

Dredged Up

from the past

Autumn 2007

Archaeology Finds Reporting Service Newsletter

Protocol update

As a result of last year's success, BMAPA and English Heritage have extended the Awareness Programme to February 2008. This means that Wessex Archaeology on behalf of BMAPA and English Heritage will be presenting the Protocol to many more wharves in England, Wales and even in continental Europe. We will also visit marine geophysical and geotechnical surveying companies as they routinely work for the marine aggregate industry. They will then be able to report their findings such as uncharted wrecks too.

We will be enhancing the remote learning package DVD and other learning material to assist you with identifying objects of archaeological interest; recording and reporting them; conserving and storing them, and provide contacts to your local PAS (Portable Antiquities Scheme), Museums and County Archaeologists.



Wharf staff, getting to grips with their heritage



More information will be made available on archaeological metalwork, especially iron objects and their corrosion product, concretions. There will be more guidance documents on historic munitions and more issues of the Implementation Service Newsletter so the public, professionals and specialists are informed about your discoveries.

There will also be another seminar in Salisbury in the autumn. Let's continue working together through the Protocol and the Implementation Service to continue making a valuable contribution to our understanding of submerged archaeology.

2005/2006 Finds Awards

In the wake of the new Protocol introduced in 2005, BMAPA and English Heritage have granted the first three awards of the programme. It was a tough decision for the judge, head of English Heritage's Maritime Archaeology Team, Ian Oxley, who assessed the importance of over 80 significant finds and the performance of over 800 industry staff involved in the Protocol. The programme has greatly facilitated the spread of information about new discoveries to those organisations that can make the most of it.

The first award was given to the site that had discovered the most interesting or significant archaeological find. For the 2005/6 scheme this was the mammoth tusk discovered by staff at Purfleet Aggregates in Thurrock, Essex in February 2006. Dated back to 44,000 years old by English Heritage's Scientific Dating Section, the finding has significant implications for understanding the distribution of these species in northern Europe during the last Ice Age and so the possible presence of human communities in the area.

The second and third awards were given to the wharf and the vessel displaying the most professional attitude towards archaeological reporting throughout the year. These were Solent Aggregates Ltd, Bedhampton Quay, where staff had been displaying both efficient and enthusiastic application of the reporting requirements; and marine aggregate dredger *Arco Humber* operated by Hanson Aggregates Marine, whose staff have been regularly reporting small fossil fragments amongst the 8500t cargo of sand and gravel.

Further information can be found at:
www.wessexarch.co.uk/projects/marine/bmapa

Or please contact Mark Russell:
tel: 020 7963 8000
e-mail russell@qpa.org, www.qpa.org

English Heritage's Head of Maritime Archaeology, Ian Oxley and BMAPA Chairman Kevin Seaman presenting the award for the most professional attitude in applying the protocol at a land-based wharf over the period 2005/06, to the staff at Solent Aggregates Bedhampton Wharf.



Cannon ball (found by G. Phillips, Ridham Docks. Image courtesy of UMA)



Finds from 2007/2008 so far

An animal bone and a metal blade-like object were discovered by Roger Burnham at CEMEX's Northfleet wharf from a split cargo. The vessel *Sand Weaver* had dredged material from licence areas 102 (Humber) and 251 (Lowestoft). Wessex Archaeology specialists identified the bone as a mammal radius, from a horse, red deer or cattle and interpreted the metal blade as a tool, possibly part of an agricultural implement such as a plough.



Bone of a large mammal (found by R. Burnham, Northfleet Wharf. Image courtesy of CEMEX)

Iron object, possibly an agricultural tool (found by R. Burnham, Northfleet Wharf. Image courtesy of CEMEX)

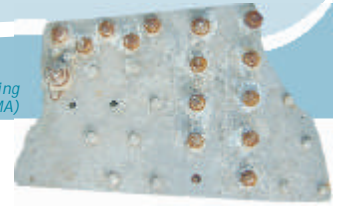
Three cannon balls were salvaged and reported by UMA. Two were discovered amongst material from licence area 340 off the east coast of the Isle of Wight at Bedhampton Quay by D. Taylor and R. Smith. The third one is discussed on page 8. From the same load came almost 300 pieces of unrelated wreckage of a 1940 aircraft and a human bone was also salvaged.

