

# Dredged Up

Issue 18  
from the past

Spring 2016

Archaeology Finds Reporting Service Newsletter

## Protocol Update

Welcome to Issue 18 of **Dredged Up**, the newsletter of the Marine Aggregate Industry Protocol for the Reporting of Finds of Archaeological Interest. Since the last newsletter, 13 reports have been raised, each detailing an individual find.

In this issue, we celebrate the annual Finds Awards – for best attitude by a wharf, best attitude by a vessel and the best find of 2014–2015. The ongoing success of the Protocol would not be possible without the dedication of wharf and vessel staff, so Wessex Archaeology would like to thank everyone for their continued hard work!

In addition to the best find from last year, this issue also highlights some of the interesting finds that have been made since last October. The diversity of finds so far have included a post-medieval iron shot, a brass valve and bracket, a plate for a machine gun and, as always, the ever-present animal bone.

We have an interesting article written by Tom Harrison on the wealth and variety of finds discovered off the East Coast on pages 4 and 5. Tom has recently joined the Implementation Team on an internship that is funded jointly by Wessex Archaeology and Santander, and is in conjunction with Bournemouth University.

Also in this issue, we look at how the ground breaking Marine Aggregate Industry Protocol has influenced heritage protection in other industries, and how similar protocols are being applied to Ports and Harbour dredging in Portsmouth (page 7) with the discovery of some interesting finds. A similar Protocol is also currently being relaunched for the fishing industry in Sussex as described on page 8 by Alistair Byford-Bates, who is responsible for the Fishing Protocol and is also the newest member of the Marine Aggregate Industry Implementation Team here at Wessex Archaeology.



The brand new Protocol Awareness materials are hot off the press, and the Protocol Implementation Team cannot wait to share them with you. More information on this fantastic resource can be found on page 6.

### **Awareness Visits are free, informative and fun!**

A member of the Protocol Implementation Team will not only bring all of the exciting new awareness materials, but will also provide the opportunity for you to handle artefacts that have previously been reported through the Protocol – from mammoth teeth to aircraft parts.



**Book your Protocol Awareness Visit today – email us at [protocol@wessexarch.co.uk](mailto:protocol@wessexarch.co.uk) or call us on 01722 326 867!**

## 2014–2015 Finds Awards

We are delighted to announce the results of the 2014–2015 finds awards that celebrate the hard work of industry staff with regards to the Protocol. Nominations were made by the Implementation Team at Wessex Archaeology, who work closely with the marine aggregate industry staff both at wharves and on vessels. The results were approved by Chris Pater, Historic England's Head of Marine Planning, and Mark Russell, the Director of BMAPA, and the winners are...

### Best Attitude by a Wharf

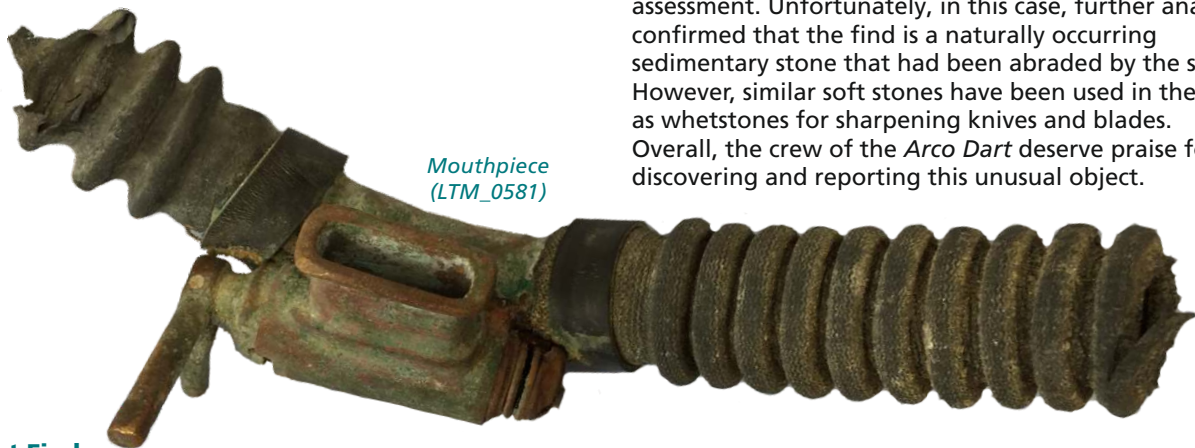
It was difficult to decide the best wharf this year as so many wharves have been outstanding. However, a decision must be made and the winner is Tarmac's Burnley Wharf in Southampton. Burnley Wharf reported 20 finds in 2014–2015, over double the number of finds reported by any other wharf! A huge thank you to wharf staff who consistently provide detailed Preliminary Recording Forms with excellent descriptions of finds accompanied with clear photographs illustrating any interesting features on the find.



