



South West Maritime Archaeological Group
'History from the Sea'



View from 'Gara Rock Hotel Lookout' onto Moor Sand, Salcombe

Salcombe/Moor Sand Sites
2013 End of Season Report

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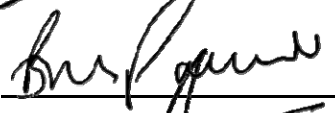
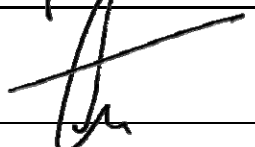
South West Maritime Archaeological Group
'History from the Sea'

Salcombe/Moor Sand Sites
2013 End of Season Report

Licenses:

Site	Type	Date of Issue
Moor Sand	Survey	01 December 2012
Salcombe Cannon Site	Surface Recovery	01 December 2012

Prepared by Jim Tyson & Mick Palmer

Approved by	Position	Signature	Date
Mr. N. Oldham	Licensee Moor Sand		<u>1 November 2013</u>
Mr. B. M. Palmer	Licensee Salcombe Cannon Site		<u>1 November 2013</u>
Mr. D. Parham	Nominated Archaeologist		<u>1 November 2013</u>

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Glossary / Abbreviations

BM	British Museum
CIA	Council for Independent Archaeologists
EH	English Heritage
RoW	Receiver of Wreck
SNR	Society for Nautical Research
SWMAG	South West Maritime Archaeological Group
Wessex	Wessex ADU

Front cover:

View from Gara Rock Hotel Lookout.

Showing the Bronze Age Field System on 'Deckler's Cliff' and headland falling down to the sea and locating the Protected Wreck Sites of Salcombe / Moor Sand Bronze Age sites and the Salcombe Cannon Site.

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South West Maritime Archaeological Group
'History from the Sea'

1 Introduction

This document is the joint end of season report for the Salcombe/Moor Sand Sites; it details the activities and achievements of the South West Maritime Archaeological Group (SWMAG) for the 2013 season, both on and off site, in respect of the Survey License issued on 1st December 2012 until 30th November 2013 for the Moor Sand site, and the Surface Recovery License issued on 1st December 2012 until 30th November 2013 for the Salcombe Cannon Site.

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

This document will be available online at <http://swmag.org.uk/sites/scs/reports/2013eos.pdf>.

1.1 Moor Sand

Originally discovered in 1977 when a Bronze Age sword and eroded blade were found just off Moor Sand beach, the site was protected in 1978 by Protection of Wrecks Order 1978 - Statutory Instrument 1978 No. 199. The Statutory Instrument defines an exclusion zone centred at position Latitude 50° 12.700' North, Longitude 03° 44.333' West (OSGB36), extending for a distance of 300m from that point.

Moor Sand was surveyed and searched by the late Keith Muckelroy in 1977, 1978 and 1979 using visual and metal detector search techniques, and again in 1982 by Martin Dean. These surveys recovered a number of Bronze Age artefacts which are now at the British Museum.

In the intervening period the site has been monitored and surveyed but no further artefacts were located until SWMAG started investigating the area in 2009 as part of extending the area from the bronze age finds to the south east of the 17th century site.

Field work is continuous

1.2 The Salcombe Cannon Site

First investigated 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 defines an exclusion zone centred at Latitude 50° 12.696' North, Longitude 03° 44.679' West (OSGB36), extending for a distance of 250m from that point.

Activity in 2001 expanded the site to the south-east with the recovery of Bronze Age artefacts. That the site is Bronze Age in origin was confirmed during 2004.

Continuing work in subsequent years has followed the archaeology towards Moor Sand and, as proposed as a possibility in the end of season report in 2010, the distribution of artefacts confirms that the archaeology encompasses both sites.

Further survey work has continued following a possible debris trail to Gammon Head and back to Rickham Cove. This sea bound line encompasses the terrestrial land where bronze Age field systems and 3 Round Houses were located.



1.3 Joint Project - Salcombe/Moor Sand

The licensees of the Salcombe Cannon and Moor Sand Sites have again agreed that the archaeology takes precedence over site boundaries and the sites are now being investigated as a single project; hence this document being a joint report. Mr. D. Parham is the nominated archaeologist for both sites and co-ordinates the project.

Figure 1 shows the areas designated under Statutory Instruments 1978 No. 199 and 1997 No. 2536 overlaid on an extract from Admiralty Chart 1613, together with a multi-beam sonar plot of the seabed.

