# Dredged Up

Issue 22 Spring 2018

Archaeology Finds Reporting Service Newsletter

**Dredged Up** is the newsletter

of the Marine Aggregate
Industry Archaeological
Protocol. We welcome
you to Issue 22. Since
the last newsletter in
October 2018, **42 finds**have been reported
through 14 reports and
one wharf has been visited.



The Protocol has entered its 13th successful year, made possible through the eagerness and dedication of wharf and vessel staff, the **Site Champions** and the **Nominated Contacts** so everyone from the Protocol Implementation Service Team would like to thank all of you. In this issue, we celebrate the annual Finds Awards for the best attitude by a wharf, best attitude by a vessel and best find (**page 2**).

We welcome a new **Site Champion** at Tarmac Thurrock Wharf this year and keep you up to date with all the wharf news (**page 3**).

**Pages 4 and 5** display a roundup of the finds reported since the last issue, including 26 cannonballs!

On **page 6 and 7**, we are delighted to share with you the exhibition of Marine Aggregate Industry Archaeological Protocol finds that have been reported over the years, currently housed at the Littlehampton Look and Sea Centre.

The evolution of another Protocol; the **Fishing Industry Protocol for Archaeological Finds** (FIPAD) through the **Marine Antiquities Scheme** (MAS) is discussed on **Page 8** and how you can also get involved with the MAS app.

#### **Social Media**

If you would like to keep up to date with the Protocol, please give our **Facebook page** a like.



Book your Protocol Awareness Visit today email us at protocol@wessexarch.co.uk or call us on 01722 326867

### **2016–2017 Finds Awards**

As spring is upon us, it means that it is time for the annual Finds Awards! In this issue, we are pleased to announce the winners of the 2016-2017 reporting year:

### **Best Attitude by a Wharf**

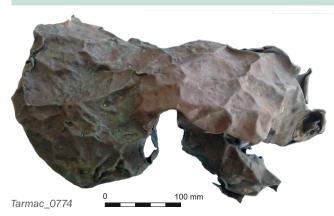
This year, the winner of the best attitude by a wharf is **Cemex** Brighton Wharf. This is based on their eagerness demonstrated towards the Protocol, their attitude towards archaeological finds and the warmest welcome

that Lowri received during her awareness visit there in July 2017. They were also extremely accommodating in allowing two members of the implementation team to go there to pick up a large stone cannonball (CEMEX\_0742) that they had previously reported, for the display at Littlehampton Look and Sea

CEMEX\_0742 centre (page 6-7).



Cemex Brighton Wharf team members. From left to right: Michael Pettitt, Mark Nichols and Andy Roberts.



#### **Best Attitude by a Vessel**

This award goes to Tarmac's City of Chichester. This is due to three objects being reported through the Protocol directly from the vessel as a result of the keen eye of Rob Malloy. All three objects come from Licence Area 351 in the South Coast dredging region, approximately 13 km south-east of the Isle of Wight. Tarmac\_0774 is the badly crushed and torn remains of a copper alloy fuel tank with what appears to be the heavily corroded and damaged sender and gauge point with the remnants of its mounting points visible. These types of copper alloy tanks are still found in older yachts and motor launches, and is most probably 20th century in origin.

The other two objects were found and reported together as Tarmac\_0771. Both items are of iron/steel origin based on the corrosion products present. One looks much like an engine valve, whereas the other appears to part of a badly damaged electric motor or similar, with evidence of severe mechanical damage in the past, as none of the surfaces appear to show recent damage or clean surfaces.



Tarmac\_0771

#### **Best Find**

The winner of the award this year is an unusual object (below) found on board CEMEX's Sand Fulmar. The object (CEMEX 0770) was discovered in Licence Area 512 in the South Lowestoft dredging region, approximately 18 km south-east of Great Yarmouth by Bob Hebblethwaite and reported as a webbing net with associated aluminium fittings. Initially thought to be a cargo net, further research suggests that, based on its size, it is the drogue parachute from an air dropped torpedo or sonobouy. The Royal Navy's Merlin Mk2 helicopters deploy the training version of the Sting Ray torpedo, and it is possible that the parachute, once separated from the torpedo would travel some distance, if not recovered at the time of deployment with the practice torpedo. Another possibility based on the unusual aluminium frame is that it is part of an experimental air to air refuelling drogue, that has been lost. More recent designs have metal braces for all the petals of the drogue, but early experimental versions were made in a range of designs.



