Protocol Update

Welcome to Issue 8 of Dredged Up, the popular newsletter of the BMAPA/TCE/EH Protocol Implementation Service.

Once again, there has been an array of exciting finds reported through the Protocol. The 2009-2010 project year ended in September, and we have already had many finds reported for the new year. Plus we have the 2009-2010 Finds Awards on page 3.

The BMAPA Seminar was held in October 2010, with some fascinating guest speakers and a revealing round-table discussion in the afternoon. The full report can be found on page 7.

Don’t forget: if you would like an awareness talk to refresh staff about the Protocol, get in touch with Katie Card on 01722 326 867 or by email via protocol@wessexarch.co.uk

You can view the Protocol documents online at: [http://www.wessexarch.co.uk/projects/marine/bmapa/docs.html](http://www.wessexarch.co.uk/projects/marine/bmapa/docs.html)

Team News

Sadley, we are saying farewell to Rhonda Steel, Learning & Access Officer, Coastal and Marine. She left on January 12th, returning to Australia to work as a Marine Archaeologist for the Victorian Government in Melbourne. Katie Card and Sarah Phillips will continue to run the programme, with Euan McNeill managing the project on behalf of Wessex Archaeology.

Remember, if you have any questions about finds, finds reporting or the Protocol, don’t hesitate to get in touch with the team at Wessex Archaeology.

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Rhonda Steel and a crocodile in Weymouth 2010
Finds from 2009/2010

This mammoth tooth was discovered by M Kirby and B Gould at Tarmac’s Erith Wharf and was found alongside a piece of ship timber. It has been identified as a tooth fragment from a young mammoth, which was deposited in the sea during a time when this area was dry land.

Dean Noon at Brett Aggregates’ Cliffe Wharf reported a cattle femur (upper leg bone), which may have been discarded over the side of a vessel, washed downriver to the sea or deposited during a time when areas of the sea were dry land. It was dredged from Licence Area 228.

The mammoth tooth in particular is important to report as it can help to build a picture of the prehistoric landscape around the coast of Britain. Around 16,000 years ago much of the coastal waters around the UK was dry land joining the east of England to mainland Europe. Seafloor surveys can show where ancient rivers meandered across this landscape, and animal remains and flint tools enhance archaeologists’ understanding of where people were and how they used these areas.

Finds from 2010/2011 so far

A copper coin was discovered at Bedhampton Wharf by A Farmiloe after being dredged from Licence Area 127 off the Dorset coast. It was identified as a ‘Cartwheel’ penny minted around AD 1797 during the reign of George III. The front of the coin bears the image of King George III and the reverse shows Britannia seated and looking to the right. It was introduced to prevent counterfeiting and to give the public a coin worth its weight in copper. However, these large (35mm diameter) and heavy coins proved unpopular with the public and were soon replaced by a smaller series of pennies. Although likely to be an isolated find, vessels working in Licence Area 127 should remain vigilant as the coin may indicate the presence of a nearby shipwreck.

Hanson reported two pieces of aircraft wreckage discovered by Darryl Mason and found in Licence Area 240 in the North Sea aboard Arco Adur. Images of the two finds, a hydraulic jack and a tailwing spar, were shown to staff at the RAF Museum who suggested that they were probably made by Metropolitan-Vickers Aviation Ltd (MVAL). During World War 2, MVAL constructed three types of multi-engine bombers, as well as producing parts for other aircraft. The fact that these two finds were dredged from similar locations supports the possibility of an aircraft wreck somewhere in this area. Plane crashes can be spread over large distances and it is important that all vessels working in this area remain vigilant for future finds, which could assist in identifying and locating this aircraft.

Since the last issue of Dredged Up 19 new finds have been reported by industry staff.
The results of the 2009-2010 find awards are now in. The winners were nominated by Wessex Archaeology staff who have worked closely with the aggregates wharves and vessels over the past six years, and were approved by Ian Oxley of English Heritage and Mark Russell of BMAPA.

Over the past year there have been many exciting discoveries reported through the Protocol and all wharves and vessels should be praised for their vigilance as all finds help improve understanding of our maritime heritage.

We are delighted to announce that the winners of the 2009-2010 Finds Awards are:

**Best Attitude by a Wharf** – Tarmac Erith
**Best Attitude by a Vessel** – Sand Fulmar
**Best Find** – Tarmac’s Ridham Wharf for their Silver Tableware discovery

Tarmac Erith is presented the award for Best Attitude by a Wharf for reporting a many and varied collection of finds of different materials. In the past year, Erith have reported 10 finds including cannonballs and cutlery as well as a ship’s timber and mammoth tooth. As well as reporting finds, their preliminary reports contain a lot of information, which helps the implementation service to quickly research and determine the significance of the find. Well done Erith and keep up the good work!

Sand Fulmar’s crew have excelled at spotting finds this past year including a tiny shark’s tooth, animal bone and timber. They are awarded Best Attitude by a Vessel for reporting a piece of 1700-year-old Roman pottery. It is a fragment from a mortaria, a bowl used to grind food, similar to a modern pestle and mortar. Although no Roman shipwrecks have been found in the coastal waters of Britain, evidence from pottery finds such as this mortaria provide evidence of Roman trade along the East Coast of the Britain. It is possible that this find was lost overboard by local East Anglian traders but it may also indicate the presence of a Roman shipwreck in this area.