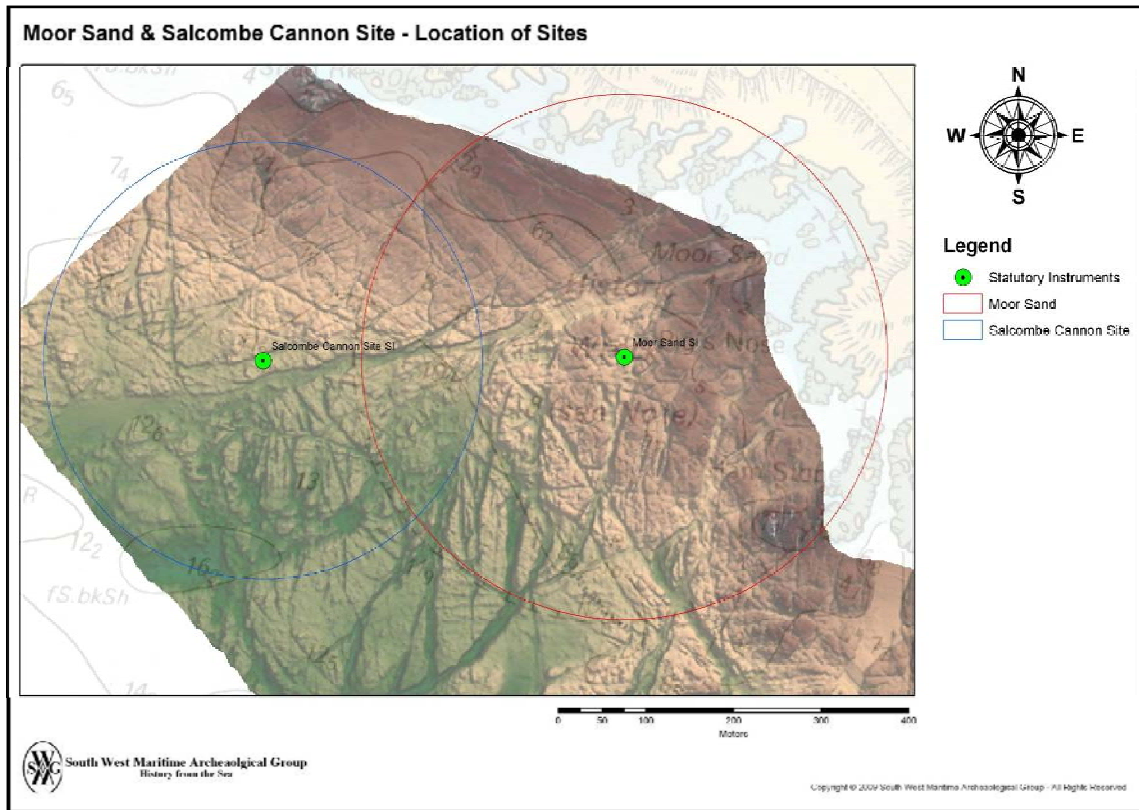


Figure 1 - Location of the Moor Sand & Salcombe Cannon Sites

2 Summary

2.1 Qualified Dive Hours and Research Time

Type	Hours
Divers Underwater	82
Dry Research (est.)	560
Magnetometer survey	48

2.2 2013 Season Highlights

- On site
 - Continued excellent support from Prawle Point National Coastwatch, Brixham Coastguard and Devon & Cornwall Constabulary.
 - Magnetometer survey around Salcombe/Moor Sand site area, from Rickham Cove to Prawle Point
 - Spot diving when conditions permitted to check integrity of site
 - Continuing Examination of the Magnetometer Hits provided by Wessex and subsequent Magnetometer recordings by SWMAG. A full and comprehensive survey being produced.
 - Confirmation that the Bronze Age artefact spread continues to exceed expectations
- Off site
 - British Museum (Neil Wilkins). The continuing display of artefacts from the Salcombe B / Moor Sand site in the 'Uncovered Gallery', Plymouth City Museum & Art Gallery.
 - Continued Display of Artefacts from the Salcombe B / Moor Sand site in the 'Citi Money Gallery (Room 68)', British Museum (see Section 6.2.1 for details)
 - Artefacts from the Salcombe B / Moor Sand site continue to be displayed in the 'Uncovered Gallery', Plymouth City Museum & Art Gallery. (see Section 6.2.26.2.1 for details)
 - Continuing Artefacts and Video from the Salcombe B / Moor Sand site are currently on display as part of the '2012BC: Cornwall and the Sea in the Bronze Age' exhibition at the National Maritime Museum Cornwall, Falmouth (see Section 6.2.3 for details)
 - Participation in Wreck Security with Devon/Salcombe Police ,English Heritage
 - Work is progressing in association with support from Alan Aberg, Society for Nautical Research (SNR) for a SWMAG publication on the 17th Century Cannon Site, projected date for editing is now 2014 with a publication date of late 2014/15. An update of progress is awaited after requests to the steering persons.
 - Team members have continued making presentations on the teams projects in the South West regions (see Section 7 for details). Our colleagues at the British Museum have now made some 22 lectures regarding Salcombe Bronze Age and 6 on the 17th Century Salcombe Cannon Site..
 - Continued recognition nationally and locally made to the team for their continued work in the field.
 - SWMAG web site has been completely updated (see Section 6.1 for details)
 - Academic Publication 'Claimed by the Sea, Salcombe, Landon Bay and other Marine Finds of the Bronze Age' *Needham, Parham and Frieman*. (see Section 6.3.1 for details)
 - Lecture and representation at 2013 SHA Conference, Leicester. Conference on Historical and Underwater Archaeology '35 Years Salcombe Bronze Age'. *Parham*, Feb. 2013
 - Daily Mirror. April 2013. Salcombe Bronze Age listed in UK Top 10 underwater sites.
 - Conference and representation with display. 'Yesterday Today' 'Bronze Age Connections in a Modern World'. Dover 18-20th Oct. 2013. (see Section 6.1 Item 10 for details)

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2.3 2013 Season Lowlights

- On site
 - Economic climate reducing field work participation on site. This resulted in targets and expectations not met and now carried forward to 2014 season
- Off site
 - Weekends that were good/reasonable for diving were missed, due to family events for many team members and again the poor economic environment
 - A documentary was proposed and meetings took place with Hanns Schuler from Munich, Germany who had previously produced *The Emperors Lost Harbour* and now currently working on a documentary of Francis Drake's Circumnavigation of the World. Unfortunately funding fell through for *Bronze Age Trade in Devon (Salcombe) and Tin Mining* but this may be revisited in 2014. Direct contact is maintained. Hannes did visit Salcombe for an overview.

3 Fieldwork Activity

3.1 Introduction

This year the field work plan was to continue on from the area of finds during 2011/2012 in order to establish the dispersal limits for the finds related to the 900BC collection. Further investigative survey work between the 900BC site and the 1350BC site. Examination of Wessex Magnetometer anomalies for Wessex 12 and Wessex 1 were made and is a continuing process to investigate other marks.

3.2 On-site Work

3.2.1 Site Action Plan

In March 2013 SWMAG issued their Site Action Plan for the year. Those actions outlined in the plan and their status are summarised below.

Objective	Activities	Status	Notes
Re-establish site for 900BC Bronze Age site	Renew mooring	Completed	
	Re-establish 2 nd and 3 rd mooring Fixed Points.	Completed	2nd and 3 rd mooring established at Wash Gulley centre adjacent to centre of Bronze Age wreck site.
Re-establish site for 1350BC Bronze Age site	Create 4th Point in 1350BC centre.	To Start	Moorings are in compliance with MMO regulations
	Replace datum as required	On going	All areas
	Straighten lines	Continuing	All areas
Re-establish new datum for use in season. These to be removable to avoid interference plus MMO regs.	Identify positions	On going	Bronze Age site Moor Sand area towards Moor Sand to Pigs Nose Outer Rock
	East West axis following existing gully		
	Fix datum	On going	Following above lines
	Datum as required	On going	Further expansion to find limits of area of both Bronze Age centres

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Objective	Activities	Status	Notes
To search for extremity to east and south	Examine mag. fix	Ongoing	Continue work from Arc View generated sea bed maps
Survey towards Moor Sand Bronze Age area	Line from Wash Gully to Moor Sand at 90°	Completed	'J' Line. Tagged at 5 mtr Intervals e.g. 5, 10, 15, 20 etc
	Similar line as above but at an angle	Not Started	'K' Line . 80 m. Tagged at 5 mtr Intervals
Seabed mobility survey	Identify key datum	Not Started	Objective is to continue to identify seabed movement and determine any potential areas of instability.
	Datum to seabed measurement	Not started	
Search	Area to the North West	Not started	Objective is to determine extent of site and possible debris trail.
	Direct line search to Moor Sand	On Going	To identify Bronze Age or 17C debris trail, or Portuguese
Survey	Define areas to be surveyed	Open	
Accurately geo-reference the site	Fix real world locations for pre-determined datum and report to SWMAG	Open	Endeavour to identify extent of site
		Not started	



3.2.2 Artefact finds 2013

Figure 2 below shows the area of finds made in 2013 and the related areas of finds in the 'Wash Gully' and the reef above where the 2009 & 2010 finds were made.

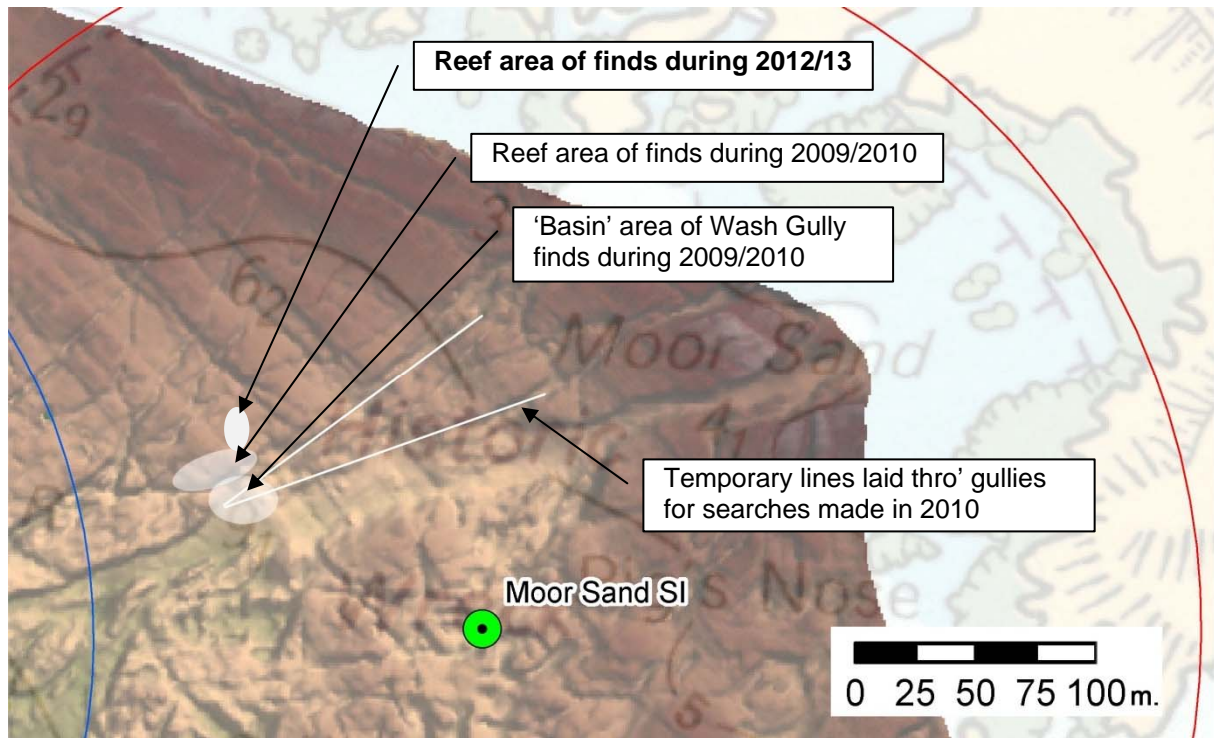


Figure 2 - Position of finds in 2013 and previous work in 2009/12

The positions of artefacts located during the 2013 season are shown in Figure 2 above. The artefacts are summarised in Appendix I and listed in Appendix II.

