The *Warship Hazardous* Project Site Report November 2015.

Introduction

The weather conditions over winter were at times very poor, with high south westerly winds & much rain, the hoped for early site visit was not possible due to the conditions.

The site buoy coming ashore early in the new year gave an indication of sea conditions & implied that we could expect considerable changes on site, however a site visit was not possible until late April.

This summer has been very similar to last year, with warm sunny weather, however the considerable rain through the winter meant a lot of fresh water runoff into the Bay, bringing with it much soft sediment, the first dive for the year in April recorded very poor visibility. Strong south westerly winds have prevailed for much of the summer, underwater visibility was very poor at less than a metre on a number of visits to site; this situation did not improve until late May, then deteriorated again, generally underwater visibility in the Bay has been very patchy throughout the year.

The shingle movement along the coast from an easterly direction throughout the year continues unabated, both the Environment Agency & Bunn Leisure's major sea defence works east of the site completed in 2013, as yet cannot be directly linked to seabed movement around the site, although it may have contributed to general removal of sand in the Bay area as a whole, this however would be very difficult to prove.

The breach opened in the shingle bank at Medmerry to allow the Environment Agencies "Managed Realignment" of the coast, (*at a cost of many millions of pounds*) has changed shape & the general profile of the shingle banks are considerably altered from twelve months ago. It remains to be seen what effects this work will have on the wreck site & its surroundings over the long term, as well as the shape of the bay generally.

The slipway at Bracklesham remains unusable for long periods during the predominant south-westerly weather patterns. As stated previously, at the end of September through to the beginning of April, when the district council close their safety boat office & tractor powered launching facility, the public slipway is inoperable for normal boat launching & recovery, severely restricting easy access to the site, even if weather conditions are favourable, added to which the tractor was not available for some five weeks at the height of summer due to breakdown, this year.

Launching from Chichester harbour is neither economical nor practical during "out of hour's times" as it adds another two hours & considerable fuel expense plus harbour dews, to the diving day. However it was necessary to recover the rib from Itchenor once in July, due to a sudden weather change making the slip at Bracklesham too dangerous for recovery.

This year the District Council was approached regarding the locking of the gate in the <u>public access</u> to the sea, during "out of office hours" making access in the evenings out of the question, however it appears that the council do not see public access as a priority & it seems, it is far more important to make sure gypsy encampments cannot be set up on the grass area adjacent to the slipway.

The alternative option i.e launching & recovering from Itchenor will have to be made use of in future, to increase available on site time, as it seems unlikely that The District Council will alter or improve launch facilities at Bracklesham.

This year it was decided to use as many neap tides as possible when conditions were favourable, to work on the site.

Time would also be spent progressing the project design & application for a limited site excavation, along with an MMO license application for this year's work.

Weather conditions improved after a very stormy start to the year & a first dive was possible on the 26th of April when underwater visibility was recorded as between .5 & 1 metre, water temperature was twelve degrees, the same as this time last year *(See "Diver Observations" written by Licensee)*. No damage was observed around the site at this time in the very poor visibility; however the considerable sand movement in

& around the site noted last season has increased. Sand movement in the area of the main site has revealed some more of the diver trail cable which has a number of breaks in it; it is therefore in need of major repair or replacement to make it usable.

Various new timbers & artefacts were also noted on this first dive.

Plans for 2015

- Continue monitoring variations in seabed levels, using points remaining from those set up in 2002 plus those set up in 2009/10 & more recently, adding more if required.
- Carry out further planning of areas/artefacts exposed due to continued erosion & sea bed movement.
- Survey and recover artefacts exposed by erosion and under threat of loss or damage.
- Continue with conservation of artefacts in wet storage at present & those in chemicals, under guidance from Paul Simpson.
- Continue developing site exhibit at Earnley Gardens.
- Continue web site development.
- Raise additional funding to continue work on site & artefact conservation.
- Continue metal detector search in new areas of gullies in the southwest for further artefacts as conditions allow.
- Carry out further geophysical surveys of surrounding area of site as conditions allow.
- Commence excavation as laid out in submitted project design.
- Continue raising public awareness of Hazardous & the project with presentations etc.

Field work

This year has seen long spells of very low visibility in the bay for a large part of the diving season; however seven days of diving have taken place on site this season, on a number of occasions diving was cut short due to near zero visibility.

During visits to site, when ever conditions allowed, visual monitoring of seabed levels within the main wreck area were carried out, this showed similar sand overburden levels at monitoring points as recorded in September 2014.

A number of loose artefacts were observed some of which have been recovered from the main site area, the gullies north east of the main site appear to still be covered by sand overburden. The diver trail cables were found to be more uncovered than last year & even more breaks in its length were noted. Some datum points around the site have been lost or damaged over time & some re-labelling was carried out to facilitate measuring in of artefacts.

