British Marine Aggregate Producers Association,
Historic England and The Crown Estate

Marine Aggregate Industry Protocol for the Reporting of Finds of Archaeological Interest

Annual Report to BMAPA 2019–2020

November 2020

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Prepared by

wessex archaeology

Celebrating the 15th Anniversary of the Protocol

for the Reporting of Finds of Archaeological Interest

Protocol background

The Marine Aggregate Industry Archaeological Protocol (the Protocol) is in place to ensure the protection of submerged cultural heritage that may be discovered during marine aggregate industry dredging works.

Prior to a licence being granted to dredge a proposed area, an intensive investigation is undertaken to identify potential archaeological material on the seabed. Using geophysical and geotechnical survey data, and analysis of available records from various sources, archaeologists can identify known and suspected sites of archaeological interest within aggregate extraction regions. The known and protected sites are protected through Archaeological Exclusion Zones (AEZs) to ensure that no harm comes to them through dredging activities. Even after this level of investigation, unidentified sites and especially individual artefacts may still be found within dredged cargoes. In response to this, the Protocol was proposed to define a framework through which archaeological material could be identified, reported, investigated and, crucially, protected. The Protocol ensures that any items of potential heritage importance recovered during aggregate dredging, whether encountered on the seabed, on a dredging vessel, or more commonly, at a wharf after a cargo is landed, can be properly reported, assessed, recorded and archived. In some instances, further mitigation or monitoring may be required.

Wessex Archaeology drafted the Protocol in 2005 on behalf of English Heritage (now Historic England) and the British Marine Aggregate Producers Association (BMAPA).

BMAPA member companies have adopted the scheme voluntarily since 2006, though adherence to the Protocol has become a formal condition of consent for new marine licences and the re-licensing of existing licence areas. The Crown Estate joined BMAPA in 2009 to co-fund the Protocol Implementation Service.

When a find is encountered, it is reported through a Site Champion on the wharf or the vessel to a Nominated Contact who alerts the Implementation Service, which is operated by Wessex Archaeology.

Access

Conditions relating to archaeology are placed on marine licences issued for marine aggregate extraction, which require the results of archaeological investigations to be reported to the relevant bodies.

Once a find is reported to the Protocol Implementation Service, it is researched and compiled into a report. Details of the dredged finds are then sent to:

- the Site Champion who reported it;
- the Nominated Contact;
- Historic England;
- BMAPA;
- The Crown Estate;
- The National Record of the Historic Environment (NRHE); and
- the appropriate local Historic Environment Record (HER).

If considered wreck material, finds are also reported to the Receiver of Wreck in compliance with the *Merchant Shipping Act* 1995 and they ascertain a droit number.

All aircraft material is reported to the Ministry of Defence as it may be protected under the *Protection of Military Remains Act* 1986.

Marine finds were previously reported to the NRHE, however the NRHE is now changing, and will soon become the National Marine Heritage Record (NMHR).

All finds, old and new are also published on the Marine Aggregate Industry Archaeological Protocol Facebook page[1] that was set up in March 2017.

Each annual report also publishes all the finds reported during that reporting year, and they are all available to download[2].

In addition, the discoveries and achievements of the staff involved with the Protocol are acknowledged through various publications produced by Wessex Archaeology, including the biannual *Dredged Up* newsletter, also available to download via the previous link.

1. https://www.facebook.com/marineaggregateindustryarchaeologicalprotocol
2. https://www.wessexarch.co.uk/our-work/marine-aggregate-industry-protocol-reporting-finds-archaeological-interest

Raising awareness

The Protocol Awareness Programme is funded by BMAPA and The Crown Estate and implemented by Wessex Archaeology. Members of the Protocol Implementation Team promote awareness of the Protocol and keep awareness materials up to date as well as visiting several wharves each year to maintain a close relationship with the staff. To have consistency, it is often the same member of the team visiting the wharves where possible. Emails between the Implementation Team and the wharf managers and Site Champions are encouraged throughout the year to keep a consistent flow of communication. Through emails, phone calls and during the visits, questions can be answered, and feedback is gathered so that we can further improve the delivery and content of the Protocol. Awareness is also promoted to the wharves and vessels through the biannual *Dredged Up* newsletter.

