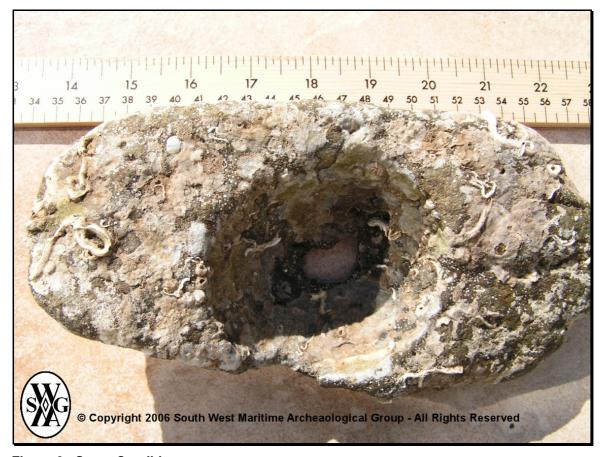


Figure 6 - Stone Crucible

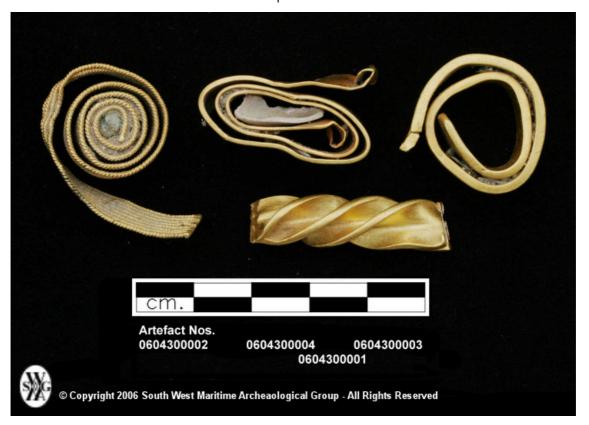


Figure 7 - Bronze Age Gold Artefacts

It appears that the area currently bounded by the datum lines contains a significant amount of material, and without doubt requires additional work, potentially selected excavation, to reveal the full extent of material contained within it.

#### 3.2.2.2 Salcombe B to Moor Sand

The intention was to begin survey work along this line during the second half of the season, but weather was been against us during this period, and only a preliminary survey was carried out immediately after the line was laid. However this revealed contamination by more of the bricks discussed in section 3.2.2 of last years report. Both full and "tumbled" bricks were found. These will need to be taken into account when a full survey is undertaken; the only practical solution being to move the bricks as they register on metal detectors as previously agreed with the nominated archaeologist.

The gully that the line lays in is in line with the debris trail of bricks presented previously; therefore it is almost certain that the bricks here are from the same event. As mentioned in last years report, there are local reports of a brick barge having been lost in 1929, and it is conceivable that the bricks on the site are from this.

As the main concentration of bricks is at the south of Salcombe B site, and it appears that there is a debris trail towards Moor Sand, it could indicate mobility at seabed level that heads in this direction.

#### 3.2.3 Coin Area

During the 2004 season a Spanish 8 Reale Cob coin was recovered, and during 2005 the location was linked into the E gully.

Further searching of this area failed to uncover any additional artefacts. This supports the possibility presented in last years report that the coins are being released from elsewhere and the three coins discovered were transported as the result of seabed movement.



## 4 Post Fieldwork Activities

#### 4.1 Artefact 0409050003 – strumento con immanicatura a cannone

Known to have originated from Sicily, the *strumento con immanicatura a cannone* is now confirmed as being the first secure object of Mediterranean origin and Bronze Age date to be found in north-west Europe. Potentially it is the most archaeologically significant find to date as it demonstrates that trade was taking place across Europe on a wide geographical scale. Although such trade had been inferred from land based finds, the presence of this artefact in a marine environment and in context with other material provides significant evidence of cross channel trade.



Figure 8 - Strumento con Immanicurata a Cannone

The name means literally "having a cannon shaped handle". The purpose of the object is still not clear.

#### 4.2 Artefact 0604300002 - 8 Strand Gold Bracelet

This artefact (top left in Figure 7), while striking in its own right, is of interest due to the similarity between it and pieces held at Wrexham Museum and Musée de Cluny, Paris. Both of these pieces are confirmed as Bronze Age in origin, and this together with the context of the discovery in Salcombe B confirms this artefact as also being Bronze Age.