*Shaped stone (Hanson\_0572)*

### Best Attitude by a Vessel

This is awarded to Hanson Aggregate Marine's *Arco Dart*. The eagle-eyed crew discovered an intriguing, regularly shaped stone (Hanson\_0572) while dredging sand in the Severn Estuary. This find was exciting because the dredger screens used in sand extraction in this area generally prevent larger objects from entering the hold during sand extraction, and there are few reports from the Severn Estuary. Staff on-board the vessel supplied detailed measurements and a crisp, clear photograph of the find, and even supplied the find to Wessex Archaeology for further assessment. Unfortunately, in this case, further analysis confirmed that the find is a naturally occurring sedimentary stone that had been abraded by the sea. However, similar soft stones have been used in the past as whetstones for sharpening knives and blades. Overall, the crew of the *Arco Dart* deserve praise for discovering and reporting this unusual object.



*Mouthpiece (LTM\_0581)*

### Best Find

The most interesting find this year, and winner of this award, is the antique dive regulator (LTM\_0581) discovered by James Lutman at Tarmac's Bedhampton Wharf. The artefact was recovered from material dredged by the *Arco Dee* in Licence Area 372/1, east of the Isle of Wight. It was immediately recognised as some kind of diving equipment, and research by Bob Campbell from the Historic Diving Society identified it as a Dunlop Underwater Swimmers' Breathing Apparatus (UWSBA) mouthpiece, and suggested it

could have a link with the nearby Portsmouth Naval Base. The Dunlop UWSBA was scientifically designed by the Admiralty at the National Institute of Medical Research and was the first equipment that allowed divers to swim horizontally. Such equipment was used by 'frogmen' during the Second World War. This find is particularly interesting because, unlike so many Protocol discoveries, this find could be definitively identified, which then led to it being able to provide a probable link with local naval diving activities.

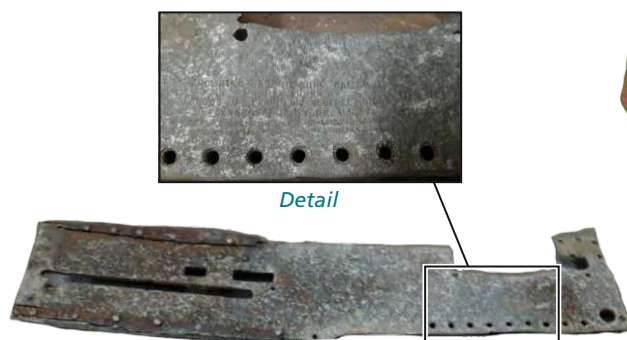
**Congratulations to all participants and keep up the good work!**

For more information about all the finds reported this year, take a look at our annual report that can be accessed from the Protocol website

[www.wessexarch.co.uk/projects/marine/bmapa/docs.html](http://www.wessexarch.co.uk/projects/marine/bmapa/docs.html)

## Finds from 2015–2016 so far

Even though we are only half way through the reporting year that begins on the 1st October every year, there have already been some very exciting archaeological discoveries reported through the Protocol so far! Here are some of the highlights of the first half of 2015–2016, and we look forward to receiving many more reports over the next six months.



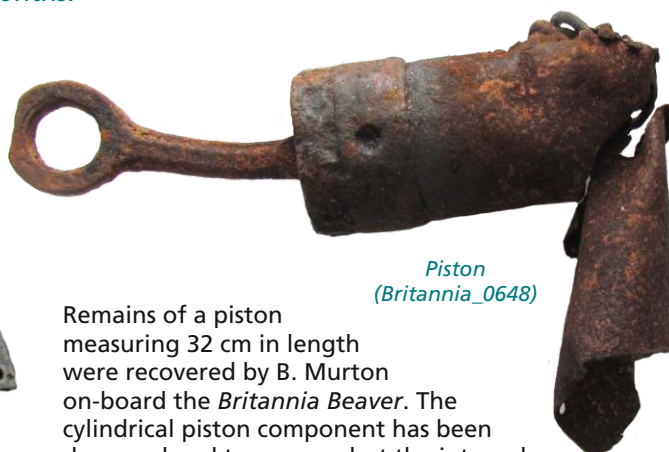
Machine gun side plate (Tarmac\_0639)