The Protocol Awareness Programme:

- delivers in-person training by an archaeologist during awareness visits to wharves, aiding industry staff to identify several different types of archaeological finds through interactive slides as well as the process of reporting and conserving finds of archaeological interest discovered on the wharf. As of 2020, the training also sets out guidelines on what to do if a find is suspected to contain asbestos;
- demonstrates the different types of finds from a range of various ages that can be encountered by allowing wharf staff to handle a collection of finds that were previously been reported through the Protocol;
- produces the biannual *Dredged Up* newsletter which aims to publicise the Protocol and highlight recent finds and news. The newsletter is sent out to each Nominated Contact, wharf and vessel that implements the Protocol. The most recent issue, Issue 27 printed in Autumn 2020, and all previous *Dredged Up* newsletters, can be found online[1]
- raises Protocol awareness amongst third parties, such as geotechnical and environmental survey companies working on behalf of the marine aggregate industry;
- is available to support and train individual Site Champions to ensure that new and existing staff are familiar with the Protocol, either in person, over the telephone or via email;

- as of 2019, produces promotional material in the form of branded photo scale cards and mugs delivered to each wharf and vessel enrolled in the scheme; and
- as of 2019, produces biosecurity awareness material and delivers basic training as an add on to the archaeological awareness training.

Biosecurity poster (top) and booklet (right)

1. http://www.wessexarch.co.uk/projects/marine/bmapa/dredged-up

Visits to wharves

Unfortunately due to Covid-19, no Protocol Awareness Visits have been made this year. However, contact has been maintained through emails, phone calls and social media.

Once it is safe for visits to resume, if you would like to arrange a Protocol Awareness Visit in future, or would like to receive more advice on finds and finds reporting, please contact Wessex Archaeology via protocol@wessexarch.co.uk. Training could also be provided remotely and has been successfully done so in the past should any wharf urgently need any for newcomers. Just get in touch.

The training sessions that take place usually last around 30 minutes to minimise disruption to the work of the wharf and are often split in to two or three sessions so that the wharf can continue working with a rotation of staff. The sessions are designed to be informal and involve an interactive presentation to explain the different ways archaeology can reach the seabed and what to do if it is found in the cargo landed at the wharf. The reporting process is also discussed as there have been instances where a Site Champion of a wharf may prefer to report the material directly to the Protocol Implementation Team rather than going through the Nominated Contact. A member of the Implementation Team brings an array of archaeological finds previously reported through the Protocol that wharf staff can handle and discuss. The training also sets out guidelines on what to do if a find is suspected to contain asbestos and UXO. A member of the Implementation Team also brings handouts, laminated scale sheets and branded photo scale cards. Questions can be asked at any time during the training and a discussion is usually had at the end of the presentation. The handouts are designed to be left at the wharf to enable the Site Champions to induct future new employees for current employees to refresh their memories. The Protocol Implementation Team firmly believe that these visits are key to the success of the scheme as it promotes enthusiasm and resolves issues. As well as delivering the training, the visits allow the Protocol Implementation Team to maintain contact with wharves and vessels, keep the content fresh, boost interest in the Protocol and promote it to both new and existing staff.

All archaeological awareness materials can be accessed through the Protocol pages on Wessex Archaeology's website[1] and are available in English, Dutch and French.

Training certificates are sent out to the Site Champions to give to all wharf staff who receive the awareness training so that they may add them to their working portfolios. These are emailed to each Site Champion or wharf manager after a wharf is visited. Additionally, a feedback form is also handed to the attending wharf staff at the end of each visit (or emailed) in order to gather comments and suggestions so that we can continue to make improvements to Protocol Awareness and the way we deliver the training.