A new, partially buried, uncharted wreck was discovered by Martin Fairley, hydrographic surveyor, at Emu Limited, lying at 1.2km NW of dredging area 202. The site was detected during a sidescan sonar and swath bathymetry survey on behalf of Hanson. This is the first report of its kind for the Protocol, an exciting finding and outstanding contribution from a survey company operating over and around a dredging area.

Possible uncharted wreck site (identified by M. Fairley, data provided by EMU, image produced by WA)



Aircraft airframe with German style riveting
(found by P. Tallents, Greenwich Wharf. Image courtesy of UMA)



New Discoveries of Aircraft Remains



MG15 saddle magazine & July 1940 stamp dated ammunition
(found by B. Gould, Erith Wharf. Image courtesy of UMA)

The Spring 2007 issue, announced the discovery of the remains of six aircraft, predominantly Allied World War II losses. Two of these groups of finds were dredged by UMA last summer from licence area 430, approximately 29km east of Southwold, Suffolk and are presented here in detail.

Paul Tallents from Greenwich Wharf salvaged a selection of aluminium parts including cog wheels, gears, springs and a

magneto. Andy Simpson of the RAF museum at Hendon assisted in the identification: *"They are certainly aircraft engine related, possibly propeller reduction, pitch control gear or engine supercharger. There are some markings, but unfortunately, these are insufficient to identify the type of aircraft"*.

Approximately 1km away, a rudder pedal was also recovered during summer 2006. Mr. Simpson commented: *"This pedal belonged to an American aircraft as it has the North American Aviation Company logo. It probably came from a P-51 Mustang fighter or a B-25 Mitchell bomber"*.

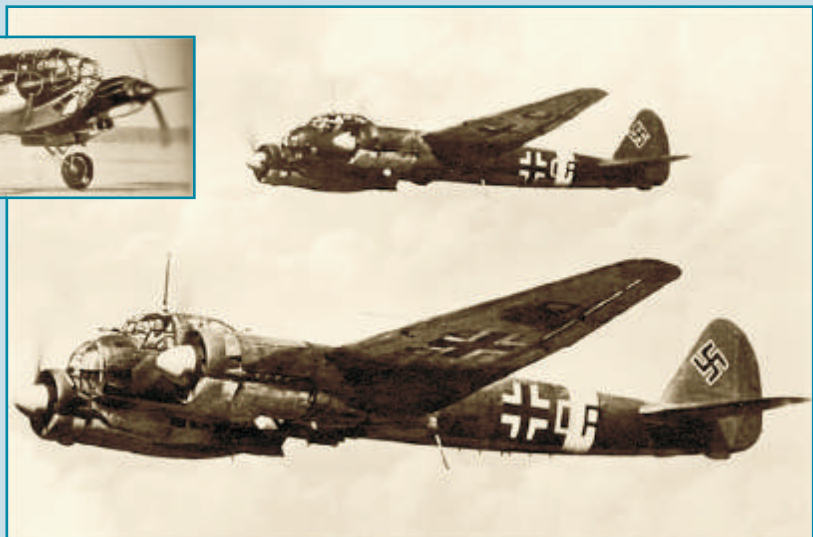
Since then, UMA's *City of London dredger* has recovered approximately 320 objects from licence area 430, all probable aircraft remains and an associated human bone.

Over 20 pieces of aircraft remains including riveted aluminium airframe parts and a saddle magazine were salvaged by Barry Gould at Erith Wharf. Ian Jones of the Metropolitan Police assisted in the identification:

"This saddle magazine belonged to a German MG15 machine gun and the latest stamp date on the remaining ammunition is July 1940".