The Wrexham bracelet consists of six strands, the Musée de Cluny bracelet has seven, whereas the bracelet from the Salcombe B site is made up of eight strands.



Figure 9 - Bronze Age Gold Bracelet from Wrexham Museum

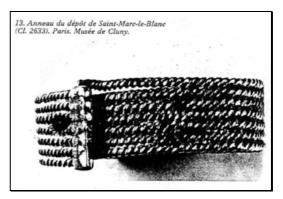


Figure 10 - Bronze Age Gold Bracelet from Musée de Cluny, Paris

# 4.3 Artefact 0507110002 – Metal-working Hammer and Artefacts 0509180001 & 0509180003 – Metal-working Swages

Originally believed to be a shaft or handle, artefact 0507110002 has been identified as a hammer typical of that used for metal working. This artefact, taken in context with the discovery of unworked gold (artefact 0604300003) and finished gold artefacts (artefacts 0604300001, 0604300002, and 0604300004), leads us to believe that artefacts 0509180001 and 0509180003 are swages used in the production of jewellery.



Figure 11 Artefact 0507110002 Metal-working Hammer



Figure 12 Artefact 0509180001 Metal-working Swage



Figure 13 Artefact 0509180003 Metal-working Swage

Further evidence of this has come from exchanges between the group and Dr. George Bass.

#### 4.4 Replication/Reproduction of Artefacts

In previous years SWMAG has investigated 3D scanning and the reproduction of artefacts. This has resulted in the group being able to reproduce bronze palstave axe heads. This year the process was taken to the next step in the production process, and a complete replica axe was made using a reproduced axe head. The result is shown in Figure 14.



Figure 14 - Palstave Axe Reconstruction

# 5 Contact with the Nominated Archaeologist and Other Parties

SWMAG maintained close contact with our Nominated Archaeologist and other parties. Communications during the 2006 season are summarised below.

	Phone Calls	E-mails	Meetings
Nominated Archaeologist	45	48	14
English Heritage	12	20	3
British Museum	14	16	4

A very constructive meeting with Stuart Needham of the British Museum took place on 26<sup>th</sup> April. SWMAG is very grateful to him for his feedback on artefacts analysed to date, his willingness to discuss theories, ideas, and results with the group, and, in particular, for his support of the group as indicated in his open letter of 30<sup>th</sup> August 2006 (Appendix II).

Meetings were held during the summer with the Curators of the Royal Albert Memorial Museum (RAMM), Exeter and his assistant, and Cardiff Museum. These meetings provided useful information, helping to further the group's research efforts.

On the weekend of the 21st – 22nd October six members of the group attended a conference organised by the Dover Bronze Age Boat Trust entitled 'Bronze Age Connections: Cultural Contact in Prehistoric Europe'.

Dr. Francesco Tiboni of Milan University has contacted SWMAG through English Heritage, and wishes to discuss the site and possibly dive it.

## **6 Visiting Divers**

SWMAG welcomes visits from individuals and groups by prior arrangement. During 2006 students from Bournemouth University were taken onto the site on 6<sup>th</sup> and 9<sup>th</sup> April.

## 7 Media

Articles published about the Salcombe Cannon Site, including Salcombe B, since the last report which the group are aware are:

- Preece, C., The Designated Wreck Sites of Devon, Devon Archaeological Society Newsletter, October 2005, pp14-15.
- Gross, J., Diver's Find Could Alter History, National Coastwatch Institution Prawle Point, Issue 25, pp 1 and 3.
- Parham, D., Needham, S. and Palmer, M., Questioning the Wrecks of Time, British Archaeology, November/December 2006, pp 43-46.

While perhaps not strictly "media", a photograph of some items from the Salcombe B assemblage is used on page 4 of the Joint National Archaeology Policy Committee (JNAPC) Code of Practice released in June 2006; the same image is also used on the Crown Estate website Press Release page for the Code of Practice

(www.thecrownestate.co.uk/newscontent/92\_jnapc\_code\_launched.htm).