Contact is maintained through regular emails, the Facebook page, the annual report and the *Dredged Up* newsletter.

1. http://www.wessexarch.co.uk/projects/marine/bmapa/docs.html

Reporting process

Archaeological finds discovered by wharf and vessel staff are reported through a Site Champion to the designated Nominated Contact of the company that owns the wharf or vessel. The Nominated Contact uploads the images and preliminary form to the secure online console[1]. In some cases, the Site Champion will report finds directly to the console rather than through the Nominated Contact. The console alerts the Protocol Implementation Service operated by Wessex Archaeology and the find is added to the database before the Receiver of Wreck is notified if the find is classed as wreck material. If classed as wreck material, the Nominated Contact is asked to sign the Receiver of Wreck form, prepared by the Implementation Service, and send it directly to their office. The find is investigated and occasionally sent to external specialists to identify before a report is produced. Most of the reports are presented on an A4 page and will have an image of the object taken with a scale for reference (see reports for 2019–2020 at the back of this report).

The Implementation Team at Wessex Archaeology then communicates directly with the Nominated Contact and/or Site Champion regarding the archaeological importance of the discovery, and conservation and storage recommendations.

It has been positive that despite Covid-19, reporting through the console has still continued.

The Nominated Contacts for each company are detailed below.

BMAPA Company	Nominated Contacts	Position
Britannia Aggregates Ltd	Richard Fifield	Marine Resources Manager
CEMEX UK Marine Ltd	Samantha Ringwood	GIS & Licence Co-ordinator
DEME Building Materials Ltd	Christophe Matton Tom Janssens	Marine Resources Manager General Manager
Hanson Aggregates Marine Ltd	Nigel Griffiths Patrick Mallon	Principal Resources Manager Marine Licensing & Compliance Co-ordinator
Isle of Wight Aggregates	Edward Skinner	Marine Resources Co-ordinator
Kendall Bros Ltd	Paul Stevens	Managing Director
Tarmac Marine	Edward Skinner	Marine Resources Co-ordinator
Volker Dredging Ltd	Will Drake	General Manager

1. http://net.wessexarch.co.uk/bmapa/login.aspx?ReturnUrl=%2fbmapa%2findex.aspx

Purfleet Aggregates staff with tusk (2006)

Hanson_0035 mammoth tusk reported in 2006

Fifteen Years of the Protocol

In 2019–2020, the Protocol celebrated 15 successful years! During this year, 202 individual finds were reported through the Protocol (from 35 reports) including Palaeolithic handaxes, mammoth teeth, munitions, pottery, and a post-medieval jug. These have been added to a database of over 2000 finds reported since the launch of the scheme in 2005.

Without the reporting process, finds from marine sand and gravel would most likely never have entered the archaeological record. Dredgers allow us to access areas of the seabed otherwise physically unexplored, and the vigilance of wharf and vessel staff allows these discoveries to be shared more widely. The reporting procedure laid out in the Protocol is designed to allow users to follow a time-effective process of documenting and reporting finds to the Nominated Contact or Implementation Team at Wessex Archaeology. The team aim to identify and conduct research on the find before producing a short report and sharing the information with marine aggregate industry staff and the named authorities. In the event that the team cannot identify the object, an in-house or external specialist will be contacted to ensure that the utmost is done to provide a background and relative age on the reported find.

Due to Covid-19, we were unable to visit the wharves to give the archaeological awareness training this year, however, communications between some Site Champions and the Implementation team were upheld via email.

The number of reports each year and the ongoing success of the Protocol confirms that it is as relevant now as it was in 2005. The support of the marine aggregate industry has once again been substantial, with the continued high standard of reporting of archaeological finds through the Protocol and the welcome that is received by the awareness staff during wharf visits.