Positions of finds during 2009/12 and the temporary line directions used in 2010 are shown for reference only.

3.2.3 Operational Field Work

On the 17th century cannon site the buoy was replaced and main gully lines checked. MMO regulations are adhered to. In the centre of the site observations showed continuing reductions to the levels of sea bed. Bare rock showing which was not in 2012. Interference was also noted from Fishermen's boats dragging the area. Disturbances to the sea bed were noted. The anchor in A Gulley being totally exposed and now deteriorating in condition.

On the Bronze, Moor Sand and Salcombe B areas limited field work was completed. It was noted all sand and gravel accumulation of 2012 had been removed by natural forces and bare rock in the Wash Gully exposed.

From this a number of Ingots were recovered (see recovery sheets) and photographed (see Section Appendix I for details)

Most of the available dive time during the season was spent investigating the bronze age site area where the 2009 to 2012 finds were made (see Figure 2 above for details).

Planned 2013 work (uncompleted) has been transferred to the 2014 season with anticipated hope for early season start program

Field work continued and is ongoing in terms of magnetometer survey and is providing valuable information that can be used in 2014. The team has two magnetometers for this purpose and

throughout the season field work continued and has provided valuable information that can be used in 2014.

In concluding this synopsis, the weather conditions throughout the season have prevented meaningful field work and all 2013 plans have been carried forward to 2014.

3.2.4 Magnetometer Survey 2013

Magnetometer surveys have been carried out throughout the season. Results are currently being reviewed and discussed.

Our remit was to analyse and Mag from Rickham Cove to Prawle point encompassing the protected sites.

Figure 3 below, shows the updated results of the anomalies recorded.

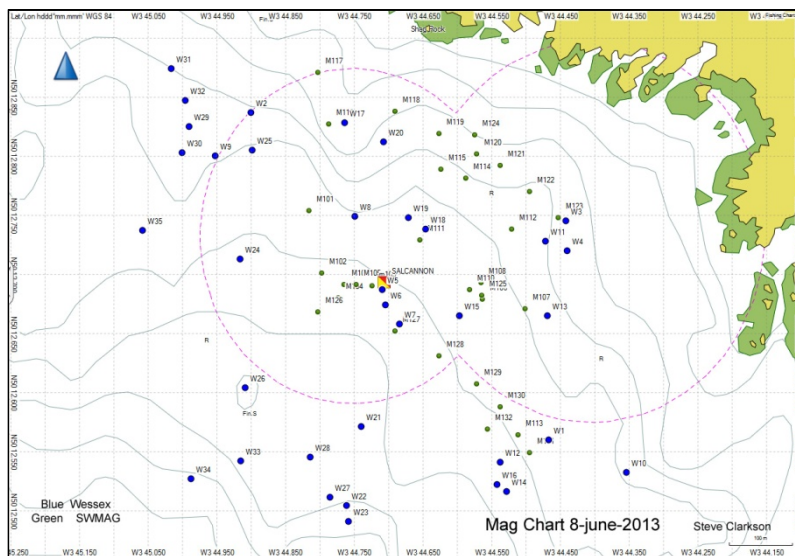


Figure 3 - Magnetometer Anomalies 2013

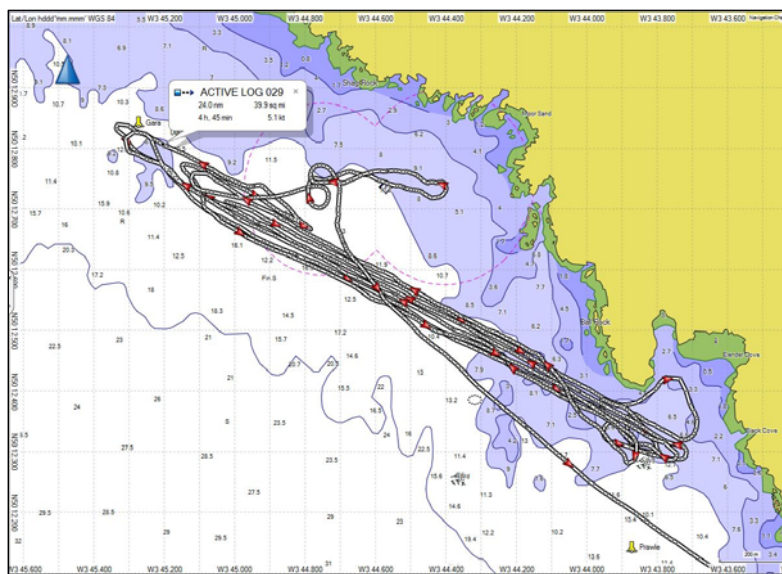


Figure 4 - Magnetometer Tracks - June 2013

Figure 4 above shows the surveys as an example of continuous tracks throughout the season in order to cross reference and corroborate each run.

3.2.5 Magnetometer Survey 2013 (proposed)

During the 2013 season, some of SWMAG team members joined with the designated magnetometer operatives during the surveys to gain experience on the use of Magnetometer skills.

From the information gained together with Wessex survey anomalies field work time commitment was given to continuously explore the findings.

The first to be analysed were the Wessex anomalies of Wessex 12, 16, 1 and 14, see Figure 5 below.

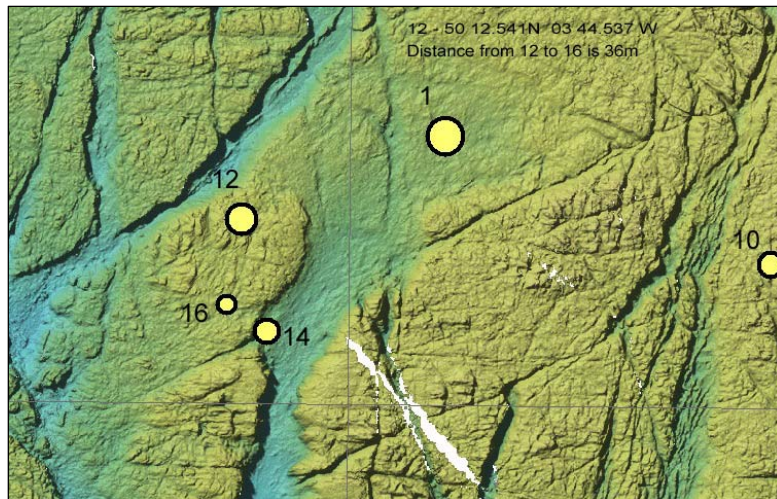


Figure 5 - Wessex 12, 16, 1 & 14 - Site Area

(Note: Figure 5 above is an extract from the SWMAG master record sheet of magnetometer targets recorded by Wessex. The area shown is in the southern section of the Salcombe Cannon Protected Site.)

The results of these inspections were;

17th C material was seen and recorded but well dispersed and in poor condition. Material was in a deteriorating state.

For identification a small intact cannonball was recovered for identification. We refer to this area of site as being unrelated to Salcombe Cannon site and therefore have identified as Wessex 12.



Figure 6 - Artefact No. 201306030001 Cannon Ball

(Note: Cannon ball shown in Figure 6 weighs approx. 2lb. and could possibly be from a 'Falconet' cannon. Currently in stored passive conservation).

3.2.6 Salcombe / Moor Sand

Continued investigative seasonal work. Examination of the then thought extremities of the Ingot recovery area was focussed upon.

Initial recoveries of a number of Ingots was made. The conclusions are that the area of dispersal is greater than the team had previously considered.

2014 plans will include expanding the known area to survey and record. The area is difficult and covered in kelp and part of the tidal stream.

Figure 7 to Figure 10 below show the artefacts and recovery records for finds from 2013 season.



Figure 7 - Artefact No.1309240001
Copper Ingot.



