

Dredged Up

from the past

Autumn 2013

Archaeology Finds Reporting Service Newsletter

Protocol Update

Dredged Up is back for issue 13. The 2012-2013 reporting year has just finished and it has been another incredibly successful year for the marine aggregates Protocol, with 52 new reports raised, detailing over 160 separate finds.



Brett Cliffe Wharf

The marine aggregates Protocol continues to be held up as an example of effective archaeological mitigation-in-action by archaeologists, heritage professionals, developers, curators and marine stewards alike. It has sparked the creation of two other industry related reporting protocols and undoubtedly more will follow. In this issue - The Crown Estate join us to talk about how they are supporting the Protocol through the marine stewardship fund, we review finds from the past six months and talk about how you can get more involved with archaeology and heritage this winter.

Awareness

Since the last issue of Dredged Up (Spring 2013) Wessex Archaeology has conducted four awareness visits and we are looking to book more before the end of the year. If you would like a visit please contact us using the details below.

Many wharves are busy - fantastic news after several economically difficult years. Taking time out for archaeological awareness training under these circumstances is understandably difficult. Wessex Archaeology is keen to support wharves and vessels however we are able - if it is not feasible for us to visit, we can send you an information pack containing material to help you identify, protect and report archaeological finds amongst dredged loads. We are also happy to give advice or deliver presentations over the phone, via email or on Skype to fit in with your operational circumstances.



CEMEX Southampton

To contact the Protocol team at Wessex Archaeology:
protocol@wessexarch.co.uk or call 01722 326 867



Finds from 2012-2013

A varied array of finds is reported through the Protocol - from maritime material to aircraft, and domestic debris to prehistoric mammoth remains. Some of the reported finds are 50 years old, some more than 50,000 years old, and each new discovery is met with anticipation and excitement. Here is a selection of finds reported during the past six months.



Lafarge Tarmac: cast iron finial

This cast iron find looks like a finial - either for railings, or possibly more likely, for a bed post. The gently curving pattern and rounded top suggest the softer setting of a bedroom, rather than railings which are pointed to deter trespassers. This find, discovered at Lafarge Tarmac's Burnley wharf, is thought to be part of a spread of post-war domestic rubble which lies in the south coast region (see page 4). Iron railings were removed from public places, such as parks, during the Second World War as part of a drive to increase the availability of scrap metal for military vehicles and munitions. This was a huge public relations exercise and everyone was encouraged to donate scrap to help the war effort. Reports suggest however that factories were ill equipped to process the donated metal resulting in some of it allegedly being dumped at sea.

This broken paving slab, found at Lafarge Tarmac's Bedhampton wharf, is thought to date to the early twentieth-century. One side is striated with tool marks from when the stone, which is Purbeck limestone, was sawn into sections for use. The other side, the smooth side, would have formed a street or path. A patina on this surface shows where the slab has borne the weight of potentially thousands of footsteps - a poignant reminder of people who may no longer be with us going about their lives in the recent past. It was dredged from area 127 to the west of the Isle of Wight which has recently yielded a number of finds more likely to have originated in a terrestrial context.

Cutlery is commonly reported through the Protocol. Most cutlery finds are thought to be lost from a vessel, though there is the potential for them to be the first indicator of an uncharted wreck. Alan Harrison who works for the Stainless Steel Advisory Service on behalf of the British Stainless Steel Association has been a huge help in identifying some of the cutlery reported this year. His knowledge of different steels has allowed identification of two knives found off of the south coast. Tarmac_0445 bears the mark 'INOX' which Alan tells us is not used in the UK, revealing that this knife was made somewhere in Continental Europe. Tarmac_0466 is of a lower cost construction being made of, Alan suspects, magnetic ferritic grade steel. Both knives were dredged from area 127 on the south coast and reported by Burnley wharf.



Tarmac_0466



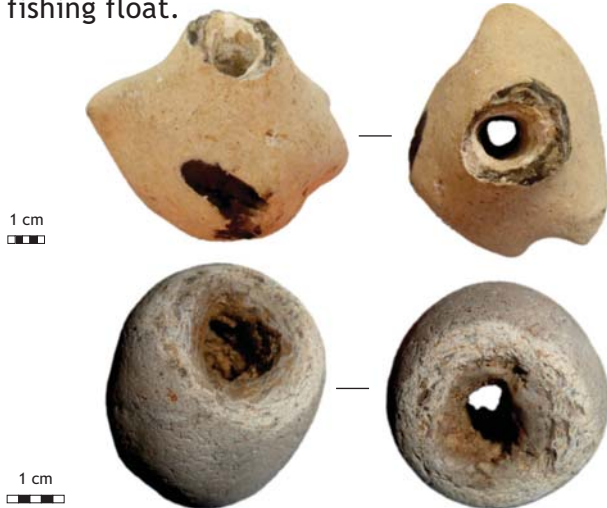
Tarmac_0445





Hag stones, sinkers and floats

The 2012-2013 reporting year has seen the discovery of four net or line weights and one fishing float.