Through the implementation of the Protocol, the marine aggregate industry has demonstrated that this is a cost-effective mitigation option for protecting cultural heritage that is both fragile and finite. The Protocol Awareness Programme trains staff to recognise and report finds of archaeological interest discovered within cargoes without the need of an archaeologist being present. Because of the success of the Protocol, the model has been adapted and implemented for use in several other industries. The Offshore Renewables Protocol for Archaeological Discoveries (ORPAD), having commenced in 2010 is now equally well-established. In addition, 2016 saw a reinterpretation of the Protocol principles for non-industry audiences, with the launch of the Marine Antiquities Scheme (MAS)[2] aimed at encouraging coastal users to report any finds they encounter. Wessex Archaeology also continues to run scheme-specific protocols for other development projects based on the marine aggregate industry model.

Further information about the Protocol and the Protocol Implementation Service is available online[1].

To contact the Protocol Implementation Service, email **protocol@wessexarch.co.uk** or phone **01722 326 867**.

DEME_0957 metal jug found in 2020. Side view showing owner's mark (left) and view revealing the bearded head decoration (right)

1. https://www.wessexarch.co.uk/our-work/marine-aggregate-industry-protocol-reporting-finds-archaeological-interest
2. https://marinefinds.org.uk

Dredged Up newsletter

In 2019–2020, two issues of the biannual *Dredged Up* newsletter were produced; issue 26 and issue 27.

Issue 26 was released online in March 2020 on the Marine Aggregate facebook page as well as all Wessex Archaeology social media platforms, and outlined some of the year's finds as well as publishing the winners of the annual Finds Awards. We also had a look at the new finds that were recently recovered from Area 240 and also highlighted the importance of asbestos awareness. The electronic copies were released on social media platforms and circulated via email. The hard copies were delayed due to Covid-19 and were distributed in August 2020.

Issue 27 was distributed in October 2020 and celebrated the success of the last 15 years by re-visiting old finds awards winners as well as taking a look at the stats on which company has reported the most since 2005 and which Licence Areas in particular they have originated from. The issue also explored some of the other work that Wessex Archaeology's Coastal & Marine team do at some aggregate wharves and why we do this.

The newsletters are distributed to every wharf, all vessels and BMAPA member companies as well as The Crown Estate, Historic England, the Receiver of Wreck and a variety of other organisations, individuals and the general public during conferences and events. A wider audience is reached through a digital copy of the newsletter that is downloadable from the Wessex Archaeology website[1] and relevant social media pages[2] as well as LinkedIn[3].

The newsletters promote the operation of the Protocol to a wide audience and also provide a positive showcase for the industry's activities. They are also an important tool for raising and maintaining awareness and interest by publicising dredged finds and the dredging process.

Newsletter issues 26 and 27

1. https://www.wessexarch.co.uk/our-work/marine-aggregate-industry-protocol-reporting-finds-archaeological-interest
2. https://www.facebook.com/wessexarch and https://www.facebook.com/marineaggregateindustryarchaeologicalprotocol
3. https://www.linkedin.com/company/wessex-archaeology

Training for the Implementation Team

During this year, members of the Implementation Team undertook additional training in asbestos and in the identification of UXO.

All members of the team attended a one day course on the Management of Asbestos with special reference to asbestos content and legislation compliance in military artefacts and vehicles presented by Simon Houghton of Brandon Environmental. As a result of the training, information on asbestos was presented in Issue 26 of *Dredged Up* and the awareness presentation was updated accordingly.

The team also attended Ramora UK's facility in Gosport for two days and all achieved a certificate in UXO Awareness in Marine Archaeology training Level 1 and 2. The knowledge gained from these courses will aid in the awareness training and in the general running of the Protocol as well as understanding some of the procedures that occur at the wharves with regards to ordnance.

Examples of finds that could contain asbestos

CEMEX_0915 aircraft components

CEMEX_0914 aircraft components

Finds Awards

The 2018–2019 Finds Awards were made to the following wharf and vessels, published in Issue 26 of *Dredged Up*.