The final award is for Best Find and is awarded to staff at Ridham Wharf for reporting late 18th century silver Tableware. Nine pieces of tableware were reported and, due to the crest on a goblet bowl, specialists were able to identify it as belonging to the sixth Earl of Stair, John Dalrymple (1749-1821). This find was also associated with an anomaly in Licence Area 254 where there is currently a temporary exclusion zone. Congratulations to all the winners. We hope that it inspires all staff on wharves and vessel to get their archaeological eye in and keep reporting finds via the Protocol.
Boats and Ships

The most common object reported via the Protocol, as expected, are associated with boats and ships. Finds such as timbers, fittings and armaments provide information about ship technology and style whilst coins, pottery and cutlery provide a more personal story about the people working or travelling on board the vessel.

Shipwrecks are an important source of archaeological material. Very few sailors set sail with the intention to sink their vessel and at the moment of sinking, with all hands on deck, the vessel sank as it was used, creating a snapshot or “time capsule” of life on board.

From the earliest times, man has used materials around him to construct vessels to explore the coastal waters of Britain. During prehistory logboats were carved from ancient oak trees; these paddle-driven logboats were adapted and enlarged during the Bronze Age before leading to sewn-plank vessels of the Iron Age.

Sailing ships became more common during the Roman period. Roman shipwrecks are relatively unknown in Northern Europe. Blackfriars I is a Roman sea-going sailing vessel, which was discovered in 1962 along the shore of the River Thames, London. It was carvel-built or frame-first construction. The carvel method lays the planks side by side around a frame to create a smooth hull.

Another style of ship construction was the clinker method, where the hull was formed with overlapping planks. The 7th century Anglo-Saxon ship buried at Sutton Hoo was of clinker construction, although only an imprint of the vessel was excavated as the timbers did not survive. Evidence of Viking longboats from the 9th-11th centuries shows their vessels were clinker in design. The carvel method was re-introduced from Mediterranean traders, becoming the dominant method in the 15th century.

The majority of boat-related finds reported through the Protocol date from around 1800 to the present day. This timeline helps illustrate how ship technologies have changed through the years.

1 Roman samian ware; Hanson Arco Beck
2 Roman mortaria; CEMEX Sand Fulmar
3 Carvel ship timber; Tarmac Bedhampton Wharf
4 Carvel ship timber; CEMEX Sand Fulmar
5 Sounding lead; Tarmac Ridham Wharf
6 1700-1800 timber with copper nail; CEMEX Sand Swan
7 Wooden sailing block; Hanson SBV Flushing
8 1700-1800 wooden pulley block; Tarmac Greenwich Wharf
9 Late 1800’s admiralty anchor; Hanson Arco Dart
10 Wrought Iron Bracket; Tarmac City of Westminster
11 1878 ship’s log; Tarmac City of Westminster
12 1900-1950 telegraph plate; CEMEX Northfleet Wharf
13 WW1 brass fitting; Tarmac Bedhampton Wharf
14 WW2 ship's badge; Brett Cliffe Wharf
15 WW2+ commando knife; Tarmac Southampton Wharf
16 WW2 admiralty telescope; Kendalls Wharf
17 1950+ red ensign flag; CEMEX Dover Wharf
18 1900-1950 telegraph plate; CEMEX Northfleet Wharf
From the 15th to the early 19th century ship building technologies remained relatively stable. Henry VIII’s flagship, *Mary Rose*, was constructed in 1511 and HMS *Victory* won Nelson the Battle of Trafalgar in 1805; there is little difference between the two vessels, in fact it could be said that a sailor picked up from the *Mary Rose* and placed on HMS *Victory* nearly 300 years later would have easily known what to do. However, taking a sailor from HMS *Victory* and putting him on a military vessel a mere 100 years after the famous battle would no doubt terrify him, with a booming steam engine and strange metal boxed hull.

The 19th century was a fascinating period of innovation in ship construction. The Industrial Revolution inspired the change and provided a platform for the move from sail to steam power and wooden hulls to steel. It was also a time of experimentation with short-lived iron-clad vessels, such as HMS *Warrior*. Finally the modern ship arrives with HMS *Dreadnought*, a 32-gun steel steam-powered vessel with 5 torpedo tubes. Since then onboard technologies such as radar and GPS, as well as armament, have continued to develop but the general look and shape of vessels hasn’t changed a huge amount in the subsequent years.
Announcing a new marine industry protocol

Following the great success of the BMAPA Protocol and in part due to the exemplary efforts of the marine aggregates dredging industry staff, The Crown Estate commissioned Wessex Archaeology to establish and implement a protocol for the offshore renewables industry.

The ORPAD (Offshore Renewables Protocol for Archaeological Discoveries) provides a system for reporting and investigating archaeological finds encountered during pre-construction, construction and installation work. Activities associated with renewable energy such as placement of turbines, cable-laying and seabed sampling all have the potential to impact on the historic environment.