Figure 8 - Artefact No.1309240002
Tin Ingot

South West Maritime Archaeological Group <i>'History from the Sea'</i> - Artefact Record Sheet 80x170 grid				
Site Ref:	SALCOMBE BAY AREA			
Art. Ref:	1309240001			
Description:	COPPER INGOT SEGMENT			
Material:	L (cm)	W (cm)	T (cm)	Wt (gm)
	3.5	2.1	2.4	111.5
Recovered By:				Date: 24/09/2013

Additional Info:	
Conservation Treatment	Immediate: <u>PASSIVE</u>
	Short Term:

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Figure 9 - Artefact No.1309240001
Copper Ingot - Recovery Record

South West Maritime Archaeological Group <i>'History from the Sea'</i> - Artefact Record Sheet 80x170 grid				
Site Ref:	SALCOMBE BAY AREA			
Art. Ref:	1309240002			
Description:	TIN INGOT SMALL SEGMENT			
Material:	L (cm)	W (cm)	T (cm)	Wt (gm)
	2.3	1.4	0.9	6.5
Recovered By:				Date: 24/09/2013

Additional Info:	
Conservation Treatment	Immediate: <u>PASSIVE</u>
	Short Term:

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Figure 10 - Artefact No.1309240002
Tin Ingot - Recovery Record

3.3 Off-site work

3.3.1 Terrestrial Work

SWMAG continues to enjoy close co-operation from both the British Museum and English Heritage as well as Local History Societies.

a) British Museum - Salcombe / Moor Sand artefacts deposited 2012

During 2012 SWMAG deposited with the British Museum 2 Tin Ingots that had previously been recovered from the Erme Estuary. It was thought this analysis would take place during 2013 but has been moved to 2014 owing to funding.

These are to be examined and scientifically dated by the British Museum. Funding for this work has already been agreed and will commence towards the end of 2013.

The aim is to date and correlate to those recovered and located at Moor Sand and Salcombe. This would then prove localised trade along the south coast of Devon. Comparisons will then be made to terrestrial recoveries from Dartmoor, Cornwall and inland Devon.

Research has shown that Tin and Copper recoveries have been made since prehistory all along the South Coast including rivers and estuaries, throughout Bronze and Iron Age, through Roman and Medieval to current times. The Rivers Dart, Erme, Avon and Tamar have not only provided Tin Streaming deposits but direct access to terrestrial deposits (and others) at Tor Royal on Dartmoor where recoveries and collections would have been brought down for final transit to the Continent.

Tin bearing Ore Load has been seen at Deckler's Cliff plus Copper further up.



b) British Museum - Erme Estuary Tin Ingots donated 2012

(Note: Details below re-input from 2012 report as BM analysis on-going).

The two tin ingots, shown in Figure 11 8 below, are from the Erme Estuary Tin Ingot site. These were donated by SWMAG so that a comparative analysis with the Salcombe/Moor Sand tin ingots could be carried out.

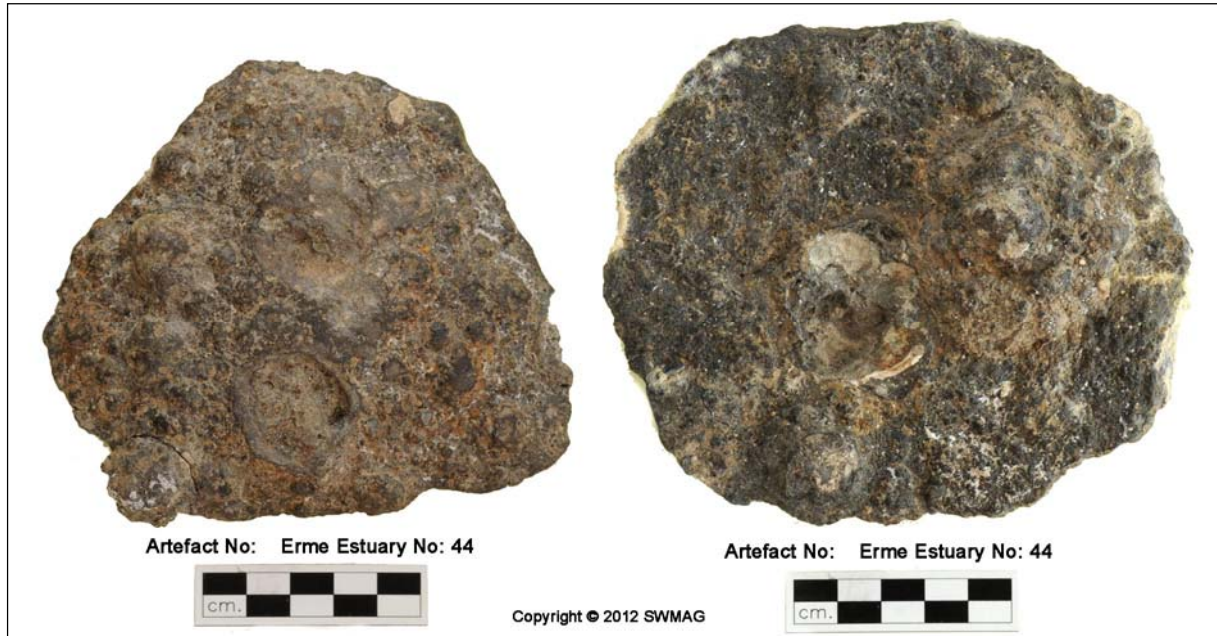


Figure 11 - Erme Estuary Tin Ingot Nos. 43 & 44 donated to British Museum

(Re-submission from 2012 Report as work in Progress by British Museum)

The British Museum is comparing and analysing age data between the Salcombe Ingots and those found from The Erme Estuary Tin Ingot protected site. New thought is suggesting the Erme Ingots are Bronze Age. Scientific analysis is currently taking place at the BM together with Ben Roberts still participating (now Durham University).

c) Reson Survey Analysis

SWMAG is unable to find the resource to interpret the data fully that was provided by the Reson Survey carried out by ADU and SWMAG in 2002.

Both extra Computer software resource is required as well as expertise for interpretation.

This is essential work that is needed to further site interpretation as well as spread of the site.

SWMAG has contacted Reson but with little results.

SWMAG has therefore abandoned the use of existing software (Fledermause) and will apply for grant funding from English Heritage for an alternative package.

A grant application will be submitted for the 2014 season

d) Local Society Co-operation for Research

SWMAG has developed close relationships with local communities and interested parties. Through use of lectures, these provide interesting comments on past terrestrial finds and recoveries.

What is considered a valuable developing local resource is the use of the involvement of all local interested parties. This will continue throughout 2013/4

3.3.2 Museum Liaison

The team continues to be in close liaison with two major museums this year, British Museum and the Plymouth City Museum & Art Gallery, and Ben Roberts at Durham University.

3.3.3 British Museum

The BM has updated the 'Salcombe/Moor Sand' collection database to cover all artefacts up to 2010 (refer to Section 6.1 Ref.5 for further details and link to database).

Samples of the copper (alloy) ingots, tin ingots and bronze objects are currently being analysed by BM archaeometallurgists to ascertain composition whilst the gold is also being analysed to characterise composition and manufacturing technology.

The British Museum is re-assessing the Tin Ingots from the Erme Estuary site. Re-appraisal has provisionally dated these as Bronze Age. Scientific comparison between the Salcombe Tin Ingot hoard and those from the Erme is currently taking place. SWMAG has donated two of the Erme Ingots to the British Museum for this purpose.

SWMAG has been recently advised, by Neil Wilkin, that the equipment and machines needed to undertake the analysis of the following items has become available;

- i. tin ingots from the Erme Estuary site
- ii. post 2010 Salcombe tin ingots
- iii. pre 2010 Salcombe tin ingots

Hopefully this analysis will give some indication of the correlation (or otherwise) between the Erme Estuary and Salcombe tin ingots.

3.3.4 Durham University

Liaison continues to be developed with Ben Roberts (Ex British Museum) who is now the Head of Department at Durham University for Pre History. This for research and opinion for the Bronze Age sites, find identifications, and new comparative findings.



4 Contact with the Nominated Archaeologist and Other Parties

The Moor Sand team and SWMAG maintained close contact with our Nominated Archaeologist and other parties. Communications during the 2012 season are summarised below.

4.1 Salcombe/Moor Sand Communications

	Phone Calls	E-mails	Meetings
Nominated Archaeologist	32	16	6
English Heritage	10	6	-
British Museum	22	28	4
Royal Albert Memorial Museum	-	-	-
University of Oxford	-	-	-
Plymouth City Museum & Art Gallery	4	4	-
Receiver of Wreck	4	4	-
Durham University	8	6	-
Pewter's Society	-	4	-

5 Illegal Diving

The site has been dived illegally in the past. In order to enhance the protection of the site, in 2008 SWMAG prepared a security plan that involved Prawle Point National Coastwatch, Brixham Coastguard and Devon & Cornwall Constabulary.