Best Attitude by a Wharf

In 2018–2019, the winner of the best attitude by a wharf was CEMEX Angerstein Wharf. In May 2019, staff at the wharf discovered a collection of fragmented aircraft material in a cargo dredged from Licence Area 511. As there had been a large turnover of staff at the wharf since the last wharf visit, they were unsure on the procedure of reporting the finds. They got in contact with a member of the Implementation Team at Wessex Archaeology who was able to guide them through the reporting process over the phone. A member of the team gave an awareness visit to the wharf within a week of them contacting us. We would like to thank Angerstein Wharf for making contact when they were unsure what to do and for working with us to educate all the members of staff on the correct reporting methods. Since then, more aircraft and munitions have been successfully reported by the wharf (CEMEX_0914, 0915 and 0920).

CEMEX_0920 munitions

Best Attitude by a Vessel

Two vessels won this award! Congratulations to Tarmac's *City of Westminster* and to Hanson's *Arco Beck*. Thank you to all vessels that has reported finds through the Protocol over the past reporting year.

Tarmac's *City of Westminster* discovered an aircraft propeller blade (Tarmac_0907) in Licence Area 430 in the East Coast dredging region, approximately 28 km east-south-east of Southwold.

This aircraft propeller blade was found by Chaminda Tennekoon in the draghead of the vessel where it was removed to deck and photographed. Images of the find were sent to Steve Vizard, an external aircraft specialist, and to Bob Clarke, an aircraft specialist at Wessex Archaeology. Bob said that metal propeller blades made of aluminium alloy (duralumin) came into production in the late 1930s, mainly in America, with Britain following suit in the 1940s. He said that the hollow hub is characteristic and used for balancing. The curve that can be seen on the propeller blade is distinctive evidence of damage to a rotating prop hitting water. Steve said that it is a British blade from an RAF aircraft and that the configuration of the blade, the way it would be attached to the actual hub unit, at its base, strongly indicates that it is a DeHavilland type prop unit. Unfortunately, this would not tell us the aircraft type, as the DeHavilland propellers were fitted to a variety of different RAF aircraft throughout the Second World War. He said it could, however, be from an early Spitfire, or at least from that period.

Combining all the aircraft material now recovered from Area 430, it would seem that they represent three different aircraft and varied nationalities; with American, German and now a possibly British part having been discovered.

From Hanson's *Arco Beck* Malcolm discovered and reported a vertebra, discovered in Licence Area 240 in the East Coast dredging region approximately 10 km east of Great Yarmouth. Professor Adrian Lister from the Natural History Museum viewed the photos and concluded that this is the second neck vertebra (axis vertebra) of an elephant. Without detailed comparisons, he could not say what species it is, but its size is consistent with woolly mammoth and as it was found in the same deposit as a woolly mammoth tooth (Hanson_0927), that is a probable ID. *Mammuthus primigenius* or woolly mammoth were in existence in Europe during the late Middle and Late Pleistocene, dating from 350,000 to 10,000 thousand years ago.

Tarmac_0907 propeller blade

Best Find

The best find of the 2018–2019 reporting year went to CEMEX_0908; a submarine pyrotechnic discovered in Licence Area 137 in the South Coast dredging region, approximately 10 km south of the Needles. Michael Pettitt, Tim Bethune and Mark Nichols discovered it at Shoreham Wharf.