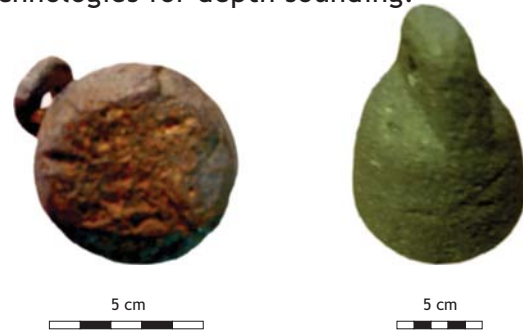


Lafarge Tarmac: net weights or 'hag stones'

Jamie Wallis, at Greenwich wharf, discovered these two perforated stones. Spotting these amongst dredged aggregate shows a real dedication to our heritage and very keen eyes. These are made of flint, a sedimentary rock which forms in gaps within the matrix of another rock, such as chalk. The holes seen here were created naturally when the stones formed millions of years ago, but at some stage in the past someone has utilised this natural feature to turn them into line or net weights. Though neither stone is especially heavy on its own, each weighs enough to sink a fishing line or to weight the edge of a net alongside other stones. It is not possible to provide a date for the use of these specific stones, as stones have been used as fishing weights from the Palaeolithic to the modern day. They could have been employed as net weights at any point during the last 50,000 years.

In the past, stones with a natural hole have sometimes been referred to as hag stones as they were thought to protect the bearer from the evil influence of witches. Wessex Archaeology hopes that the stones will be effective in keeping staff at Greenwich safe and free from the influence of evil whilst the stones are displayed at the wharf.

Two metal weights were found by the *Arco Arun*, one from area 240 on the east coast and the other from area 473 in the East English Channel. The weight from the east coast is thought to be a sinker - as in 'hook, line and sinker' - and is a lead weight used to sink a fishing line to the bottom of the sea or riverbed. The weight from area 473 is a sounding lead - used to gauge the depth of water below a ship. These were used in various forms for around 2,000 years until the invention of more modern technologies for depth sounding.



Hanson: metal weights (sinker left, sounding lead right)

Conversely, CEMEX's *Sand Fulmar* reported the discovery of a fishing float from area 319 on the east coast. Found with a small assemblage of other finds (including animal bone and fossilised teeth) this cork float would have been attached to the top of fishing nets to keep them hanging upright in the water column. This example has a vertical slit through the side of the find, showing where the broken float has become detached from the net to end up adrift in the sea.



CEMEX: fishing float

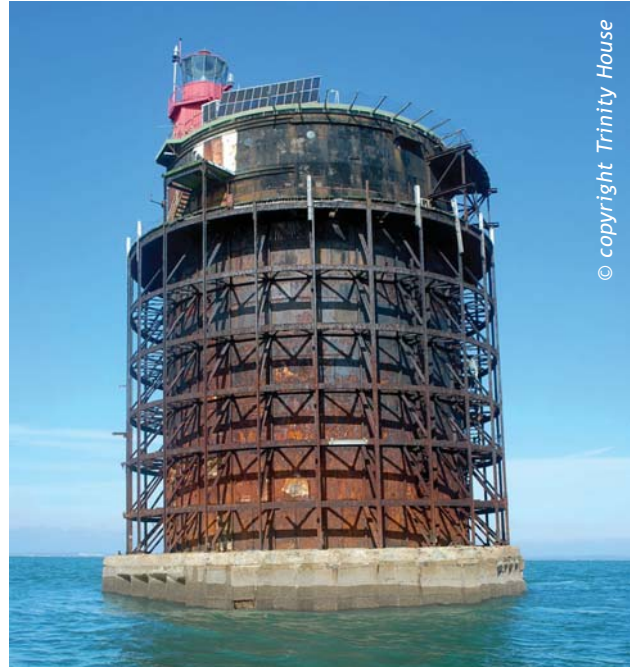


1950's debris off of the Isle of Wight

A sizeable proportion of the finds reported through the Protocol have originated in an area near the Nab Tower lighthouse in the south coast dredging region. Many of the finds are not typically found at sea and are more common in terrestrial domestic contexts. Items such as knives and forks, finials, badges and building rubble have all been dredged and reported.