Josh Small discovered this side plate of a Browning .50 calibre machine gun at Erith Wharf. Wharf staff immediately identified the find, and Jonathan Ferguson, Curator of Firearms at the Royal Armouries Museum in Leeds confirmed the identification. The Browning .50 calibre heavy machine gun was designed towards the end of the First World War by John Browning, a renowned American firearms designer. These types of machine guns were used in a marine context as light anti-aircraft guns or anti-boat defences, mounted aboard a ship or as the primary or secondary weapon on a naval patrol boat. They were also mounted on American pursuit aircraft during the Second World War – Mustang and Thunderbolts, both of which were based in England at various times.



Possible weight (Tarmac\_0646)

This unusual object discovered by Bradley Troubridge at Murphy's Wharf currently remains unidentified, although a number of possible options have been suggested. The object measures around 16 cm in length and has a maximum width of 5 cm, and comprises a wrought iron 'sleeve' with a deliberate opening along its length with a deep recess within which lie brass elements. One suggestion for its use is as a counterweight or a sinker for towed gear, whilst another idea is that it represents a mechanical component. If you have a suggestion as to its function, we'd love to hear – please get in touch at [protocol@wessexarch.co.uk](mailto:protocol@wessexarch.co.uk).



Piston (Britannia\_0648)

Remains of a piston measuring 32 cm in length were recovered by B. Murton on-board the *Britannia Beaver*. The cylindrical piston component has been damaged and torn open, but the internal spring and a connecting rod are still visible. Since the object is made of iron, it is thought to represent an early example of a piston as later examples were made from lighter alloys. It is possible that the piston derives from a boat or ship that had been equipped with a steam engine and may date to the early 19th century.



Brass plaque (Tarmac\_0640)

This brass plaque was discovered by Steve Vince at Shoreham Wharf. The plaque measures 9.5 cm in length and 5 cm in width, and is clearly inscribed with 'Yarrow & Co LTD, Glasgow' around the outside with 'No. 381' stamped in the centre. Yarrow and Co. Ltd. was a major shipbuilding firm founded in London in 1865. In the first half of the 20th century, the company was one of the world's leading builders and destroyers of frigates, building ships for the Royal Navy as well as for export. However, they also built a large number of merchant ships and boilers for other shipyards. Members of the Caledonian Maritime Research Trust, dedicated to recording the maritime heritage of the Clyde, identified the plaque as a probable boiler plate. The 'No. 381' is still a mystery, however research is ongoing.

## Focus on Finds – Discoveries off the East Coast

The Protocol, which is now in its 11th year, has produced some outstanding results only possible with the help of the dredging and aggregate teams and their keen eye for finds. Most notably is the coast off East Anglia, which is one of the most expansive resources for sustainable energy solutions and for the extraction of marine aggregates, with 13 licensed aggregate areas currently in operation.