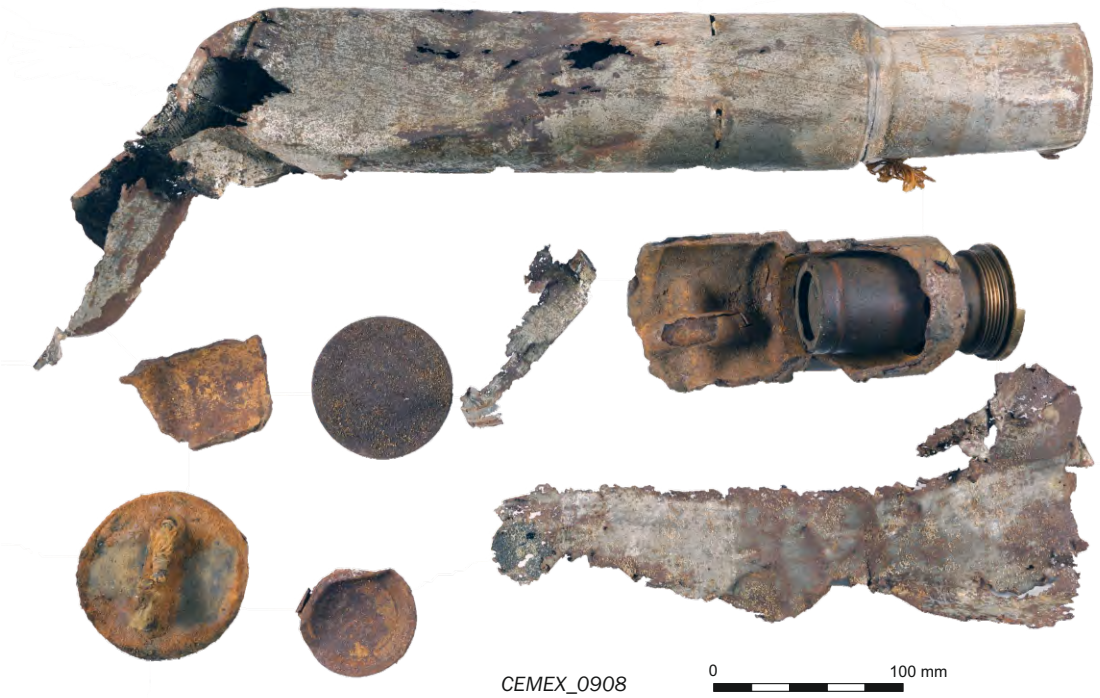
The first element of this find is a broken metal cylindrical tube that measures 820 mm long and 70 mm wide that appears to be made of aluminium with an associated brass mechanism, inscribed with 'Ejector No. 2 MK I/L II MB/44' as well as the Navy Broad arrow. Wire and a series of electrical components are also visible. The second component of this find is a canvas parachute that, despite a few holes, was complete with the remains of the string that would have held it to its origin. Images were sent to our in-house specialists Alistair Byford-Bates, Bob Davis and Bob Clarke. Alistair and Bob Davis both said that it looked 'percussive' and suggested that both finds were connected.

After research, it has been suggested that this find is an example of a Submarine Emergency Identification Signal, Star, Mk 2 Mod 2 or Mk 3 Mod 0. They were for use exclusively with the submarine signal ejector and were ejected by compressed air. On rising to the surface of the water, Submarine Emergency Identification Signals Mk 2 Mod 2 and Mk 3 Mod 0 project a Single Star Grenade Mk 5 to a height of 250 feet (76 m), where a parachute would open to support the star, which would burn for approximately 13 seconds. The complete signal was available in one of three colours, red, green or yellow and should not have been ejected at depths greater than 160 feet (79 m), as the time required to reach the surface was limited to the 27 seconds allowed by the fuse. They consisted of a buoyant tube of aluminium 18.5 inches (470 mm) long and three inches (76 mm) in diameter, which contained the Single-Star Grenade Mk 5 Mod 0. Early issues of Submarine Emergency Identification Signal Mk 2 Mod 2 contained either Smoke Grenade Mk 3, for day use, or Three-Star Grenade Mk 4, for night operation.

Bob Clarke had a different idea for the find. He said it looks more like a 2-inch UP (unrotated projectile) Anti-Aircraft Rocket which were successfully deployed in the anti-aircraft Z Batteries, operated by the Home Guard. He said the chute looks to be 5 feet (1.5 m) based on the images, which unfortunately is a standard size and therefore cannot be identified further. He said it may not be associated with the other find.

CEMEX_0908 canvas parachute

This item is believed to date to the Second World War, where it may have been deployed as a flare from a submarine. It is not possible to confirm whether both finds are associated with each other at this time although it is believed to be the case.