CEMEX\_0770

All our winners receive a £100 cheque and a certificate of their achievement. Congratulations to all of you!

## **New Site Champion**

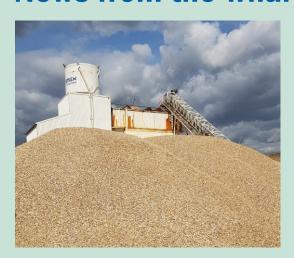
A new **Site Champion** has been appointed at **Tarmac Thurrock Wharf** in Essex. We would like to welcome Tommy Merchant to the team of Champions! After discovering his first find – two fragments of aircraft (Tarmac\_0829), and taking the initiative to contact the Protocol Implementation Service Team, Tommy expressed an interest in taking on the role of **Site Champion**. He has since received further training on the Protocol and the reporting process, and we look forward to more finds being reported from Thurrock wharf!

The two aluminium strips were determined to be aircraft as the rivets are evenly spaced while the shallow T profile of both pieces is known to be associated with aircraft as it helps to prevent flex. Steve Vizard, an aircraft expert, determined that these pieces are a typical aluminium extrusion from an aircraft, and were used extensively by American aircraft types, although certain British aircraft, such as the Hurricane also used this T section, especially in the wings. He said that the remaining rivet heads look to be more like British rivets, than their American counterparts, which have a slightly different profile.





### **News from the wharves**



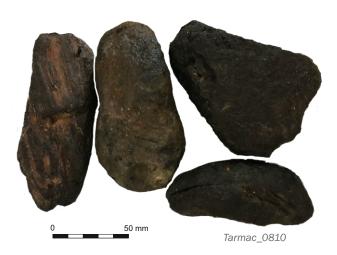
Since the last newsletter, the Protocol Implementation Service Team has visited one wharf. Every wharf visit aims to improve the deliverance of the Protocol and we appreciate all the warm welcomes, enthusiasm and cooperation of all participating staff. The wharf that has been visited so far this year was CEMEX UK Materials Ltd, Dagenham Wharf, Dagenham, Essex.

A second round of visits will be taking place this spring and summer, so if you would like to arrange an awareness visit, whether you have new members of staff or simply as a refresher, please contact the team:

protocol@wessexarch.co.uk
Tel: 01722 326 867

## A Round-up of Finds since the Autumn Issue

From 1 October 2017 to the present, we have had 42 archaeological finds reported through the Protocol. Over the next two pages we will look at the range of material reported.



Four dark pieces of waterlogged wood (Tarmac\_0810) were reported after being found by Jon Jerromes at Burnley Southampton Wharf from the cargo of City of Chichester after being dredged from Licence Area 351 in the South Coast dredging region. The extent and effect of erosion on the wood prevents the identification of the species of wood and makes it difficult to distinguish if the wood has been worked. The pieces vary in size; the largest being approximately 250 mm in length and 100 mm in width. Based on the images, the wood is thought to be unworked, suggesting that it represents the natural environment rather than a structure. Furthermore, none of the pieces exhibit any fastenings, which supports the suggestion that the wood is natural, however, one of the pieces displays a relatively square hole which could have been associated with a fastening at one stage. One possibility is that the find could be a water worn piece of a larger timber object that could possibly be associated with a vessel or marine structure such as a jetty.



This **iron fastening** (Tarmac\_0809) was discovered in Licence Area 127 in the South Coast dredging region, approximately 13 km south, south-east of Hengistbury Head. Jon Jerromes discovered it at Burnley Wharf Southampton. Tarmac\_0809 is an iron fastening, approximately 160 mm in length, with a shank diameter of around 20 mm. The fastening is hooked slightly on the top or head and was initially thought to be a ship's nail. Further research suggests that perhaps the find could be a rail spike, a large nail with an offset head that is used to secure rails and base plates to railroad ties (sleepers) in the track. A rail spike is roughly chisel-shaped and with a flat edged point; the spike is driven with the edge perpendicular to the grain, which gives greater resistance to loosening. The first recorded use of a rail spike was in 1832 therefore this example may date from this period.