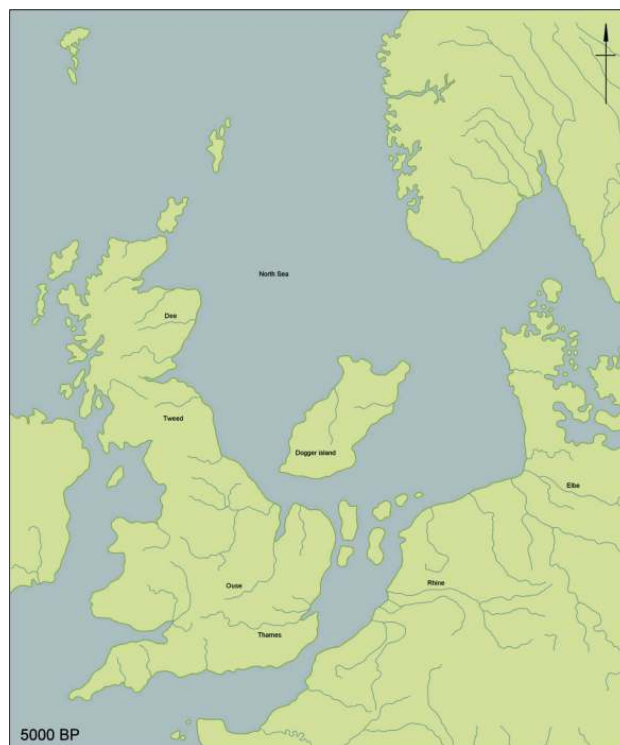
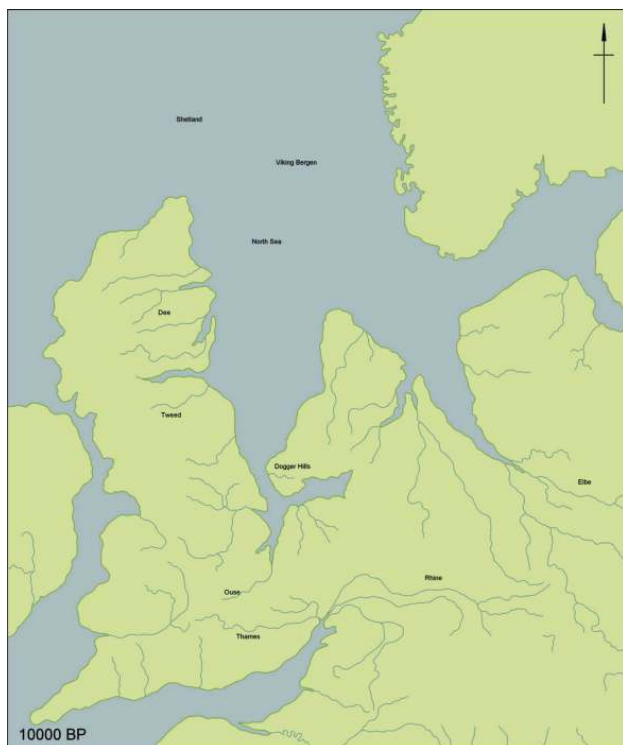
One of the main reasons why this region is so productive is that throughout the past, sea levels have risen and fallen along with the recession and growth of the ice sheets, leaving not only marine aggregate deposits but also terrestrial deposits. There have been multiple occasions where Britain was joined via a land mass to mainland Europe, with sea level changes in excess of 100 metres. In fact, Britain only became an island around 7000 years ago (see the maps found below).

This now-submerged land that extends between our eastern coastline and the Continent would have been home to a vast host of flora, fauna and, most importantly, human occupation. Some of the oldest known finds of human occupation have been found at Happisburgh off the north Norfolk coast and more recently a submerged

forest has been discovered off Cley to the north of Happisburgh. Further evidence lies out in the region known as Doggerland that was once dry land, but is now submerged.

Additional modern and more common events in this area of the North Sea can provide an insightful look into the past. Largely exploited for shipping since the earliest days of maritime trade and exploration, evidence of incidents and battles are uncovered during dredging operations. Two examples of this are the Second Anglo-Dutch war, which took place off Lowestoft in 1665, and then much later, the Second World War, where huge losses in shipping and aircraft were witnessed off our eastern coast.

This is why the Protocol is of such importance, and without the cooperation of those working in the marine sectors, finds of great importance can be easily missed or overlooked. Since the start of the Protocol in 2005, around 20% of reported finds have come from the East Anglia region, ranging from Palaeolithic fauna to the Second World War wreckage. Evidence uncovered within the marine aggregate recovered from the licence areas of this region potentially holds significant information of local, regional, national and even international importance.



## The finds

Some of the most common finds in the region are those dating back to when it was an expanse of land. Palaeolithic finds preserve the types of fauna and flora that would have been in the area. But exceptional finds, such as the assemblage of Palaeolithic hand axes and worked flints, show that this land was inhabited and utilised by our predecessors. Hand axes were part of the essential tool kit of the time, and vital for processing local fauna; remains of mammoth, woolly rhinoceros, deer and elephants show the range of food sources available. Finds of whale bones from the same region demonstrate the constantly changing landscape and seascape.

Deer leg bone

Mammoth tooth



Handaxe



Worked flint



Cannon ball

Following the latest glacial retreat, Doggerland has been reclaimed by the North Sea and has continued to be an area of great activity. Early seafarers, such as the English, Spanish and Dutch, navigated their way along new found trade routes, subsequently resulting in occasional incidents and more notably battles during this age of sail. Since the Protocol began large numbers of cannonballs have been found in this region. The four Anglo-Dutch wars, that took place over 132 years between 1652 and 1784, make this one of the richest regions in terms of cannonball discoveries. Recoveries of round shot, the most recognisable projectile, have most commonly been reported through the Protocol in this area, but examples of bar shot have also be found, which were designed to damage or destroy enemy ships' masts and rigging to prevent escape.