CEMEX_0908

CEMEX_0964 brass weight

Hanson_0936_001 hand axe

Protocol reports

During the 15th year of operation, Wessex Archaeology received 35 reports through the Protocol Implementation Service. These reports encompassed details of 202 separate finds. Further details of each discovery are shown below and included in the wharf reports appended to this report.

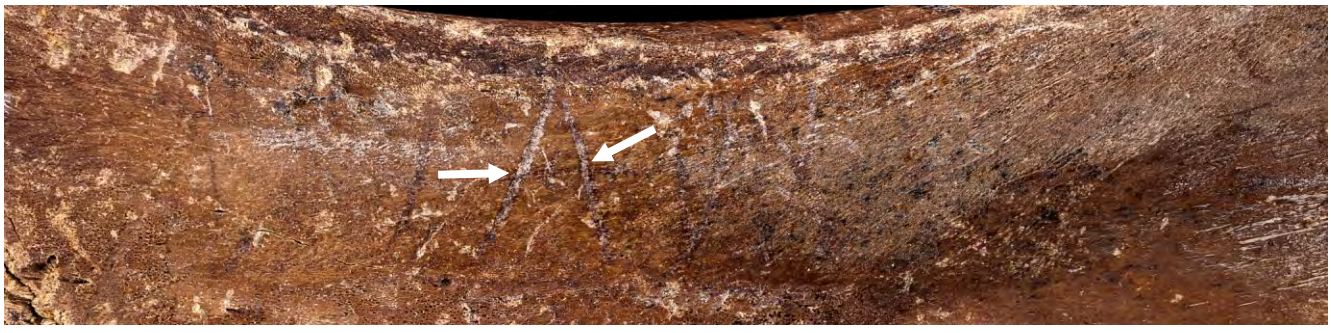
Finds reported in 2019–2020

Report ID	Licence Area	Region	Wharf/Vessel	Description	No.
DEME_0932	351	South Coast	Vessel	Large munition	1
CEMEX_0933	137	South Coast	Wharf	Hook	1
CEMEX_0934	340	South Coast	Wharf	Two plastic tubes	2
Hanson_0935	240	East Coast	Vessel	Mammoth tooth	1
Hanson_0936	240	East Coast	Wharf	Collection of flints	3
Hanson_0937	240	East Coast	Wharf	Collection of bones	26
Hanson_0938	240	East Coast	Wharf	Collection of flints	27
Hanson_0939	240	East Coast	Wharf	Collection of bones	85
Hanson_0940	240	East Coast	Wharf	Shell casing	1
Hanson_0941	240	East Coast	Wharf	Pottery sherd	1
Hanson_0943	240	East Coast	Vessel	Hook	1
CEMEX_0944	340	South Coast	Wharf	Bullets	4
CEMEX_0945	340	South Coast	Wharf	Munition	1
CEMEX_0946	340	South Coast	Wharf	Munitions	4
CEMEX_0947	340	South Coast	Wharf	Munition	1
CEMEX_0948	511 or 512	East Coast	Wharf	Collection of bones and aircraft pieces	8
CEMEX_0951 & CEMEX_0952	460 or 512	East English Channel or East Coast	Wharf	Collection of bones	4
Hanson_0953	401/2	East Coast	Wharf	Metal finds including pipe cover and gasket	6
Hanson_0954	240	East Coast	Wharf	Three bullets	3
Hanson_0955	240	East Coast	Vessel	Bone	1
CEMEX_0956	137	South Coast	Wharf	Munition	1
DEME_0957	340	South Coast	Wharf	Jug	1
Hanson_0958	240	East Coast	Wharf	Two animal bones	2
Hanson_0959	401/2	East Coast	Wharf	Two shells	2
Hanson_0960	401/2	East Coast	Wharf	Two bullets	2
DEME_0961	351	South Coast	Vessel	Large munition	1
CEMEX_0962	137	South Coast	Wharf	Possible flare casing	1
CEMEX_0964	460 or 512	East English Channel or East Coast	Wharf	Brass weight	1
Hanson_0965	401/2	East Coast	Wharf	Shell casing	1
Hanson_0966	401/2	East Coast	Wharf	Shell casing	1
Hanson_0967	401/2	East Coast	Wharf	Bullet	1
CEMEX_0968	137	South Coast	Wharf	Pottery sherd	1
Hanson_0969	240	East Coast	Vessel	Tusk fragment	1
Hanson_0970	240	East Coast	Vessel	Mammoth bone	1
CEMEX_0971	514/1	Humber	Vessel	Metal debris	4