Britannia\_0820 is a **suspension and wheel hub unit** that was discovered in Licence Area 351 in the South Coast dredging region, by D. Benneworth at Ipswich Wharf. This suspension and wheel hub unit measures approximately 500 mm in length and comprises two parts. The round end is the wheel hub unit and is bolted on to the suspension via four bolts, all of which are still intact. The object is made of steel and has corroded in the marine environment. A wheel hub unit also referred to as a 'wheel hub assembly' and 'wheel hub bearing', is an automotive part that sits behind the tyre of a vehicle.



WARG\_0803

Before any dredging works is carried out in a new licence area, surveys are carried out to identify any anomalies that may cause a disturbance to the dredging process. During a survey conducted by Marine Ecological Surveys Ltd for the South Coast Dredging Association, Ellie Maher discovered three pieces of metal (WARG\_0803). The larger piece, measuring approximately 400 mm by 400 mm, was found with a piece of knotted rope around it. Whether the rope is associated with the items is unclear. One of the smaller objects is a thin piece of copper, associated with the larger piece, as the same material can be seen attached to the outside. The second smaller object is a handle, also thought be associated with the larger object as the remaining handle still attached is of identical shape and size. The larger object is believed to be a deck hatch or deck plate that admits light or access to the spaces below deck. The moulded rim of the hatch is still visible on the outside of the large square shape where it would have sat on a hole in the deck and provided a waterproof seal. It is thought that a glass panel would have initially been secured in the opening although whether this was broken or missing before entering the marine environment is unclear. It is also not clear how the hatch would have been secured once closed as there does not seem to be any fixtures or fittings attached to the inside.



DEME\_0817 'front'

DEME\_0817 'back'

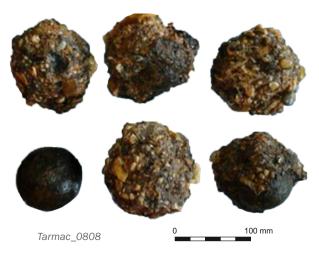
Although this **globe valve** (DEME\_0817) was discovered in Licence Area 478 in the East English Channel dredging region, the find was discovered by Christophe Matton at Flushing Wharf in the Netherlands. A logo or maker's stamp of some sort is seen on one side of the object in the form of a 'B' in a diamond shape and there is faint text still visible on the flange rim. Anthony Mansfield, a Senior Naval Engineer, was able to identify the object as the body of a globe valve with a screw connection bonnet. A globe valve, different from ball valve, is a type of valve used for regulating flow in a pipeline, consisting of a movable disk-type element and a stationary ring seat in a generally spherical body. The symbol on the opposite side to the maker's mark should be the flow direction or the nominal size. The faint text on the flange rim should be the pressure rating or a standards reference.



Tarmac\_0812 is a **brass plaque** dredged from Licence Area 351 in the South Coast dredging region and discovered by Dougal Boydy at Shoreham Wharf. The find is approximately 190 mm long by 80 mm wide and has two holes either side, in order for the object to be mounted or affixed to a surface, that would have possibly been made of wood or metal. Images of the plaque were sent to our in-house specialist, Bob Davis. He suggested that the initials 'CM' on the plaque could be anything from a manufacturer's mark to a personal monogram. He also suggested that the script of the letters look like 20th-century type face. Through online image searches, brass plaques have been found to depict the words CREW'S MESS from vessels such as HMS *Royal Scotsman*, therefore it is possible that Tarmac\_0812 displays an abbreviation of this.