No illegal diving activity has been reported during 2013 to date.

SWMAG would like to thank Prawle Point National Coastwatch, Brixham Coastguard and Devon & Cornwall Constabulary for their continued support (refer to Appendix IV for further details).



6 Media/Museum/Outreach

6.1 Media

The team website, <http://swmag.org> has been completely revised with a new look and more features;

The Web site is continuously used for research and information.

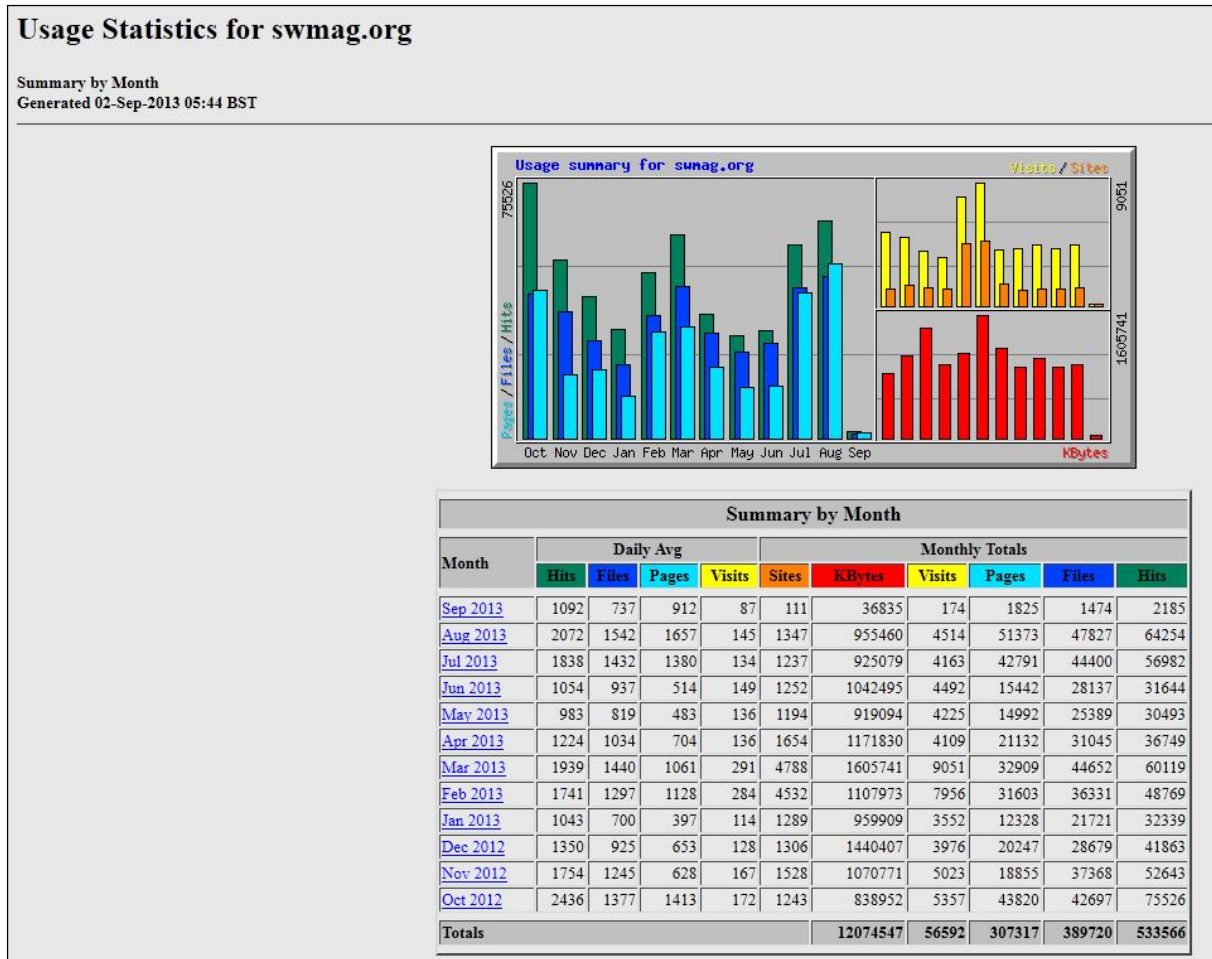


Figure 12 - SWMAG Website - Usage Statistics



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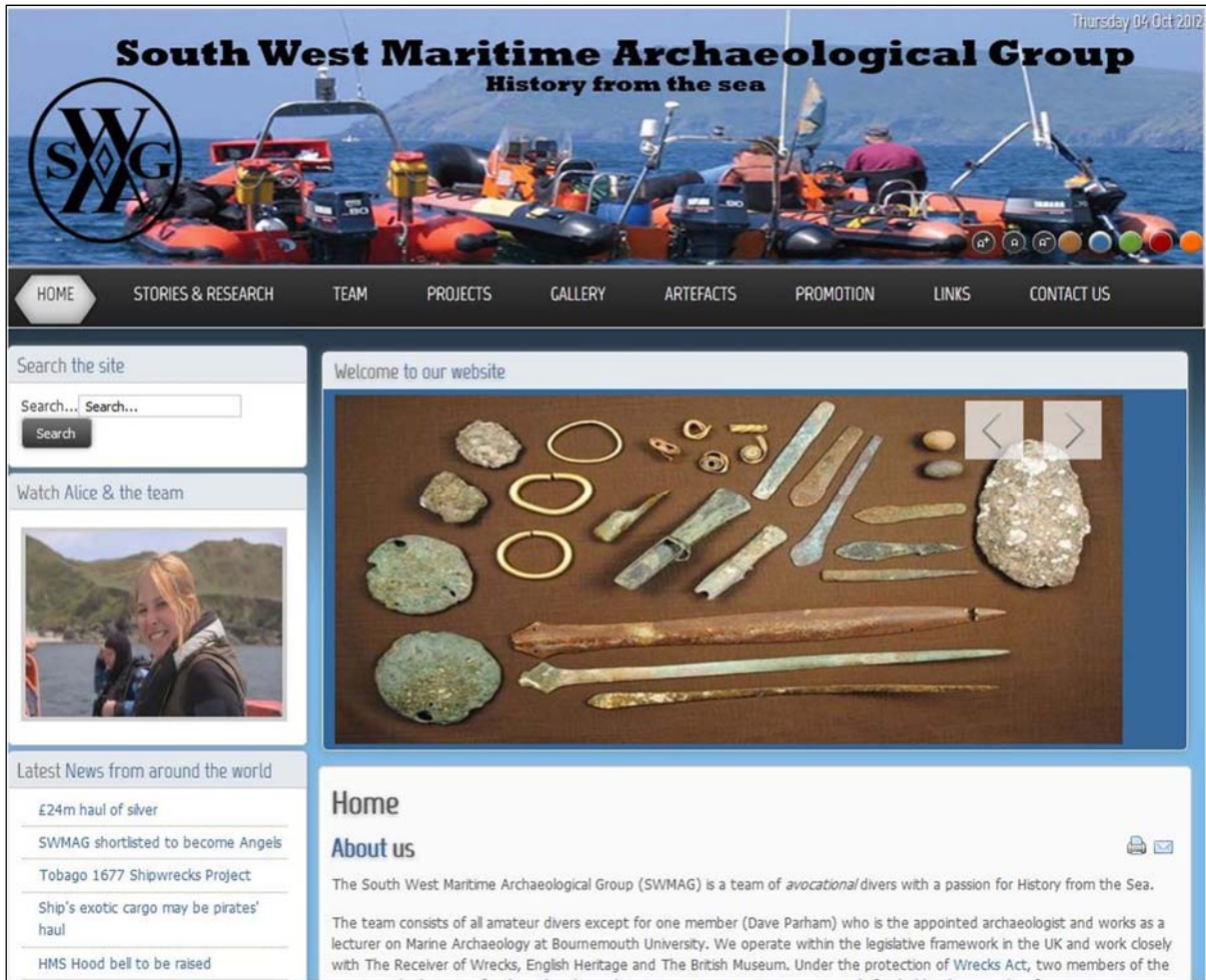


Figure 13 - SWMAG Website - Front Cover

Note: SWMAG have added to the web site :