Another common discovery has been the remains of aircraft crash sites dating from the Second World War. These finds are notably fragmented due to the impact of the crash, but they are an eye opening insight into the important barrier from mainland Europe that the Channel and North Sea created during times of war. Other aircraft objects, such as ammunition like this Second World War fuse cap from a 3.7" AA gun (below), are routinely reported.



Fuse cap



Aluminium aircraft part



Bar shot

It is hoped that those involved in the marine aggregate industry and the accompanying Protocol will continue their great work in reporting finds that help to build a more complete history of the UK's prehistoric submerged landscapes and maritime and aviation history.

## New look for the Protocol Awareness materials

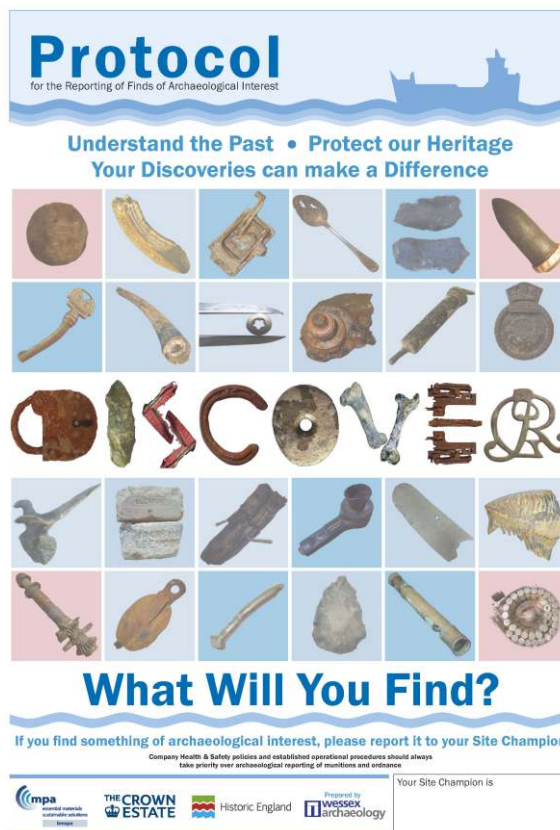
The Implementation Team are thrilled to introduce the new Protocol awareness materials that we have developed! Changes have been made to everything from the poster to the handouts including the Preliminary Record Form. The fresh new look includes a striking new logo and images together with updated text throughout.

The poster (right) has been redesigned with the eye-catching word 'DISCOVER' made up from finds previously reported by wharf and vessel staff through the Protocol and surrounded by a range of different objects also discovered by members of the marine aggregate industry, showing the diversity of archaeological material that is found.

The Preliminary Record Form has been restyled to make recording finds even clearer and the reporting procedure more efficient. The revised form includes the addition of tick-box reminders (for example to provide us with the track plot of the vessel), and enables you to make a note outlining how you are looking after any finds you have discovered (for example, placing it in a bucket of fresh water, stored in a cool and dark place).

The Handouts are an excellent resource that can be accessed as and when needed to provide specific information on:

- **The Protocol** – introduction to the scheme;
- **The Reporting Process** – the journey an object goes on from being found to being reported to the Nominated Contact;
- **Concretions and Metalwork** – learn how to spot these clumps of metal and what they could be concealing;
- **Munitions and Ordnance** – company Health & Safety policies and established operational procedures should always take priority over archaeological reporting;
- **Prehistoric Finds** – learn how to identify worked flint or a mammoth tooth, and how important the discovery can be;
- **Photographing Finds** – tips for producing high quality images with scale sheets;
- **Conservation** – discover how to care for, protect and store your find.



### Remote Learning Packs

Designed to augment traditional awareness visits, our remote learning packs provide 24 hour access to awareness materials. They include the poster, handouts and the new Induction Pack. The Induction Pack enables industry members to conduct their own awareness training, enabling wharf and vessel staff to familiarise themselves with the Protocol and provides an understanding of the archaeology of the seabed.

The remote learning packs are a fantastic resource for Nominated Contacts and Site Champions to reach new members of staff or those that have not been able to attend an Awareness Visit previously. In addition, because the packs can be used at any time, they can be regularly accessed to refresh training.