Additional datums have been placed along the east side of the hull remains.

The plan to start the limited exploratory excavation trench across the site, north of the break in the hull was not realised. This was due both to weather conditions and to the fact that the relevant permissions had not been forthcoming. A full project design was submitted early in the season to support reinstatement of an excavation licence. Revisions to the PD were requested at several stages and so it was not signed off until after the end of the season. The parallel MMO licence application stalled after assignment to tier 4 and a failure by MMO to justify or review that decision.

Late in 2015, MMO changed the Case Officer to one who was far more sympathetic to our case and who reassessed the application to tier 2. The fee has been paid and it is hoped that a one off, lifetime licence will shortly be granted to cover any and all pre-approved work.

Results

As previously stated, weather conditions were very poor over winter & through early April, making for a later than hoped for first visit to site on the 26th April this year, although the summer has been very warm, strong south-westerly winds have prevailed for a large part of the summer, resulting in many diving weekends being cancelled at the last minute. Underwater visibility in the bay has been very changeable through the season, varying at times from less than one metre up to 4 metres at best, on some visits to site it was impossible to carry out any meaningful work in the less than half a metre visibility experienced. The conditions this year have not been helped by fresh water runoff over winter, the Environment Agency's managed retreat at Medmerry may also be adding to a build up of soft sediment accumulating in the bay & suspended in the water column, this takes a considerable time to settle out after storm conditions.

Monitoring points were measured during visits to site & noted in diver logs, comparisons between these measurements & those taken in previous years have yet to be compared fully; however localized changes were noted on the first visit to site (*see Diver observations26th April*). It has been necessary to re-label a number of datum pins around the site & also re-establish some pins in their existing positions. Additional datum's have been added along the east side of the site.

The cannon ball mound & the three large cannon stand well proud of the seabed as last year; however as visibility improved in mid June, some additional undercutting became apparent on the west side of the hull remains, along with substantial loss of sand overburden around the line of guns.

At this time it was also noted that the barrel stave ends visible in the centre of the wreck last season & reported at that time as being more uncovered than 2008, have been again further uncovered over winter, in some places by as much as 100mm (See fig. 3).

Four artefacts were recovered from the site this season & placed in wet store at our facility at Earnley, these items have been reported to the Receiver of Wreck.

One other artefact, a large frame was recovered from the beach by the District Council safety staff; it was thought by them to be from the Hazardous wreck site when recovered from the foreshore in early May, however on closer inspection we do not believe this to be the case. However we reported the find to the Receiver of Wreck, photographed, & recorded the timber by scale drawing. This timber has since been sampled for dendro analysis.

In view of the poor visibility on site for a large part of this season & the number of cancelled site visits, it was not possible to carry out the wider area searches we had planned for; however some time was spent searching the area of the newly discovered guns located during last year's geophysical survey, for additional wreck material.

Nothing else was located in the proximity of the guns at this time.

Much time under water was devoted to searching for the ground mooring for the site marker buoy, washed ashore in the early February storms, when it was eventually located, a large section was found to be missing. We believe the missing section may have been caught up in fishing gear dragged through the site, which may also be linked to damage observed to two cannon on site & approximately 20 metres of pot line found entangled around the three big guns noted in the dive log of 14th June (*see Diver Report 23rd May*). A number of hours by team members were devoted to maintenance work on the display building & wet store, also work on wet stored artefacts has also been progressed.

Some of the artefacts delivered to Fort Cumberland for continued work by our conservation advisor Paul Simpson & E.H's Angela Middleton last year, have now gone through the freeze drying process, & have been collected & returned to our storage facility.

Since this time, Paul Simpson has retired from the position of conservation advisor to The Hazardous Project, we take this opportunity to here by acknowledge with thanks, the help & assistance he has given us over the years.

A re-written & up dated project design (*fourth edition*) for the reinstatement of the excavation licence, has been submitted to Historic England hopefully for the final time, this was completed after many hours of work by team member David Johnston and in November we were notified that it had been accepted.

Team member David Johnston initiated dialogue with the MMO last year, and submitted a full licence application, in order to get the necessary permissions in place to secure an MMO licence to operate our PoWA licences; however this process has proven unduly difficult to bring to fruition. After much email traffic, constantly shifting goal posts and updating of licence application, the MMO Case Officer assigned the application to Tier 4 (Complex Case) and demanded £2,200 to progress the application. We declined to pay and requested a review by higher management, which was not forthcoming and the application stalled. During a trawl of "dormant cases" an MMO representative finally contacted David in mid October this year. On realising that the fault lay with MMO, that Case Officer chased on our behalf and this resulted in a much reduced licence fee being agreed & the fee has now been paid by David from his private funds, in order to hopefully remove yet another hurdle in this very long process. The refund request of this fee has been added to the up-dated P.D.