- A 'Guidance' page showing potential Marine Archaeologists where to get advice and guidance.
- A Link to all SWMAG items in the British Museum Database.
- All the Site Reports

Other media is covered in the tables below;



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Ref	Media - Internet	Details
1	South West Maritime Archaeological Group web site	As detailed above, the team's web site was completely revised and updated this year to give visitors better access to the past and current achievements and successes of our underwater cultural heritage sites to date.
2	British Museum Collections Database	Collections online database 'Compass' by the British Museum, currently lists; Salcombe Bronze: 353 artefacts related to the Salcombe/Moor Sand bronze age sites Salcombe Cannon: 546 artefacts related to the 17th century cannon site http://www.britishmuseum.org/research/search_the_collection_database/advanced_search.aspx Use the above link to the 'advanced search' facility.
3	Los Angeles Times Website	SWMAG was contacted, via the web site, by the 'Los Angeles Times' for permission to include images of finds from the Salcombe / Moor Sand bronze age sites. Figure 14 below shows the featured article and link. http://www.latimes.com/nation/nationnow/la-na-nn-pirate-treasure-shipwreck-20130925,0,5425745.story?amy

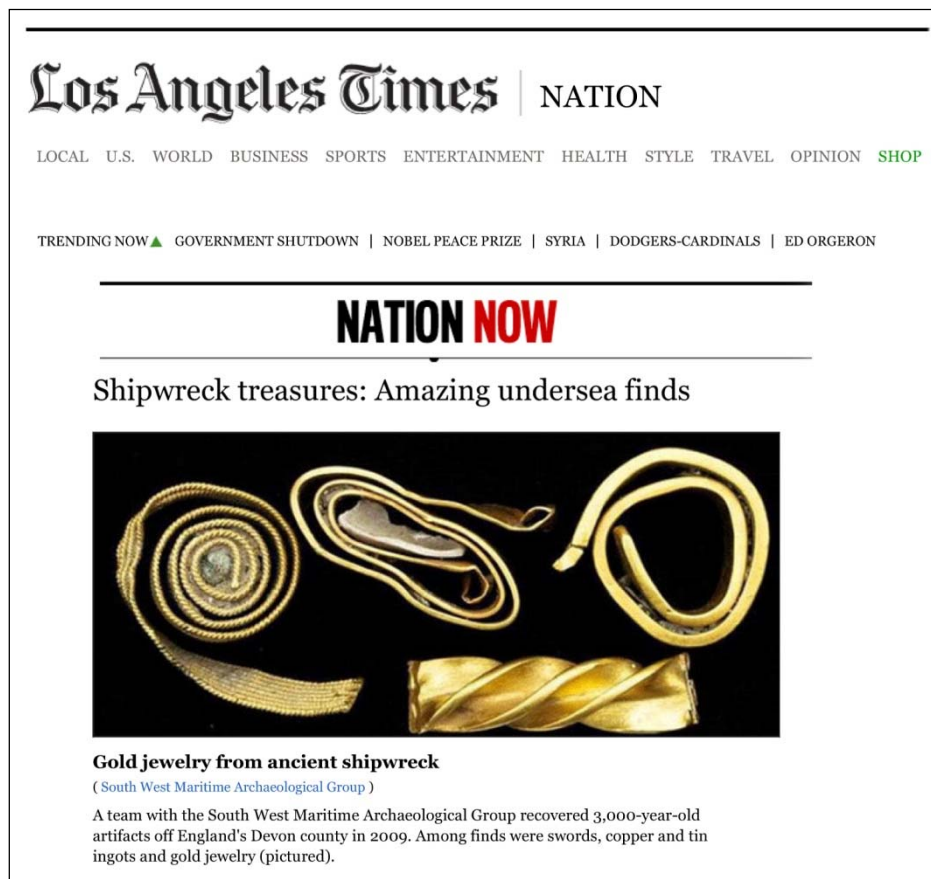


Figure 14 - Los Angeles Times - SWMAG featured

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South West Maritime Archaeological Group
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Ref	Outreach	Details
4	Pull-up Display Banners	Figures 15 & 16 below show the pull-up display banners, designed by Alison James (EH) with material from the team and provided to the team by EH. These have been excellent additions to our outreach resources.

South West Maritime Archaeological Group
History from the Sea

SWMAG are a team of avocational divers and archaeologists with a passion for *History from the Sea*. Our marine archaeological projects range from shipwrecks sunk in the 20th century to Bronze Age sites over 3,000 years old. Team members are Licensees for the Salcombe Cannon, Moor Sand, Erme Estuary and Erme Ingot protected wreck sites.

Bronze Age Salcombe and Moor Sand

The Salcombe and Moor Sand sites are two of the earliest protected wreck sites in England. The two sites are adjacent to one another and have produced the largest single collection of Tin and Copper ingots found anywhere in Britain and the Western facing Atlantic.

Salcombe is now one of the most important Bronze Age sites currently being investigated in Europe

Ben Roberts, Curator, European Bronze Age of the British Museum

In addition to the Tin and Copper ingots, swords, rapiers and axes have been recovered by the SWMAG team and are now in the British Museum.

A late Bronze Age (800-700 BC) Ewart-Park Leaf Sword, along with copper and tin ingots from the sites are currently on display in the Citi Money Gallery, Room 68 at the British Museum.

You can find out more about SWMAG at: www.swmag.org

Supported by:
ENGLISH HERITAGE

Figure 15 - Bronze Age Display Banner

South West Maritime Archaeological Group
History from the Sea

SWMAG demonstrate that recreational divers and archaeologists can work responsibly with great success in maritime archaeology in the UK. Through their work on the Salcombe Cannon Site they have set the standard that all other groups should aim for

Mark Beattie-Edwards, The Nautical Archaeology Society

You can find out about SWMAG at: www.swmag.org

17th Century Salcombe

The main site at Salcombe encompasses the remains of a 17th century armed trading ship whose origin is unconfirmed. The finds on the site are very unusual and seem to indicate a cargo of North African origin; however, the shipboard items are consistent with an origin in the Low Countries, probably Holland. This may provide evidence of trade connections with North Africa via the Low Countries or even represent an Islamic merchant ship, previously unknown in UK waters.

All the gold coins, jewellery and artefacts are deposited with the British Museum and are currently on display in the Citi Money Gallery, Room 68.

The artefacts date to the mid-17th century and historical evidence suggests that there was regular trade in gold from North Africa at this time.

Only one piece of timber has been found on the site, though it is possible that more ship structure may be located in future.

You can find out more about SWMAG at: www.swmag.org

Supported by:
ENGLISH HERITAGE

Figure 16 - 17th Century Display Banner

South West Maritime Archaeological Group
Salcombe/Moor Sand Sites : 2013 End of Season Report

Ref	Outreach	Details
5	VIP Tour of the BM	VIP Tour of the British Museum by 'NAS Fellows & Friends', 7th March 2013. Hosted by JD Hill, Head of Research at the BM and NAS Trustee. The VIP Tour of the museum was followed by a behind the scenes visit to see some of the Salcombe / Moor Sand Bronze Age finds.



Figure 17 - JD Hill with Salcombe Artefacts



Figure 18 - JD Hill & Neil Wilkins with Salcombe Artefacts

6	Strete Village Day	Full Travelling Display at Strete Village Day Event. 3 rd August, 2013 Ron Howell
7	'Yesterday Today: Bronze Age Connections in a Modern World' Conference, Dover	Full SWMAG display in the reception area of the conference. 18-20 th October, 2013. Figure 19 shows the extended display boards with the project history of the Salcombe / Moor Sand Bronze Age sites, complete with reports and palstave axe re-constructions.



Figure 19 - SWMAG Display at 'Yesterday Today' Conference, Dover

6.2 Museums with SWMAG Artefacts on Display

Artefacts found by SWMAG are currently on display in three national museums as follows;

6.2.1 British Museum

The 'Citi Money Gallery, Room 68, British Museum' was fully refurbished and opened again in June 2012. This gallery displays the history of money around the world and SWMAG artefacts are featured in two of the display cases.

- a) Salcombe / Moor Sand Bronze Age artefacts
Representing pre-monetary trade, these are in the early prehistory case and feature the 'Leaf Sword', two copper bun ingots and two tin ingots. This represents Europe about 2000-800 BC when trade and exchange of goods took place over long and short distances.
- b) Salcombe 17th Century Cannon Site artefacts
This display shows a selection of gold coins, fragments of jewellery as well as a fish shaped sounding lead, musket balls, a spoon and shards of pottery and glass. All finds from the 17th century cannon site.