All of the awareness materials can be downloaded from  
[www.wessexarch.co.uk/projects/marine/bmapa/protocol-awareness.html](http://www.wessexarch.co.uk/projects/marine/bmapa/protocol-awareness.html)

## Protocol success at Portsmouth Harbour

In mid-November 2015 capital dredging began in Portsmouth Harbour in order to widen and deepen the harbour to accommodate access for two Queen Elizabeth Class aircraft carriers: HMS *Queen Elizabeth* and *Prince of Wales*.

An On-Board Finds Reporting Protocol, based on the Marine Aggregate Industry Protocol, was initiated and will be implemented throughout the duration of the seabed clearance operations and dredging activities in order to reduce any adverse effects of the dredging on the historic environment and to mitigate against any unexpected discoveries of archaeological material.

Since work began over 150 objects have been recovered ranging from modern glass milk bottles to numerous anchors and timbers. But of particular interest is the recovery of an iron cannon by Boskalis Westminster, the company contracted by the Defence Infrastructure Organisation (DIO) to undertake the dredging programme. The discovery was reported via the On-Board Finds Reporting Protocol to Wessex Archaeology who analysed and recorded the cannon.

Andrea Hamel, Senior Marine Archaeologist at Wessex Archaeology, explained that 'we have already recovered a number of anchors, a quantity of modern glass and a range of ceramics during the work but cannons are particularly exciting finds because they could



*Recording in the field*

indicate the presence of a previously unrecorded shipwreck. More investigation into the cannon will be needed to determine its significance, but hopefully ongoing research will provide a date-range for the cannon and possible provenance.'

The cannon, which was later determined to be an isolated discovery, is currently under the care of conservators at the Mary Rose Trust where it will be stabilised until it can be accessioned to Portsmouth Museum for long term display and conservation.

We look forward to seeing what else will be recovered from this archaeologically significant harbour with its long and interesting maritime history!

*Cannon (BWL1\_0036)*



## Re-launch of the Fishing Industry Protocol for Sussex

Following the success of the Marine Aggregate Industry Protocol for the Reporting of Finds of Archaeological Interest, a number of other industries have developed similar protocols. In 2012, Wessex Archaeology launched the Fishing Industry Protocol for Archaeological Discoveries (FIPAD) pilot study, on behalf of English Heritage (now Historic England) that lasted a year. The FIPAD works in collaboration with the Sussex Inshore Fisheries Conservation Authority (Sussex IFCA) to help fishermen to voluntarily report any archaeological finds they discover during their work.

Continuing from the pilot study, applications were submitted last year to the Heritage Lottery Fund (HLF), who would support and fund the creation of the Historic Environment Fisheries Liaison Officer (HEFLO) post, following up the recommendations of the initial study. Wessex Archaeology, with the support of the Sussex IFCA, were successful in their application to re-launch the FIPAD, and in February of this year Alistair Byford-Bates was appointed to the HEFLO post. Over the next few months he will be rolling the scheme out again with the fishermen of Sussex.



*Alistair Byford-Bates*

The UK's fishing fleets have been making significant archaeological discoveries for many years, yet sadly these are often attributed to divers who free up fasteners rather than the initial finder. Examples from Sussex include medieval rudders trawled up off Rye and Winchelsea, the Norman's Bay wreck and a Valentine tank to name but a few. What has been lacking in the past is guidance about how these important discoveries can be reported and protected, and why they are so important to our shared heritage. The FIPAD project therefore aims to connect more closely than before with the fishing community and expand our knowledge of the underwater heritage through the sharing of information and experiences. Wessex Archaeology's pool of experience and expertise in the identification and conservation of artefacts both on the seabed and recovered to the surface means that the best advice possible can be passed back to the finders. Furthermore, with their wealth of knowledge on the location of wrecks and fasteners, and the artefacts they have recovered in their fishing gear finders are helping to expand the historic environment record.



Alistair studied for a degree in Archaeological and Forensic Sciences and a Master's degree in Applied Sciences by Research at Bournemouth University, after 25 years in the dairy industry. Since then he has been involved with commercial archaeology, working on a range of sites across the UK, and with a disaster management company overseas. Alistair will not only be the approachable contact for the fishing industry of Sussex providing support and advice on finds identification and conservation, he will also become a member of Wessex Archaeology's Implementation Service for the Marine Aggregate Industry Protocol – nothing like hitting the road running!

**More information regarding the FIPAD including how to report a discovery made off the Sussex coast can be found at <http://fipad.org/>**