This **lead weight** (Tarmac\_0824) measuring 280 mm in length, was discovered by G. Marshall at Greenwich Wharf from the cargo of *City of Chichester*. The sounding lead and line is one of the oldest of all navigational instruments and was used to determine the depth of water beneath a vessel. This was done by lowering it over the side of the ship and letting the line out until the lead hit the bottom. By about 1600, the line was marked in fathoms with pieces of material in order to make it easier to determine the distance to the bottom. Nearly all ancient sounding weights were cast in lead and follow one of several variations on hemispherical, bell, or conical shapes. There is a tethering hole in a stout lug or added iron ring at the upper end, and very often a concave base designed to hold a lump of tallow to determine seabed composition, although missing from this particular example.



In September 2017, a collection of cannonballs were reported from Burnley Wharf Southampton. The first report (Tarmac\_0807) was of five cannonballs discovered by Aaron Harrigan, the second (Tarmac\_0808) was of an impressive fifteen cannonballs and the third (Tamrac\_0811) was a collection of six, all discovered by Jon Jerromes. The 26 reported cannonballs all came from Licence Area 127 in the South Coast dredging region, approximately 13 km southsouth-east of Hengistbury Head. All the cannonballs were cast iron and had an approximate diameter of 3 inches with various levels of concretion. Based on the material and the size of the cannonballs that are not encased in concretion, it is believed that they may have been fired from a minion; a small brass cannon with small bore that would typically fire a 4 lb (1.8 kg) shot. This small cannon was used from the Tudor period up until the 17th century, therefore dating the cannonball itself is difficult. The minion featured heavily in the Elizabethan Navy and also in the English Civil War (1642-1651) where it is recorded as having a weight of 1200 lbs (544 kg). Eight minions also made up the armament of the famous ship, Mayflower, that carried pilgrims from Plymouth to the New World in 1620. Such a collection of cannonballs could be indicative of the location of a battle at sea or a previously unrecorded shipwreck.

# **Exhibition in Littlehampton**

In November 2017, the Protocol Implementation Service Team were invited to display a small sample of reported artefacts in the **Look and Sea Visitor Centre** in Littlehampton, West Sussex. The centre is an impressive building that has a glass tower at its top, offering a 360° view of a large area of West Sussex, including Arundel, Chichester and the South Downs, and it also has a lovely café. It was built in 2003 as part of the East Bank Regeneration Scheme and redeveloped in 2010 with Heritage Lottery funding.

The artefacts are on a rolling loan and are housed in two glass display cases in the 'From Ship to Shore Gallery'. Here, you can find out about the maritime history and geography of Littlehampton and the surrounding areas in a fun environment that has something to offer people of all ages, including a dress up rail offering a variety of RNLI costumes!

Also on offer in the gallery are copies of the previous issues of the *Dredged Up* newsletter, some material from the **Fishing Industry Protocol for Archaeological Finds** (FIPAD) and from the **Marine Antiquities Scheme** (MAS) to be taken by members of the public to read at their own leisure.

The artefacts in the display cases in the 'From Ship to Shore Gallery' serve as an important reminder of the cultural heritage that exists within the marine environment and which comes in constant contact with commercial industries such as the fishing industry and the marine aggregate industry. Ranging in date from the Palaeolithic up through the 20th century, these artefacts also serve as a good example of the broad variety of archaeological material that is found in the maritime environment and brought to our





attention through the diligent reporting of the marine aggregate industry workers. Without the reporting of these artefacts, they would be absent from the archaeological record.

Littlehampton sailors and ships went all over the world in the 19th century, however by the 20th century, sea trade had dwindled and the port became a base for the dredging of seabed sand and shingle in the 1960s which makes it the perfect place to house our finds. We would like to thank the **Look and Sea Visitor Centre** for hosting the exhibit and to all the wharves and vessels who have given us items over the years with a special thanks to those who loaned individual items for this particular exhibition.

### Some of the items on display at the Littlehampton exhibition



#### Commando knife (UMA\_0183)

Keith Miller, the Head of Weapons, Equipment and Vehicles at the National Army Museum in London noted that the blade shared similarities with the Fairburn-Sykes knife, a type that was both issued and bought by commandos and other special forces during the Second World War. However, these knives were largely made with metal grips of white metal or brass while the hilt (handle) of this knife appears to be made of Bakelite. Because of this, Keith suggests that the knife is not military, but rather represents a souvenir or replica knife which was manufactured in the early postwar years. Such knives often had Bakelite hilts with leather washers in between, which may explain why some of the hilt of this knife has been rotted away.



