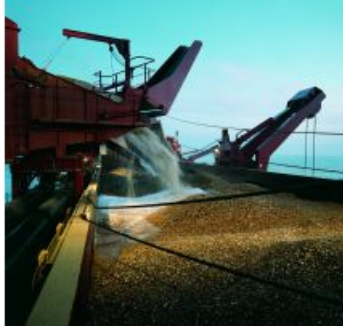


Dredged up from the Past



Prior to the approval of marine aggregate dredging licence applications, archaeologists conduct a detailed study of the proposed area in order to safeguard the UK marine heritage. Despite this, it is not uncommon for finds of archaeological significance to be recognised in loads of aggregate on board dredging vessels or at the receiving wharves.

In 2005, the [British Marine Aggregate Producers Association](#) (BMAPA) and English Heritage (EH) jointly published a Protocol that provides guidelines for reporting finds of archaeological interest

discovered during the course of aggregate dredging. Through our role in running the Protocol Implementation Service, Wessex Archaeology has become the first point of contact for dredging industry staff.

To date, we have received over 130 reports of archaeological discoveries from vessel and wharf staff, ranging from items of wreck and aircraft remains, to Ice Age hand axes of international importance. The scheme has demonstrated the level of communication that has developed between the dredging industry and archaeologists, and the level of responsibility shown by industry staff for our underwater heritage.

The EH/BMAPA Protocol for Reporting Finds of Archaeological Interest is now in its third successful year. The Protocol, which is facilitated by Wessex Archaeology for EH, is designed to encourage those working in the marine aggregate industry to report finds of archaeological interest disturbed accidentally during dredging activity.

Why do we Need the Protocol

Before dredging licences are granted, the proposed area of impact is subject to detailed archaeological study, designed to identify and advise on any submerged features that may lie within the licence area. Where identified, these are granted an exclusion zone, which is usually only a small percentage of the total licence area. Despite this, there will always be isolated finds or features not identified from geophysical survey or historical record investigation, which may be discovered by aggregate industry staff during dredging activities. The Protocol emerged as a cost-effective mitigation option to report finds and it negates the need for an archaeologist to monitor dredging onboard vessels or at wharves.

Protocol in Action

The Protocol in action takes two forms. Firstly, there have been two phases of an awareness programme, funded through the Aggregate Levy Sustainability Fund (ALSF), the aim of which is to improve the knowledge of both aggregate industry staff and archaeologists. The programme has raised awareness of the Protocol, of what constitutes an archaeological find and how an archaeological discovery should be reported when recognised. In addition to this, the programme has helped to educate archaeologists implementing the Protocol to the operating circumstances of the marine aggregate industry in order to improve and develop how the Protocol is applied. Through the awareness programme, we are also able to recognise and reward the work of industry staff and maintain communication with stakeholders.

Given the intensive nature of modern aggregate dredging, it can be difficult to assemble wharf and vessel staff to deliver 'in-person' presentations. The awareness programme was therefore designed to work in conjunction with dredging activity and

where delivering presentations was impractical this was overcome through the use of a DVD (now on its second edition), a bi-annual newsletter and a regularly updated website. Regional workshops designed to further the understanding of all parties involved in the Implementation Service were held, which focused on finds recognition and handling, and addressing questions raised during site visits.

The primary aim of the Implementation Service, however, as its name suggests, is to implement the Protocol. Both the Protocol and its Implementation Service are funded by the dredging industry through BMAPA. At the core of the Implementation Service is a secure web-based reporting system. Finds of archaeological interest are reported to a site champion, normally a member of wharf staff, who sends an initial report to their nominated contact. The nominated contact – who is a senior, single point of contact within each aggregate company – files a report detailing the find and this is read and investigated by Wessex Archaeology staff. Finds that are isolated, non-contentious or of uncertain provenance are dealt with directly by Wessex Archaeology. Finds that may result in the creation of a dredging exclusion zone are passed promptly to EH for further consideration. Information on all finds is disseminated to relevant parties, such as the Portable Antiquities Scheme, the relevant county archaeologist and the Receiver of Wreck.

Incredible Response

Prior to the inception of the Protocol, Wessex Archaeology had been informed of eight finds of archaeological interest discovered through dredging activity within the previous 6-year period. Since the beginning of the scheme in 2005, over 130 reports have been filed and many of these detail more than one find of interest. Finds reported to us are varied in their age and material. They have included an admiralty telescope (from Kendalls wharf), ships timbers, cannonballs, chains, and domestic and demolition debris from water off of the Isle of Wight, including spoons and forks – though no knives! This demonstrates an admirable level of observation, co-operation and responsibility on behalf of marine aggregate staff. EH and BMAPA have recognised this with an award scheme that celebrates the best find, the best attitude to the Protocol by a vessel and the best attitude to the Protocol by a wharf.