Back in 2008, when it became clear that the seabed around dredging area 122/3 (which is a marine licence renewal application area) contained a concentration of archaeological material, Wessex Archaeology looked deeper into the background of the region.

The area appears to contain a spread of domestic debris - rubble thought to have resulted from the blitz and later dumped at sea during the post-war recovery of the 1950's. Cities like Portsmouth and Southampton on the south coast were heavily bombed during the blitz and there would have been huge amounts of rubble to clear before recovery and rebuilding could begin. Being so close to the sea, and with a 1950's approach to waste management, it is suspected that cargoes of rubble were taken offshore and dumped in what is now the south coast Isle of Wight dredging region. The material is likely to have come from a city local to the site and the discovery of a badge in 2008 issued by the Portsmouth Education Committee has led us to think it has come from Portsmouth.



Nab Tower lighthouse

The Portsmouth records office were contacted but there was no record of the spread of material. This may be because the contract to remove waste went to a commercial firm whose records have perished along with the company which provided the service, or because waste management was not thought relevant to archives and heritage.

Area 122/3 is not currently dredged but domestic material has been recovered from nearby licences 395 and 372/1. This spread of finds provides an interesting insight to our near past and some of the material gives a fascinating glimpse into wartime Portsmouth. However, there is the risk that the domestic material is masking a site of further archaeological significance such as a shipwreck or aircraft crash site (see page 6) and so all finds are being considered fully during investigation.





Learn more

From artillery to aircraft, mammoths to maritime finds - there is a wealth of information to be found at some of the museums who help us to identify finds reported through the Protocol. Here is a round-up of some of the places you can visit to learn more about our heritage and the background to the finds brought up with dredged loads.

RAF Museum
www.rafmuseum.org.uk

The RAF Museum has two locations holding a world-class aviation collection. Staff from the Museum identify the aircraft material reported through the Protocol. Learn more by visiting the RAF Museum at Cosford in Shropshire or Hendon, London. Admission is free at both locations.



Royal Armouries Museum
www.royalarmouries.org

Cannonballs are a popular Protocol find. The national collection of artillery - the big guns - is housed at Fort Nelson, Hampshire. You can explore over 350 guns, the Victorian Fort and the new visitor centre and galleries for free. The Royal Armouries also have a museum in Leeds.

Natural History Museum
www.nhm.ac.uk

Experts at the Natural History Museum identify the Palaeolithic mammal remains reported through the Protocol - these include the teeth and tusks of mammoths found amongst dredged loads. Visit the Museum in London for free to learn more.



Natuurhistorisch Museum, Rotterdam
www.hetnatuurhistorisch.nl

A percentage of aggregate dredged from British waters is delivered to the continent. The Natural History Museum in Rotterdam is involved with protecting finds amongst these cargoes and works closely with local collectors and the wharves to retrieve and identify prehistoric material.

National Maritime Museum
www.rmg.co.uk

The world's largest maritime museum is based in Greenwich, London. Visit the National Maritime Museum for free to learn more about the seafaring past which has contributed a rich layer of archaeology to our seabed.

Get Involved

The Council for British Archaeology advertises opportunities to volunteer, participate in a dig, attend an event or join a group on their website. If you would like to learn more or get involved visit

<http://new.archaeologyuk.org/participate/>



Aircraft remains from the south coast

In summer 2013 the Protocol received several reports of aircraft material dredged from licence area 395/1 which lies to the east of the Isle of Wight.



This area is well dredged and has been under licence since the late-1990s. Intensive geophysical surveys were conducted, as well as studies of archaeological records, prior to the granting of the licence to dredge and no aircraft were identified within the area. Subsequent surveys of the active licence commissioned by Lafarge Tarmac, the most recent conducted in 2011, have also not shown any anthropogenic receptors which could be linked to an aircraft crash site.

The discovery of the finds at this time is somewhat surprising given how long the licence has been in use, though the discovery of military aircraft remains on the south coast is very common.

Thousands of aircraft were flown to attack or defend Britain during WWII and many of them were downed through enemy action. Wartime aircraft lost at sea are poorly recorded and where records exist, locations were often estimated or vague. It is not uncommon to find a record similar to 'Aircraft lost 5 miles from Southampton,' which leaves a very broad area. Even the figure, 5 miles, was possibly estimated by someone on the land watching the plane ditch or recorded by someone aboard the attacking plane. Many Luftwaffe records were burnt when the Germans realised the war was lost and with them was lost the little information they contained about aircraft crash sites.