6.2.2 Plymouth City Museum and Art Gallery

Artefacts (on long term loan from the British Museum) from the Salcombe B / Moor Sand site continue to be displayed in the 'Uncovered Gallery', Plymouth City Museum & Art Gallery. This exhibition has been very successful and is now in its third year of display.

6.2.3 National Maritime Museum Cornwall

Artefacts (on short term loan from the British Museum) and video from the Salcombe B / Moor Sand site are currently on display as part of the '2012BC: Cornwall and the Sea in the Bronze Age' exhibition at the National Maritime Museum Cornwall, Falmouth.

The exhibition is a graphic display around the building of a 60 ft replica of a Dover Bronze Age Boat. During the year, the public will be able to view this building work and also learn about Bronze Age living and trade, our wreck and work will be featured both graphically and feature a display of tin and copper ingots.

Before the exhibition was launched, the museum contacted SWMAG and requested support. Team members went to visit them and provided lots of supporting information. We also provided a SWMAG flyer of the teams work on the Salcombe / Moor Sand bronze age sites which is available to the public free of charge.



6.3 Publications

6.3.1 Salcombe/Moor Sand Sites

Finds from the Salcombe/Moor Sand bronze age sites up to 2004 were included in an EH funded CBA monograph volume published October 2013. Available from all major book stores.

Title of the monograph is 'Claimed by the sea: Salcombe, Langdon Bay and other marine finds of the Bronze Age' by Needham, Parham and Frieman (ed.)

Published by Council for British Archaeology, United Kingdom, 2013

ISBN 10: 1902771958 / ISBN 13: 9781902771953

'First discovered by sport divers in the 1970s, the two remarkable seabed finds of prehistoric bronze metalwork described here quickly became a testing ground for the new discipline of underwater archaeology, initially under the leadership of the pioneering maritime archaeologist Keith Muckelroy. A haul of 361 bronzes from Langdon Bay, Kent, represents one of the largest deposits from Bronze Age Europe. Dating to the thirteenth century BC, the collection is diverse in character and originates in various parts of western Europe and the British Isles. The assemblage from Salcombe, Devon covered here is of similar date with a unique combination of types and materials; further finds have since been made at this site. Neither site having yielded any ship s remains, all possible mechanisms for deposition are reviewed, including erosion of coastal deposits and ritual deposition at sea. Extensive comparative analysis favours the conclusion that the unparalleled Langdon Bay and Salcombe assemblages represent material spilled or jettisoned from boats in trouble.'

6.3.2 Salcombe Cannon Site

Publication is progressing on the 17th Century Salcombe Cannon Site, supported by Alan Aberg, Society for Nautical Research (SRN) and for which SWMAG received donation of £600.00 towards artefact drawings and photographs.

A lot of material has now been prepared in draft form by the various experts at the British Museum and Peter Davey on the baroque clay pipe etc.

Alan Aberg is liaising with the BM to review drafts of the material they have so far, it will then be collated with the other material for formatting the publication.

Artefacts review 10th October 2013 at the British Museum

The artefacts assemblage (excluding coins) was reviewed by Professor David Gaimster, early October 2013.

Dave Parham, site archaeologist, after discussions with David Gaimster advised;

' preliminary conclusion was that the collection of finds dated in the second / third quarter of the 17th century (i.e. 1625-1675) and with the exception of one piece of possible Iberian pottery, part of a storage vessel, were from the low countries, modern day Netherlands. The collection did not imply any great wealth and would have belonged to someone in the upper working class / lower middle class i.e. a ships officer on an average ship'.

Costs of publishing have yet to be determined but it is hoped that it may be possible to get some financial support from institutions and other grants, this has to be investigated further.

Provisional dates;

March 2014: collate all the draft material

Mid-2014: editing by invited professional

Publication: 2015



6.3.3 Publications which include SWMAG projects

The following publications included SWMAG current and previous projects;

- 1) Europe before Rome
by T, Douglas Price
Published by: OUP USA (February 2013)
ISBN-10: 0199914702 / ISBN-13: 978-0199914708

- 2) The Oxford Handbook of the European Bronze Age (Oxford Handbooks in Archaeology)
by Anthony Harding (Editor), Harry Fokkens (Editor)
Published by: OUP Oxford (June 2013)
ISBN-10: 0199572860 / ISBN-13: 978-0199572861

- 3) England's Shipwreck Heritage "From Log Boats To U-Boats"
by Serena Cant
Published by: English Heritage (July 2013)
ISBN: 9781848020443

- 4) 'South Devon's Shipwreck Trail'
by Jessica Berry
Published by: Amberley Publishing (September 2013)
ISBN-10: 1445606747 / ISBN-13: 978-1445606743



7 Presentations/Outreach and Accessibility

SWMAG team members continue to make presentations to various groups and societies in and around venues in the South West region.

SWMAG presentations 2013:

Event	Date	Details
East Budleigh Village Hall	13 th November 2012	Talk to the Otter Valley Association. '3000 Years of History from the Sea, by Ron Howell and Andy Elliott
Ashburton	27 th November 2012	Talk to the 'Ashburton Probus Club'. '3000 Years of History From The Sea' by Ron Howell .
SHA 2013 Conference Leicester University	9-12 th Jan 2013	'Society for Historical Archaeology Annual Conference 2013', Leicester University. SYM-127b: Protected Wreck Sites: 40 Years of Protection 'The Salcombe Bronze Age Wreck' by Dave Parham
Frogmore	10 th April 2013	Talk to the Coleridge Probus Club, ' Diving into History' by Ron Howell
Northampton BSAC Clubhouse Northampton	18th April 2013	Talk to the 'Northampton Radio Club'. '3000 years of History from the Sea' by Jim Tyson
Kettering Northamptonshire	20th May 2013	Talk to the 'Wicksteed Park Model Boat Club'. '3000 years of History from the Sea' by Jim Tyson
Chickerill	21 st May, 2013	Talk to the Chickerill Townswomen's Guild. 'The Gold Wreck' by Ron Howell
East Budleigh	11 th June, 2013	Talk to the East Budleigh Women's Institute. '3000 Years of History from the Sea'. By Ron Howell and Andy Elliott
Newton Ferres	9 th July 2013	Talk to the Newton Ferres Probus Group. '3000 Years of History from the Sea' by Ron Howell
East Prawle	29 th August 2013	Talk for the East Prawle History Group. ' The Gold Wreck' by Ron Howell and Andy Elliott
Totnes	18 th September	Talk for the Totnes Ladies Probus Club. 'To Sail No More' by Ron Howell
Paignton Redcliff Hotel	18 th September 2013	Talk for 'The Paignton Probus Club' 'HMS Venerable' by Steve Clarkson



South West Maritime Archaeological Group
Salcombe/Moor Sand Sites : 2013 End of Season Report

Event	Date	Details
Torquay Livermead Hotel	26 th September 2013	Talk to the 'Torquay Probus Club' '3000 Years of History from the Sea' by Ron Howell
Royal Navy Association Dartmouth	27th September 2013	Talk for the Royal Navy Association , Dartmouth and Newton Abbot Branches. 'The Gold Wreck' by Ron Howell
Stoke Flemming Village Hall	12 th October 2013	Talk for The Friends of Devon Libraries. '3000 Years of History from the Sea' by Ron Howell
'Yesterday Today' Dover	18-20 th Oct 2013	Yesterday Today: Bronze Age Connections in a Modern World International Conference, Dover. Display by SWMAG showing the team's activities, finds and project work on the Salcombe / Moor Sand Bronze Age sites. Copies of the 'End of Season' reports were available for delegates to review the extent of the team's work. See Figure 19 above for the display.

2013 Donations:

From monies raised by the presentations and exhibitions, SWMAG donated £120.00 to the Rowcroft Hospice, Torquay (Rowcroft Hospice serves the people of South Devon by providing specialist care to patients with progressive, life limiting illnesses)



8 Potential for Further Work

8.1 Fieldwork

The farmer of the land behind the Salcombe/Moor Sand sites, Mr Tucker, is willing for the team to carry out field walking during 'out of season' periods. This could prove very interesting and lead to a better understanding and perhaps provide evidence, why there seems to be multiple period wrecks in the adjacent waters.