Heinkel He 111 German Bomber
(<http://commons.wikimedia.org>)



Junkers Ju 88 German Bomber
(<http://www.world-war-2-planes.com>)



MG15 saddle magazine (found by B. Gould, Erith Wharf. Image courtesy of UMA)

Metal fastener, possibly from an aircraft (found by J. Apps, Ridham Wharf. Image courtesy of WA)

Wessex Archaeology selected 87 potentially diagnostic objects of the almost 300 aircraft fragments salvaged by Jo O'Brien at Ridham Wharf. John Romain of the Aircraft Restoration Company verified: "These aircraft fragments are most certainly German, the various alloy pieces riveted together are of classic German design" plus some other pieces have German writing. Aircraft fragments, such as engine components and a lower part of an early 1940s Lku4 course indicator gyro compass indicate the aircraft is either a Heinkel He 111 or most likely, a Junkers Ju 88.

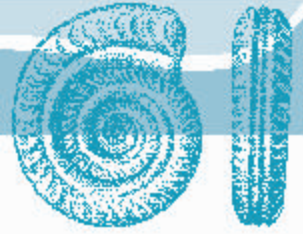
Research has revealed that this aircraft crashed sometime in 1940, probably the second half of August 1940, during the Battle of Britain. The discovery of a human bone amongst the almost 300 fragments was identified by Wessex Archaeology's in-house osteo-archaeologist as a human right upper arm bone, the humerus, belonging to an adult male, younger than 40 years old. This was almost certainly a crash casualty; however, some of the crew may have managed to bail out.

Wessex Archaeology informed English Heritage and the Ministry of Defence Joint Casualty and Compassionate Centre (JCCC) at RAF Innsworth, which in turn informed the German Embassy about the war loss. As required by the Protocol, the Receiver of Wreck was informed of all finds. Wessex Archaeology also recommended caution in further dredging activities as both the Heinkel 111 and the Junkers 88 were bombers and the presence of unexploded ordnance is possible. The maximum payload for a Junkers Ju 88 is 3000kg.



Human bone (right upper arm) found in association with aircraft remains by J. O'Brien, Ridham wharf. (Image courtesy of WA)

0 50 mm



The Archaeological Value of Fossils

Hanson Aggregates Marine reported the discovery of two stone artefacts on board of the dredger *Arco Avon* in November 2006 and May 2007. The dredged material was recovered from licence area 408, 50 miles NE of the Wash.



Part of an ammonite fossil (found by P. Roberts, *Arco Avon*. Image courtesy of Hanson)

Thanks to Hanson's staff methodical photographs our specialist confirmed that one of the stone artefacts, called a carved stone, found by P. Roberts on board of *Arco Avon*, was in fact part of an ammonite fossil of the Lower Jurassic, approximately 176-208 million years old.

The other stone artefact of unusual shape, was quickly identified by marine mammal palaeontologists of the Natural History Museum of London and of Rotterdam:

"This is a very exciting finding. Most likely the first phalange of the pectoral flipper of a dolphin from the Pliocene epoch and what appears to be quite a sizeable animal too! A marine reptile should not be discarded either".

The Pliocene epoch ranged from 5.3 million to 1.8 million years ago.

The earliest archaeological evidence of humans in the UK dates back to only 700,000 years ago, from both land and coastal sites. Archaeology involves the study of past human life and culture and man made material and environmental data such as fossilised bones of animals that co-existed with humans are of archaeological interest.



Fossilised first phalange of a dolphin flipper or marine reptile (found onboard *Arco Humber*. Image courtesy of Hanson)



Fossilised mammoth teeth and bones (H. Strijdonk, SBV Flushing Wharf. Image courtesy of Hanson)



The remains of these animals are constantly being salvaged by aggregate industry and fisheries in and beyond UK waters. These remains of land animals appear now in marine contexts mainly as a result of sea level rise. During an Ice Age, where most of the sea water was captured in ice sheets, the North Sea basin and the English Channel were dry land and were migratory paths for animals and human communities.

The most recent examples reported through the Protocol are the woolly mammoth remains salvaged by Hanson Aggregate Marine. Fossilised mammoth bones are of archaeological interest in terms of human

subsistence. These animals were present in Northern Europe and North America from c300,000 to c10,000 years ago at the end of the last Ice Age, when they became extinct.