#### Naval shell case (Tarmac\_0670)

As a result of cleaning and a new photographic technique, Bob Davis of Wessex Archaeology was able to reveal a large number of the markings on the shell base. It was concluded that this the shell casing itself is a 5" Naval shell, shown by a large '5' and an 'N', produced by Vickers in August 1941. The shell would have been fired from a 5" Naval deck gun, used commonly during the Second World War, aboard destroyers, aircraft carriers, cruisers, and also fitted to other vessels during war time. The Primer has two dates; August 1941 and September 1941. It is possible this could indicate the manufacture date and the filling date or that it was filled on both occasions. Also found on the primer is the British Broad Arrow and the type of primer, a Number 11 MkIII.



### Tank optic sight (Brett\_0381)

The object has a heavy steel body with possible stainless-steel mounting rings top and bottom. The wider end of the object has flecks of white paint on the outside and the internal and external fine threads visible. Looking down that same end the lens is still present. When held up to the light it is possible to see straight through, but unclear to see if either direction is magnified. The tank museum said that it bears similarities to the Sherman tank's 75 mm gun sight but they have numerical gradings/markings on the lens, which this find does not appear to have. There are examples of both British and American tanks that have 75 mm gun sights. Although an unusual find, there are known sites of military equipment and vehicles, such as tanks that sank en-route to Normandy in 1944 as part of the D-Day landings.



### Deadlight (Cemex\_0200)

The deadlight from a scuttle (porthole) measures 27 cm from the hinge to the fastening plate and the circular area has an approximate diameter of 18 cm. The deadlight was used to cover the glass section of a scuttle from the inside and was reinforcement against heavy seas. It is not possible to ascertain a date for the deadlight however it is likely that it comes from a vessel after the mid-19th century.

### **Evolution of FIPAD**

The Fishing Industry Protocol for Archaeological Finds (FIPAD), a protocol implemented by Wessex Archaeology that builds on the successes of the Marine Aggregate Industry Archaeological Protocol, has been actively publicising archaeological material discovered by the Sussex fishing fleet, and sharing information on the objects recovered for the past two years. FIPAD launched in 2016 as a two-year pilot project with the generous support of the Heritage Lottery Fund. During the last two years, 46 reports have been received through the protocol, ranging from a toy bus to full size cannon! Funding draws to an end in March this year, and despite approaching several possible sources, no further funding has been obtained. This means that there will no longer be an archaeologist actively working with the Sussex fishing community.

# Fishing Industry

**Protocol for Archaeological Discoveries** 



However, discoveries made by the fishing community can continue to be reported and their contributions to our shared heritage can continue to be recognised through the **Marine Antiquities Scheme** (MAS). The MAS app was modified last year to highlight contributions from the fishing community with already more than a dozen fishing finds having been reported through the app!

# **Marine Antiquities Scheme**

The Marine Antiquities Scheme (MAS), supported by The Crown Estate, the Portable Antiquities Scheme and Wessex Archaeology, encourages the voluntary recording of archaeological objects and sites found by marine users (divers, fishermen, boat enthusiasts, coastal visitors and walkers) in England, Wales and Northern Ireland. The MAS operates primarily through an app on your mobile device that is easy to download and use, enabling finds to be recorded in a matter of minutes. Alternatively, finds can be recorded via the website: <a href="http://marinefinds.org.uk">http://marinefinds.org.uk</a>. The website is also where you can find a database listing all of the finds made through the scheme so far.







While vessel and wharf staff should continue to report finds made at work through the Marine Aggregate Industry Archaeological Protocol, perhaps if you dive or fish as a hobby or often go on walks near the coast, you too could record your discoveries through the MAS.

For more information on the Protocol, how to book visits or to request copies of any awareness material please contact Wessex Archaeology

Email: protocol@wessexarch.co.uk Tel: 01722 326867 or visit Wessex Archaeology's Protocol website www.wessexarch.co.uk/projects/marine/bmapa