It has however been possible to gain the required permissions from the Crown Estates in a much shorter time frame. That permission was, however time-limited and now needs re-requesting. It is hoped that all relevant permissions will be in place for the start of next season, so as not to lose any more time.

A meeting was arranged between the site licensee, the site archaeological advisor & the Mary Rose Trust, where it was agreed that MRT would advise & guide the project team in the early stages of first aid and conservation of artefacts raised during the proposed excavation, & subsequently complete final conservation as required.

Funding for the above has been applied for within the revised P.D.

The site is now in an extremely vulnerable position, & we stand to lose much in the way of information as well as degradation, if not complete loss of exposed artefacts over this winter, as they are dispersed over the eastern Solent (*See figure 1&3*).

The development of a digitised site database is continuing & a project proposal is being prepared for submission to Historic England, meantime team members are looking into the possibilities of mounting small representative displays at other venues around the locality.

The project website is being improved & added too as time allows.

Presentations too interested groups, to further public awareness continue & have included a presentation to a local primary school, this has generated enquires from other schools in the area. A display was also mounted at the "Guns from the Sea" conference in Portsmouth; this received a great deal of interest over the two days of the conference.

Approaches were made to the Chichester Harbour Master, with regards replacement of the recovered site marker buoy & supply & installation of a suitable means of anchoring on site, this has been agreed & we understand is being funded by H.E. we await a suitable weather window for this work to be carried out.

Swath bathymetric image of the site.

Figure 1. showing site plan & diver trail overlain on past swath bathymetric survey results.



Yellow line = 2008 sand movement from the south to the north. Red line = 2009 sand movement from the south to the north. Blue line = sand movement from the south to the north as at 17th October2010. Purple line = sand movement from the south to the north as at 21st August 2011. Light brown = 2013 localized scour.



Figure 2. Swath bathymetric survey results July 2014. North up. Showing erosion over the site & out to the west.



Figure 3 Seabed changes June 2015, areas of reduction marked xx, xx.

Diver Observations.

26th April 2015.

Compiled & written by Iain Grant

This was the first dive on site this year, the vis was a very dark 0.5 of a metre, water temperature was 12 degrees c with flat calm conditions due to the light north easterly breeze.

Dan moored the rib as usual to the strop on the three big guns, and then carried out a search of the immediate area, laying a ground line to aid following divers in the very poor visibility.

A leather/textile object was found partly visible above the surrounding seabed situated between the pile of three big guns & the exposed barrels in the area of the proposed excavation, this item could not be lifted at this time as it was deemed too fragile to lift without a suitable container & would also require careful excavation, it was carefully covered with stones & sand from the surrounding area. On the next visit to site a suitable container will be used to facilitate a safe lift of the artefact, hopefully before it is lost. The barrels within the hull re-exposed last season, are now uncovered further & it is estimated there has been a reduction of some 80 to 100mm in seabed levels since last September in this area. Monitoring point M9 was measured on the east side of the site at 800mm, this shows an increase in seabed level of 20mm since the last measurement on the 14th September 2014 at this point. However the east side frames from this point heading south appear more uncovered since last year, alongside the cannon ball mound on the outside of the hull frames a number of heavy timbers have now become visible, this indicates an estimated drop in seabed levels at this point of around 300mm, sticking out

from beneath one of these timbers was a complete pewter plate which has been crushed flat, see *Figure 4*. This artefact was measured in & the position marked to enable extra measurements to be taken in better visibility, it was then recovered to the surface, before it was lost from the site. It was not possible to determine in the poor visibility whether these timbers are "in situ" or have moved to their present position over winter, further evaluation will be undertaken when conditions improve.

Generally it would appear that there has been a further reduction in seabed levels over the winter & will require further evaluation over the wider site area when conditions improve.

It was not possible to re-site the marker buoy at this time.



Figure 4. Pewter plate recovered 26th April 2015.

Various shards of glass, earthenware pottery & some animal bone were observed around the site at different times, some textile/leather was also found partially exposed close to the exposed barrels, however as it was in a fragile condition & would require excavation to recover in its entirety (*we do not as yet have an excavation licence*) it was therefore carefully re-buried, it is hoped it will remain in place over winter. Three further at risk artefacts found on the seabed, were recovered from the site this season (see *figures 5 to 7*),



Figure 5.



Figure 6.



Figure 7.

Dive Report.

<u>23rd May 2015.</u> By Iain Grant.

Water temperature was 13 degrees c, underwater visibility was about 2metres with a substantial amount of plankton in suspension.