Fossils which are millions of years old are not of archaeological interest in the UK. On the other hand, just as many people collect fossils today, people in the past often re-used fossils, as jewellery for example, and an artefact millions of years old may, therefore, still contribute to the study of humans.

Unfortunately, fossils of archaeological and non-archaeological interest are very difficult to distinguish, that is why it is so important that discoveries which appear to be of an unusual shape or fabric continue to be reported through the Protocol as any one of these may prove to be an important archaeological discovery. Fossils are of great geological and palaeontological interest and so all discoveries reported through BMAPA/EH Protocol are forwarded to the relevant parties.



Fossilised mammoth bone (H. Strijdonk, SBV Flushing Wharf. Image courtesy of Hanson)

Reconstruction of mammoth close to the edge of the ice





Wessex Archaeology



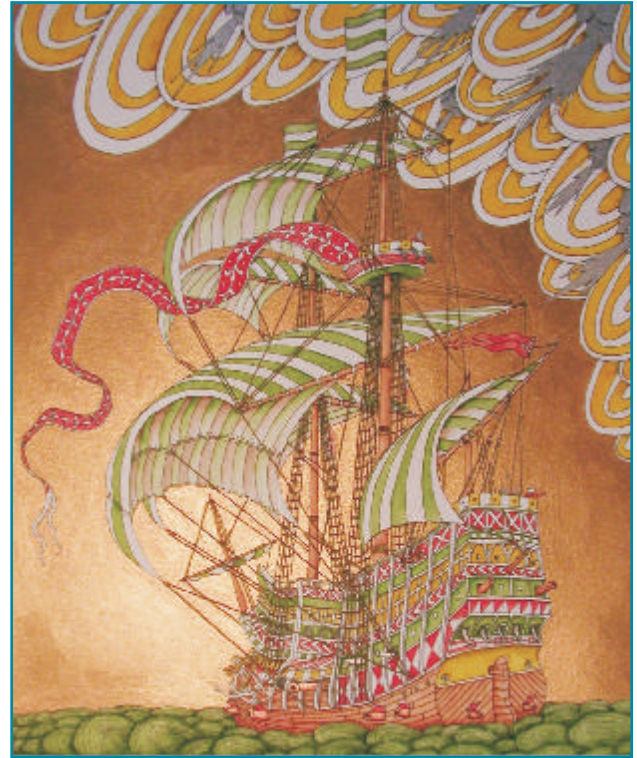
ENGLISH HERITAGE

The cannon balls of the Anglo-Dutch Wars

A cannon ball was discovered by Garry Phillips at UMA's Ridham Dock Wharf. It was found in material dredged early this year from licence area 430, approximately 20 miles off the coast of Suffolk.

Cannon balls, or round shots, are one of the earliest forms of projectiles fired from cannons. Round shots were made from iron by the 15th century until late 19th century.

The presence of cannon balls on the seabed may relate either to the location of a battle (such shot will often exhibit signs of firing or impact damage), the location of a shipwreck or nearby fort. The dimensions of this cannon ball, approximately 120mm diameter, could be associated with a 12 or 18-pounder shot, commonly used by British, Dutch and French warships of the 17th century.



*Artist's impression of a 17th century man-of-war
(Image courtesy of G. Scott, Wessex Archaeology)*

Wessex Archaeology in the course of the ALSF funded project English Shipping, found that two major naval battles took place in the vicinity of this finding. Firstly, the battle of Lowestoft in 1665, the opening engagement of the Four Days Battle, of the Second Anglo-Dutch War where 20 Dutch ships and only two English vessels were lost. Secondly, the Battle of Sole Bay, Suffolk, in June 1672, the first engagement of the Third Anglo-Dutch war where the combined English and French fleet suffered the loss of four ships while the Dutch fleet lost three ships.

Although none of the lost warships from either battle have been located, it is not inconceivable that casualties might be found around the area.