## 8 Presentations

SWMAG is keen to bring the results of discoveries made on site and the subsequent reports from and conclusions of the subsequent research to the widest possible audience. During 2006 SWMAG members gave presentations to a number of groups. These include:

- 24<sup>th</sup> International Ship Wreck Conference, Plymouth
- Devon Archaeological Society Conference, Tavistock
- Aune Conservation Association, Thurlstone
- Devon Archaeological Open Weekend, Beer nr. Seaton

### 9 Potential for Further Work

The potential for further work on the Salcombe Cannon Site is extensive. The Salcombe B site in its own right is of major archaeological significance, and has the potential to provide a huge amount of information about maritime trade in the Bronze Age period. When put in context with the Moor Sand site the potential is increased by an order of magnitude.

The primary task identified for the 2007 season is the continued survey of the Salcombe B area. SWMAG feels that two areas in particular require extensive investigation, and potentially merit limited



excavation, given the amount and significance of material found so far. These are shown in Figure 15. We will discuss the appropriate way forwards with our archaeologist and other relevant parties.

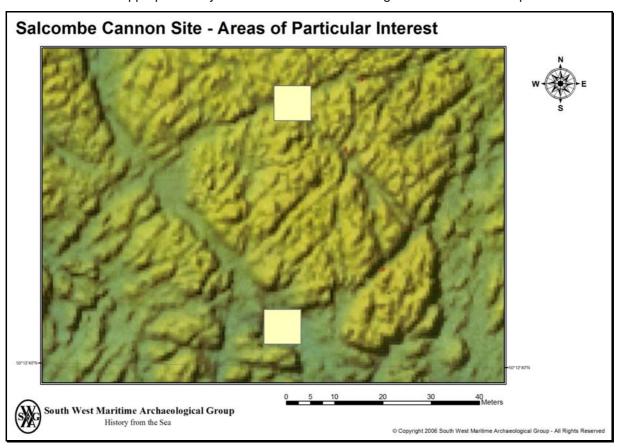


Figure 15 – Areas Warranting Closer Investigation

Identified as a task for this season, but not carried out due effort being concentrated on the Salcombe B site, and the lack of dive time during the second half of the season, are: investigation of the magnetic anomalies within the designated area, survey of the line connecting Salcombe B into the Moor Sand site in co-operation with the Moor Sand licensee. These go forwards to the 2007 season.

There appears to be evidence of seabed movement, and some items will be affected by tidal flow. SWMAG believe that a project to determine the extent of these effects would be beneficial in increasing the overall understanding of the site. SWMAG would welcome involvement from a third party to carry out this work, e.g. as a graduate or post-graduate project.

#### 10 Conclusion

The 2006 season was very productive on site during the fist half with the site datums laid out and discovery of the gold artefacts, the stone bowl, and other artefacts; the second half was less so due to weather limiting the amount of time the group was able to spend on site. However, the group feels that significant achievements were made despite the relatively low number of hours on site.

Off site, the season has been both exciting and productive. Probably the most important conclusion reached from the research carried out is that the Salcombe B site is a wreck site or sites from the Bronze Age, and provides the strongest evidence yet of pan-European trade during this period. This conclusion has been reached for the following reasons:

- The origin of most material is English or north-west France, as would be expected of cross channel trade.
- The site is very unlikely to be a land based site. The coastline did not extend out far enough at the time the material was deposited.
- It is also unlikely that the Bronze Age material was being carried on the 17<sup>th</sup> Century vessel on Salcombe A site; a possibly that must be considered due to the close proximity of the sites. This is because: 1) at the time the Salcombe B artefacts are believed to date from, the Penard/Bronze Final 1 stage, deposits were not buried with the dead and could not therefore be raided; 2) such hoards were smaller than the number of artefacts already recovered from the site

The group also feels that there is mobility on the site at the seabed level. This is supported by the fact that Bronze Age, 17<sup>th</sup> Century material is interspersed to some degree, and in particular the distribution of the bricks.

During the 2006 season, the true archaeological significance of the Salcombe B site has become evident to the academic and archaeological communities and to the group. SWMAG is committed to continuing to work closely with our Nominated Archealogist, English Heritage, the British Museum, the Diving Contractor, and other relevant agencies to further the Salcombe Cannon Site during 2007 and beyond.