Combined with the lack of historical information, aircraft don't always show clearly on geophysical surveys. Many wrecked planes are highly fragmented due to their light construction, the cataclysmic damage that caused them to ditch and their impact with the surface of the sea and potentially the seabed as well. Material can become deeply buried only coming to light after dredging has been active for some time. Aircraft remains do not always show up well on geophysical surveys because of the great likelihood that they were dispersed or have become buried beneath seabed sediments (this is thought to have occurred in area 395/1). In short, identifying aircraft at sea is not a straightforward process and it is not uncommon for material found amongst dredged loads to be the first indicator we have of the position of a downed plane.

This presents a practical problem as WWII aircraft flew heavily armed and therefore aircraft wreck sites are likely to contain ordnance. Also they may of course contain human remains and are protected under UK law (Protection of Military Remains Act 1986).



Lafarge Tarmac: aircraft remains

Hanson: Jumo engine



Hanson: Jumo engine remains

The material from area 395/1 is intriguing. Spread (currently) over seven separate reports from two separate companies we have the remains of a Jumo engine and part of a Junkers 87 Stuka dive bomber. Stukas flew with Jumo engines though the most recent engine piece retrieved (found by the *Arco Dee*) is from a version of the Jumo not fitted to the model of Stukas which were flown over the UK. This is fascinating and slightly daunting as it means there are potentially the remains of two separate aircraft scattered within the licence, so we need to stay vigilant to see if together we can further narrow down the position of these losses.



Junkers 87 Stuka dive bomber

Study of geophysical survey data revealed that no anthropogenic signatures were identified in the most recent surveys. A review of aircraft loss records however reveals that the closest aircraft loss to the licence (some 5km away) was indeed a Ju87 lost on 8th August 1940 during the Battle of Britain with the loss of the lives of both crew. The Historic Environment Records for the Isle of Wight names the crew, a pilot and a gunner, as Unteroffizier Walz and Gefreiter Shutz.



Lafarge Tarmac: aircraft remains

The material recovered from 395/1 currently suggests a scattered site of debris from a plane. Aircraft crash sites at sea can be highly dispersed with aircraft shedding wreckage prior to ditching and fragmenting over a wide area. Material may also be moved by natural processes on the seabed. The bulk of the plane may lie outside of the area and the material discovered may be part of the debris field associated with it. Alternatively, there may be significant remains within the licence and Wessex Archaeology will continue to work with all companies dredging the licence to protect our heritage.

The Crown Estate renews £60K funding pledge to support seabed heritage

Since 1999 our marine stewardship programme has provided funds for community initiatives and scientific research that help to promote the long-term sustainable management of our marine portfolio. Within the programme, our marine stewardship fund supports community initiatives that help to improve and enhance our marine and coastal assets which include almost all the seabed around the UK and around half of the foreshore.

A great example of the sorts of project the fund supports is the Marine Aggregate Archaeological Reporting Protocol, which provides a single and consistent system for the UK marine aggregate industry to report finds of historical significance. The Crown Estate manages nearly all marine and gravel resources lying offshore the UK and a number of our licensees are actively involved in the Protocol through their staff working at wharves and on board dredgers who may encounter archaeological finds during their day to day work.

We have provided funds of £60,000 to support the Protocol since 2009, and have pledged a further £60,000 during the next three years so that, in areas where dredging is actively undertaken, discoveries can be properly assessed by Wessex Archaeology and other heritage experts. Information produced through the Protocol will not only help us to support our licensees in their activities, but also enables us to understand more about the seabed we manage and the heritage it contains.



Developing an understanding of good estate management is fundamental to the way we manage our marine portfolio. Our interests range from aggregates, aquaculture, cables and pipelines, to ports, harbours, moorings and marinas. Through our management, investments and developments we look to deliver real benefits to local communities and the UK generally. Our marine stewardship programme is a part of this. Since the programme began in 1999 we have invested some £10 million in supporting around 500 projects across the UK.



Fiona Wynne, Stewardship Manager at The Crown Estate is responsible for managing The Crown Estate's marine stewardship fund which supports community initiatives aimed at improving and enhancing The Crown Estate's marine and coastal assets.

To contact the Protocol team at Wessex Archaeology:
protocol@wessexarch.co.uk or call 01722 326 867