The first job was to try & locate the mooring chain for the site marker buoy which came ashore in February; although one end of the ground chain plus anchor was located, divers were unable to locate the end of the riser chain, so a further search will be conducted on the next dive.

On visiting the main site, we were able to take extra positioning measurements for the pewter plate that was recovered on the 26th April. A general search of the site revealed that the east side just outside the frames, from the cannonball pile to monitoring point M9 is now clear of sand down to the clay substrate, this has uncovered a large amount of lead caulking along with some lead tingles, further to the north, a pewter spoon located close into the east side of the beak lay on the surface, this artefact was measured in & recovered to the boat, on closer inspection the back of the spoon handle appears to have the letters RB incised in the metal – intriguingly, these are the Captain's initials!

Generally around the site there are a number of changes in evidence i.e there are two large timbers east of the cannonball pile noted on the last dive in poor vis, one is approximately 65mm thick x 320mm wide & over 5 metres long, these are newly uncovered or have been moved into this position over winter. There is a considerable change in the top edge of the beak timbers & the lead sandwiched between them seems to be more pronounced than in previous years, there is also evidence of falling seabed levels locally north of the beak. When the vis is clearer, photographs will be taken to compare with those taken in previous years.

The whole area inside the east & west frames shows signs of additional scouring from the storage barrels to the inside of the beak, revealing a number of lead tingles & some bone, further carful searching of this area is required for small artefacts that may lie uncovered & therefore unprotected.

When we have a larger dive team available, a search of the south end of the site will be carried out, along with those areas north, east & west of the main site, including some of the anomalies identified by the Wessex Archaeology electronic survey carried out in 2014.

An experimental cleaning of the growth on some of the cannon, in the southwest sector of the site, in preparation for more accurate measurement & photographic recording was carried out; however this work was not completed due to poor vis & a change in weather.

Artefacts

Four artefacts were recovered from site this season, as follows:

- 1. HZA001.15 Pewter plate.
- 2. HZA002.15 Pewter spoon with RB incised on rear of handle .
- 3. HZA003.15 Wooden pulley block.
- 4. HZA004.15 Brass button 28mm dia.

All artefacts have been reported to the Receiver of Wreck & are stored in water at our wet store.

Diver Trail

The diver trail, although more uncovered than last season is in a very poor condition & at present is unserviceable. It was decided this year to not spend time on it as visibility was poor at best & the team felt there was more pressing work required on site. Funding for replacement cable to reinstate the trail in future has been included in the test excavation P.D.

Website

It is intended to make further improvements to the website at <u>http://hazardousproject.info</u> We will continue to add further content as time and source material allows.

Looking to the Future.

As mentioned last year, major works now completed along the coast to the east of the *Hazardous* wreck site, by the Environment Agency & others, could have considerable effects in the area as a whole & in particular

on the wreck site. However it is difficult at present to say whether the seemingly increased degradation of the site is caused or indeed exacerbated by those works.

This year has seen major seabed movement, mainly over winter in & around the site, to the point that it is now uncovered in some areas to a greater extent than last year. The new guns to the south west of the main site remain uncovered although there is some increase in sand levels north of their position.

We believe the reinstatement of the Hazardous Wreck site to the English Heritage "At Risk" register last year was timely & it is hoped that Historic England will hold this position into the future; however this move alone will not record & protect the sea bed archive for future generations, this we believe can only be achieved by excavation within the hull as laid out in the now approved project design, recording & recovering artefacts at risk before everything is lost forever. Preservation by record may be the only option for much of the remaining structure.

Diving Schedule

Diving operations were carried out on seven separate days. This resulted in 1,798 working minutes underwater by nine divers plus boatman.

Plans for 2016

- Continue monitoring variations in seabed levels, using points remaining from those set up in 2002 plus those set up in 2009/10 & more recently, adding more if required. The funding of a hull mounted sidescan sonar system as part of the recently-approved test excavation P.D. will allow ongoing monitoring of the wider area by identifying areas of sand & of exposed reef.
- Carry out further planning of areas/artefacts exposed due to continued erosion & sea bed movement.
- Survey and recover artefacts exposed by erosion and under threat of loss or damage.
- Continue with conservation of artefacts in wet storage at present & those in chemicals, under guidance from Mary Rose Trust.
- Continue developing site exhibit at Earnley Gardens.
- Continue web site development.
- Raise additional funding to continue work on site & artefact conservation.
- Carry out metal detector search in new areas of gullies in the southwest for further artefacts as conditions allow.
- Carry out further geophysical surveys of surrounding area of site as conditions & funding allow.
- Commence test excavation as laid out in recently approved project design.
- Continue raising public awareness of Hazardous & the project with presentations etc.

Licensee