Both the marine aggregates industry and the offshore renewables industry will be sharing the offshore regions for their different purposes. The BMAPA Protocol already informs us about the historic environment in licence areas. Additional information reported through the ORPAD will allow better understanding of the marine historic environment for archaeologists, marine industry, developers and the general public.

Explore the Seafloor Web Update

The last stage of Explore the Seafloor, the MALSF funded project reported in the last Dredged Up, is well underway. It aims to communicate, through a range of e-learning resources, the fascinating results of recent scientific research, enabling people to learn about the marine environment by studying the archaeology, geology and ecology of the seafloor.

This stage involves developing the website to continue as a legacy from the project and act as a gateway to previous ALSF-MEPF funded outreach activities. It includes a range of online educational resources for secondary schools, many of which will be suitable for a wide range of other audiences, including online games, interactive lessons and an amazing image bank.

The first e-game “Seafloor Explorer” is near completion and will test your abilities to manage a scientific seafloor exploration. Have a go at diving to investigate a shipwreck or getting samples of fish to study from the seafloor.

This game and other resources will be online by the end of March 2011 at http://ets.wessexarch.co.uk/
BMAPA Awareness Seminar

The annual BMAPA/TCE/EH Protocol Seminar was held in London in October 2010. It was well attended by industry staff and heritage professionals.

During the morning, there were talks from Ed Salter, English Heritage; Ian Selby, The Crown Estate; and Mark Russell, BMAPA, who detailed their involvement and the importance of the Protocol.

Additional talks were presented by a variety of specialists. Nick Ashton from the British Museum presented his work on recent discoveries at Pakefield (Suffolk) and Happisburgh (Norfolk), which examines the earliest prehistory of Britain from the first human colonisers up to the end of the last Ice Age (700,000 to 10,000 years ago).

Louise Tizzard, Wessex Archaeology, presented the latest results from ongoing research in Licence Area 240. In 2008, an assemblage of 75 Palaeolithic or Old Stone Age artefacts and animal remains were dredged off the coast of Great Yarmouth. This significant prehistoric discovery led to a funded research project into the further potential of the area.

Finally, the audience were treated to a film of an investigative dive to identify aircraft remains as a Do-17 German Bomber found on the Goodwin Sands. Ian Thirsk, RAF Museum, presented the find and described the plans for preserving this important aircraft. The video can be viewed on the RAF Museum website:

http://www.rafmuseum.org.uk/cosford/conservation-centre/dornier-17-conservation-project.cfm

Antony Firth, Wessex Archaeology, chaired the afternoon’s discussion. Some of the key issues raised included the importance of Position Fixing when reporting archaeological discoveries, particularly when dealing with loads from 2 or more licence areas and when reporting finds dredged days or even weeks before discovery. This led to a discussion about Speeding Up The Process where ideally finds should be reported as soon as they are discovered, providing more precise information about the find location and encouraging better care of the artefact with conservation and labelling. The issue of storage of finds was also raised; where the Receiver of Wreck is required to locate an owner or museum this can often take a while. Guidelines on post-discovery disposal or donation of finds would also be useful.

Implementation of the Offshore Renewables Protocol (see page 6) will add to the good work of the BMAPA Protocol. Joining the Protocol results will enhance understanding of our submerged heritage. The importance of circulating this information to heritage professionals was also stressed. Overall, it was a successful day with informative presentations and interesting discussions, which will assist the Protocol continuing to move forward successfully.
How to report a dredged find and photography tips

When you discover something of archaeological importance inform your Site Champion/Office on Watch.

The Site Champion will complete the Preliminary Report Form with as much information as possible. To help with this report try to remember the following checklist:

- Origin of the Cargo – include the vessel’s track plot if appropriate
- Licence Area
- Date of Dredging
- Finder’s Name
- Description – What is it?
- Dimensions
- Photographs – these provide a lot of information about each object and can be sent to specialists around the country.
- Conservation – Marine finds are fragile so protect your discovery by keeping it cool, dark and wet

Focus on Finds
Cannonballs – please include the diameter and weight. This information is essential in identifying the date and use of the cannonball.

Photography Hints & Tips

When taking photographs don’t forget:
- Use a Scale – if you do not have a scale sheet, use a ruler or an object of known size, e.g. a coin or biro
- Macro – close up photos are often not in focus unless you are using the Macro setting on a camera, so make sure your photos are in focus and if you don’t have a Macro setting make sure you take a photo from at least 20-30 cm (c.8-12 inches) away
- Angle – take at least one photo from a Bird’s Eye view over the scale sheet, then additional photos of different angles if appropriate
- Markings – make a note of any unusual markings

Checklist
Can someone tell from the photographs:
- What size the object is?
- What shape it is?
- What type of object it is?
- What it is made of?
- Whether it has any unusual markings?

Full information found in the Protocol Handouts can be downloaded from the project pages at: [http://www.wessexarch.co.uk/projects/marine/bmapa](http://www.wessexarch.co.uk/projects/marine/bmapa)