8.2 Outreach

a) Local Museum

Salcombe Maritime Museum curator, Mr Roger Barrett, has suggested that the team work with them to create a new static display for 2013/14.

SWMAG have provided the museum with a video of the team's work on various sites that visitors can watch and relate to artefacts etc on display.

We will also assist in re-developing the existing photos and appreciation board displays we supplied some years ago.

Also we are supporting the museum's application to the British Museum for the temporary loan of Salcombe/Moor Sand artefacts.

b) Interpretation board for sites

SWMAG have been involved with Gara Rock Hotel (looks down over the site) in providing visitor information. A new interpretation board, see Figure 20 -below, has been arranged together with English Heritage



Figure 20 - Sites Interpretation board at the Garra Rock Hotel

Note: The new interpretation board above will be officially unveiled on 22nd March 2014 by Dr Sarah Wollaston, MP for Totnes.

c) Archaeological Day at Garra Rock

SWMAG are in discussions with the 'Garra Rock Hotel' on the possibility of providing an 'Archaeological Day' with talks and displays by SWMAG and local land archaeologists and other interested parties.

Provisional date for this would coincide with the interpretation board unveiling in b) above.



9 Conclusions

2013 fieldwork season has been successful despite difficulties during the season.

Positive results were from surface magnetometry surveys that were carried out on days during the week where windows of 24 hours prevailed during weather changes.

These results have been analysed and will be incorporated into our 2014 season. This work is on-going throughout the season

Desk based research and liaison with British Museum and other professional bodies regarding artefact research and origin is ongoing.

a) 17th Century Salcombe Cannon Site

Inspections only were made to the Cannon Site 17C.

The planned photo-mosaic seabed work was only partially complete and has been carried forward to 2014.

The Bathymetric survey data still requires analysis and funding is being sought. It is considered that more interpretive results are obtainable and specialist analysis is required. No further interpretive results have been obtained since the initial work by ADU and Wessex.

M Dean (ex-ADU) has been briefly consulted to see what costs are involved. This information is awaited together with what possibilities may remain.

b) Bronze Age Sites

Looking at the three areas; Moor Sand site incorporating Muckleroy area, plus the area of 900BC recoveries and the BA area within the Salcombe defined area of 1350BC, activity on site during the 2013 season was poor due to adverse weather and team participation due to the economic environment..

Only a few artefacts have been found. Hopefully, analysis by the BM archaeometallurgists (see Section 3.3.1 a) will provide useful results on their provenance.

The team inspected the interesting 4th area whilst searching the extremities of the site. Slightly to the north of the 900BC area there were surface recoveries of Bronze Age Tin and Copper ingots. This work will carry forward to 2014 and be a major part of the field work planned

The Team have not re-visited the central area between the two Bronze Age sites but accepts that it is important to do so.

Media Outreach & Awards

The team is very pleased with the level of outreach that it has achieved this year.

In addition to our longstanding commitment to delivering lectures/presentations about our work on the Bronze Age and 17th century sites we have also enjoyed a considerable amount of media coverage, in all its formats.

General public outreach has also been greatly improved this year by Salcombe/Moor Sand finds being on display in three major museums with SWMAG credit being given for the recoveries.

In these difficult times we hope that this coverage has contributed to demonstrating the value of maritime archaeology to the public at large, achieved by a dedicated avocational team



Acknowledgements

The team would like to extend its grateful thanks to all the people and organisations that have supported us, in many ways, through all the years.

The following list is by no means comprehensive, or in any particular order, and we apologise to anyone we may have missed;

Alison James	English Heritage
Ben Roberts	Durham University
Stuart Needham	British Museum
Dr Peter Northover	BegbrokeNano OMCS
Dr Chris Salter	BegbrokeNano OMCS
George Bass	USA
Alison Kentuck	Receiver of Wreck
Alan Aberg	Society for Nautical Research
Coastwatch Team	Coastwatch Team Prawle Point
Coast Guard Team	Brixham
Malcolm Darch	Salcombe Maritime Historian
Neil Wilkins	British Museum
Ian Oxley	English Heritage
Mark Dunkley	English Heritage
Fiona Pitt	Plymouth Museum

We would also like to make a special thanks to our archaeologist Dave Parham for all the good work and time that he gives the team together with the services of Bournemouth University.



Appendix I **Artefact Summary 2013**

Salcombe / Moor Sand Bronze Age Sites

Type of Artefact	Number Located	Notes
Copper Ingot	1	Part of Convex Ingot, worn smooth and relatively clean
Tin ingot	1	Small Fragment Tin Ingot
Total number	2	

Appendix II **Artefact List 2012**

Salcombe / Moor Sand Bronze Age Sites & Wessex 12 Area

Artefact Number	Date Located	Description
Salcombe / Moor Sand Bronze Age Sites		
201309240001	20130924	Copper Ingot (fragment)
201309240002	20130924	Tin ingot (fragment)
Wessex 12 Area		
201306020001	20130602	Lead Weight
201306020002	20130602	Lead Disc
201306030001	20130603	Cannon Ball

SWMAG Artefact numbering system:

All artefacts raised are given a unique record number generated, on the day of the find, as follows;

Artefact Number: YYYYMMDDxxxx (e.g. 201309240001)

Where;

YYYY = year found (e.g. 2013)

MM = month found (e.g. July = 07)

DD = day found (e.g. 28)

xxxx = series number for the items found on that day (e.g. 0001 for the first item etc.)



Appendix III **Artefacts Deposited with British Museum**

The following artefacts were deposited with Ben Roberts, British Museum on the 18th June 2012;

III.i **Salcombe / Moor Sand Bronze Age Sites**

Artefact Number	Description	Artefact Number	Description
1004240001	Tin Ingot	1006190004	Copper Ingot
1004240002	Tin Ingot	1006190005	Copper Ingot
1004240004	Copper Ingot	1006190006	Copper Ingot
1004240005	Copper Ingot	1007240001	Copper Ingot
1004240006	Copper Ingot	1007240002	Copper Ingot
1004250001	Bronze Sword	1007240003	Copper Ingot
1004250002	Copper Ingot	1007250001	Tin Ingot
1004250003	Copper Ingot	1007250002	Tin Ingot
1004250004	Copper Ingot	1007250003	Tin Ingot
1004250005	Copper Ingot	1009250001	Tin Ingot
1004250006	Tin Ingot	1009260001	Tin Ingot
0909190009	Tin Fragment (very thin)	1009260002	Copper Ingot
1005160001	Copper Ingot	1009260003	Copper Ingot
1006180001	Tin Ingot	1009260004	Copper Ingot
1006180002	Copper Ingot	1009260005	Copper Ingot
1006190001	Copper Ingot		
1006190002	Copper Ingot		
1006190003	Copper Ingot		

III.ii **Erme Estuary Tin Ingot Site**

Artefact Number	Description
1004240001	Tin Ingot
1004240002	Tin Ingot



Appendix IV **Illegal Diving Activities & Security**

Fortunately, this season seems to have been free of illegal diving activities on the site. This may have been partly due to the same difficult weather conditions that limited the team's visits to the site, but hopefully is more likely to be due to high public profile which resulted from last year's intrusion on the site.

The SWMAG security document for 2013 is annually distributed, usually in February. We issue it to the appropriate persons and to others on request.

The proposed closure to Brixham Coastguard may result in the alteration of security procedures, if that proves to be the case the site security document will be amended and re-issued accordingly.

Security procedures currently have proved to work successfully and SWMAG wish to thank the Prawle National Coastwatch team for their diligence.

Appendix V **Salcombe/Moor Sand License**

Participating persons on the Salcombe/Moor Sand license during 2013 were:

Steve Clarkson	Mick Palmer
Dave Dunkley	Dave Parham
Andy Elliott	Jim Tyson
Ron Howell	Mike Turner
Mick Kightley	Andy Wagstaff
Mike Kingston	Julie Williams
Neville Oldham	Mike Williams

Appendix VI **South West Maritime Archaeological Group**

South West Maritime Archaeological Group members for 2 years or more are:

Steve Clarkson	Mick Kightley	Dave Parham	Julie Williams
Dave Dunkley	Mike Kingston	Mike Turner	Mike Williams
Andy Elliott	Neville Oldham	Jim Tyson	
Ron Howell	Mick Palmer	Andy Wagstaff	

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