Awards and Rewards

The 2006/2007 good-attitude awards went to UMA's Ridham wharf and the Sand Swan, whilst UMA staff at Erith wharf received the award for best find by reporting the discovery of wreckage from a plane crashed at sea. Though parts of the same plane were also reported by Ridham wharf (to date, 300 pieces of this aircraft have been recovered), it was the discovery of a machine gun saddle magazine that earned Erith their reward.

The magazine, with bullets still rusted into their original positions, was identified by Metropolitan Police Civilian Explosives and Ordnance Disposal Officer Ian Jones as having come from a German MG-15 machine gun. This contributed to the identification of the aircraft as a German Junkers Ju 88. The discovery of the saddle magazine also allowed us to date the plane, as ammunition is date stamped when manufactured. The newest bullets in the MG-15 magazine were produced in July 1940 and, given the wartime circumstances, it is likely that they were put into use soon afterwards. It is thought that the plane crashed in the summer of 1940, probably in late August, during the Battle of Britain – Germany's first major defeat of the Second World War. This plane is almost certainly a casualty of this battle and the discovery of a human arm bone associated with the wreckage suggests that the crew were still in the aircraft as it sank to its final resting place.

Contentious finds, such as human bone and munitions, should always be treated with respect and the Protocol advises wharf staff on the handling of both. Munitions, it is advised, should be dealt with under the dredging industry's own protocol for safe disposal of potentially hazardous items and this will always take priority over archaeological reporting for the safety of all concerned. Human bone is reported to the police and coroner in order that date and origin can be investigated. In the case of the upper arm bone found alongside fragments of German military aircraft, it is protected by the Protection of Military Remains Act and will be reburied according to the wishes of the German authorities.

Steps have also been taken by Wessex Archaeology, in the form of a comprehensive geophysical survey of the licence area in question, to identify the location of the aircraft crash site in order that it can be protected from further disturbance under the Protection of Military Remains Act. It was discovered that the plane is heavily dispersed and an exact location could not be determined. Several large anomalies, likely to represent concentrations of aircraft debris, were highlighted by the survey and archaeological exclusion zones implemented around them.

Machine Guns to Mammoths

In January of this year, Wessex Archaeology received, via the Implementation Service, a report of international importance. Some 28 hand axes were found by local archaeologist Jan Meulmeester on a spoil heap at a Dutch wharf in Flushing, near Antwerp. They were found amongst gravels dredged from English waters from dredging licence area 240, which is located 13km off of the Norfolk coast. Mr Meulmeester regularly searches for mammoth bones and fossils in material delivered to the Dutch wharf by British company Hanson. He brought the finds to the wharf's attention and they were officially reported through the Protocol.

The discovery has been hailed as the single most important find of Ice Age material from below the North Sea. Archaeologists have been investigating the idea that during periods of glaciation, when water is stored at the poles as ice caps and sea levels were lower, land was available for human occupation that has since been inundated by water. The discovery of 28 hand axes, associated flint flakes and animal remains, including mammoth teeth and tusks, from below the North Sea confirms this theory and allows us a unique opportunity to study how our ancestors lived during past Ice Ages.

The hand axes are Palaeolithic, though it is not yet known when exactly during the 750,000 years that make up the Palaeolithic (also known as the Old Stone Age) these finds originate from. EH is currently co-ordinating with their Dutch counterparts, the

National Service for Archaeology, Cultural Landscape and Built Heritage, to investigate the discovery. As part of the Protocol, dredging company Hanson has moved their activities to another part of the sea bed while archaeological investigation continues.

The Importance of the Protocol

The reporting of the North Sea hand axes through the Protocol demonstrates the level of co-operation that exists between archaeologists and dredging industry staff, and the level of responsibility shown by the latter with regards to finds of archaeological significance. It also shows the importance, relevance and need for the Protocol to minimise the impact of aggregate dredging on archaeological remains and demonstrates how co-operation with the marine aggregate industry is helping to inform our ideas of our past.

The Future

The Implementation Service continues to assess and advise on finds discovered through dredging activity and reports from nominated contacts are regularly received. We hope to continue implementing the service for EH and the BMAPA, and continue to maintain good communication with wharves and vessels.

[Wessex Archaeology](#) would like to thank the wharf and vessel staff who have diligently reported finds to us and the specialists who have assisted our identification of them.

<https://www.hydro-international.com/content/article/dredged-up-from-the-past>