# Appendix I Artefact List

Artefact Number	Date Recovered	Description
0604300001	30.04.2006	Gold Twist 1 1/2"
0604300002	30.04.2006	Gold 8 Strand Bracelet
0604300003	30.04.2006	Gold Flat Rolled Bar
0604300004	30.04.2006	Gold Flat Bracelet Rolled
0604300005	30.04.2006	Pan Weight Lead Small
0604300006	30.04.2006	Lead Sound Weight Small
0604300007	30.04.2006	Lead Shot
0605250001	25.05.2006	Bullet 2WW
0606040001	04.06.2006	Palstave Axe Head
0606040002	04.06.2006	Black 'Stone'
0606040003	04.06.2006	Stone Crucible Mould
0606040004	04.06.2006	Rapier Blade (part of)
0606040005	04.06.2006	Black 'Stone'
0606040006	04.06.2006	Lead Sound Weight Small
0606040007	04.06.2006	Shot Lead 17C
0606040008	0406.2006	Shot Lead 17C
0606040009	04.06.2006	Shot Lead 17C
0606040010	04.06.2006	Lead Sound Weight Small
0607220001	22.07.2006	Small Lead Pan weight
0607220002	22.07.2006	Small Balancing Weight
0607220003	22.07.2006	Shot Lead 17C
0607220004	22.07.2006	Lead Patch
0607220005	22.07.2006	Brass 'zipper' Pull

## Appendix II Open Letter from Stuart Needham



Letter of support for Investigations on the Salcombe 'B' Bronze Age seabed assemblage by the South-West Maritime Archaeology Group

To whom it may concern

Please accept this letter as confirmation of British Museum support for the project to conduct appropriate archaeological explorations of the site, Salcombe 'B', found by the South-West Maritime Archaeological Group in 2004. Other bodies (English Heritage's Maritime Unit; Bournemouth University Department of Archaeology) are involved in setting standards for the fieldwork and monitoring the project. The role of The British Museum is to provide expert period-specific advice on the objects recovered, and thereafter to provide long-term care of the objects – relating to their conservation, study, display and interpretation. Acquisition of all the finds and the site archive by The British Museum is agreed by all interested parties and is facilitated by the Receiver of Wreck through her jurisdiction over material salvaged from the seabed. British Museum acquisition will not prevent appropriate loans of the material for display in the region of discovery.

The British Museum's interest in the new finds is acute. They relate clearly to a smaller group of similarly dated bronzes recovered between 1977 and 1983 from a site known as Moor Sand, just a few hundred metres further east. At that time much excitement was generated in the archaeological world because this group included pieces of continental origin; the assemblage was acquired for the national collection. Both the Moor Sand and Salcombe B assemblages can be dated to the Penard phase of the Bronze Age, circa 13<sup>th</sup> century BC and this inevitably begs questions as to whether they are part of the same find. The new finds are of particular importance because they extend significantly the range of bronze types from the seabed here and, for the first time, are adding objects of other materials such as stone which might prove to be contemporary. Also amongst the assemblage is an object with tremendous implications – a bronze instrument of Sicilian origin. This is the first good context for a Mediterranean object of Bronze Age date in Britain or its coastal waters. Our academic interest extends to how all this material came to be deposited on the seabed at Salcombe; a foundering ship is only the most obvious of possible explanations and we hope that continued fieldwork will enable firmer interpretation.

Whatever the original context was, there is no doubt from the extant finds already, that this is a site of considerable importance for understanding the nature of maritime contacts in Bronze Age Europe.

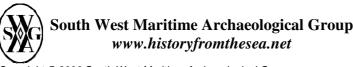
Stuart Needham, BSc, PhD, FSA, FSA Scot Curator of European Bronze Age Collections The British Museum 30 August 2006

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## Appendix III South West Maritime Archaeological Group

South West Maritime Archaeological Group members for 2006 were:

Dave Dunkley

Andy Elliott

Ron Howell

Dave Illingworth

Mick Kightley

Mick Kingston

Neville Oldham

Mike Palmer

Dave Parham

Jim Tyson

Julie Williams

Mike Williams

Chris Yates



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