Specialists

If a new find cannot be successfully identified by a member of the Protocol Implementation Service team at Wessex Archaeology, or if more information is needed, experts both in-house and from external companies and organisations are consulted. Since the implementation of the Protocol in 2005, the collection of willing and valuable experts we consult has grown to include a range of fields. The table below provides a list of the specialists who gave advice during the 2019–2020 reporting year. Specialists that we have contacted in the past but not during this operational year are still included in Wessex Archaeology's internal lists but have been omitted from the table below. We are extremely grateful to all the specialists who have assisted in the identification of Protocol finds over the last 15 years.

Expert	Advice given concerning	Institution/Organisation
Euan McNeil	Maritime artefacts	Wessex Archaeology
Alistair Byford-Bates	Maritime artefacts	Wessex Archaeology
Graham Scott	Maritime artefacts	Wessex Archaeology
Paolo Croce	Maritime artefacts	Wessex Archaeology
Phil Andrews	Terrestrial artefacts	Wessex Archaeology
Lorrain Higbee	Zooarchaeology	Wessex Archaeology
Phil Harding	Flint artefacts	Wessex Archaeology
Lorraine Mepham	Pottery	Wessex Archaeology
Rachael Seager Smith	Pottery	Wessex Archaeology
Dr Adrian Lister	Mammoth remains	Natural History Museum
Simon Parfitt	Animal bones	Natural History Museum
Dr Silvia Bello	Cut marks on bone	Natural History Museum
Anthony Mansfield	Mechanics and engineering	Senior Naval Engineer
Trevor Parker	Ordnance	Ordnance Society
Steve Vizard	Aircraft	Airframe Assemblies



Teeth marks on Hanson_0937_001 scapula bone identified by Dr Silvia Bello (above). See Case Study 2 for more details

LTM_0581
antique dive regulator

UMD_0062 rudder pedal from aircraft

Britannia_0228 ship's badge for HMS Cavendish

Hanson_0171 sherd of Roman samian ware

Tarmac_0320 ship's log

Case Study 1 – Looking back at Fifteen Years of Protocol

To celebrate 15 successful years of the Protocol, we thought it would be interesting to look back at previous finds and analyse the statistics. We looked at how many finds each company has reported since 2005 up to 30 September 2020. This provides an update on the data presented in *Dredged Up* issue 27. By looking at the table below, it may seem that CEMEX were the winners; however, over the years Tarmac has had many names including Lafartarm, Lafarge and LTM therefore, they are the clear winners with a total of 528 finds.

Over the last 15 years, we've had **2081** finds, which is very impressive! Without the dredging industry, these finds would not have been discovered so we would like to send a big thank you to every single one of you who contribute to the Protocol. We've had some very special finds over the years, some of which are featured on this page representing all eras of history.

Company	Number of finds	Number of reports
Tarmac	413	274
Cemex	515	153
LTM	102	84
Hanson	444	131
UMA	429	88
UMD	78	74
Britannia	28	24
Pre-protocol	16	13
Brett	16	13
Lafartarm	12	7
Kendalls	11	11
Deme	8	8
Clubbs	5	5
WARG	3	1
Lafarge	1	1
Total	**2081**	**887**

Which areas had the most/least

The table on the next page shows a breakdown of where finds have originated from in the last 15 years. Some areas have changed their location, shape and size over the years but the map on the next page is true as of 2020.

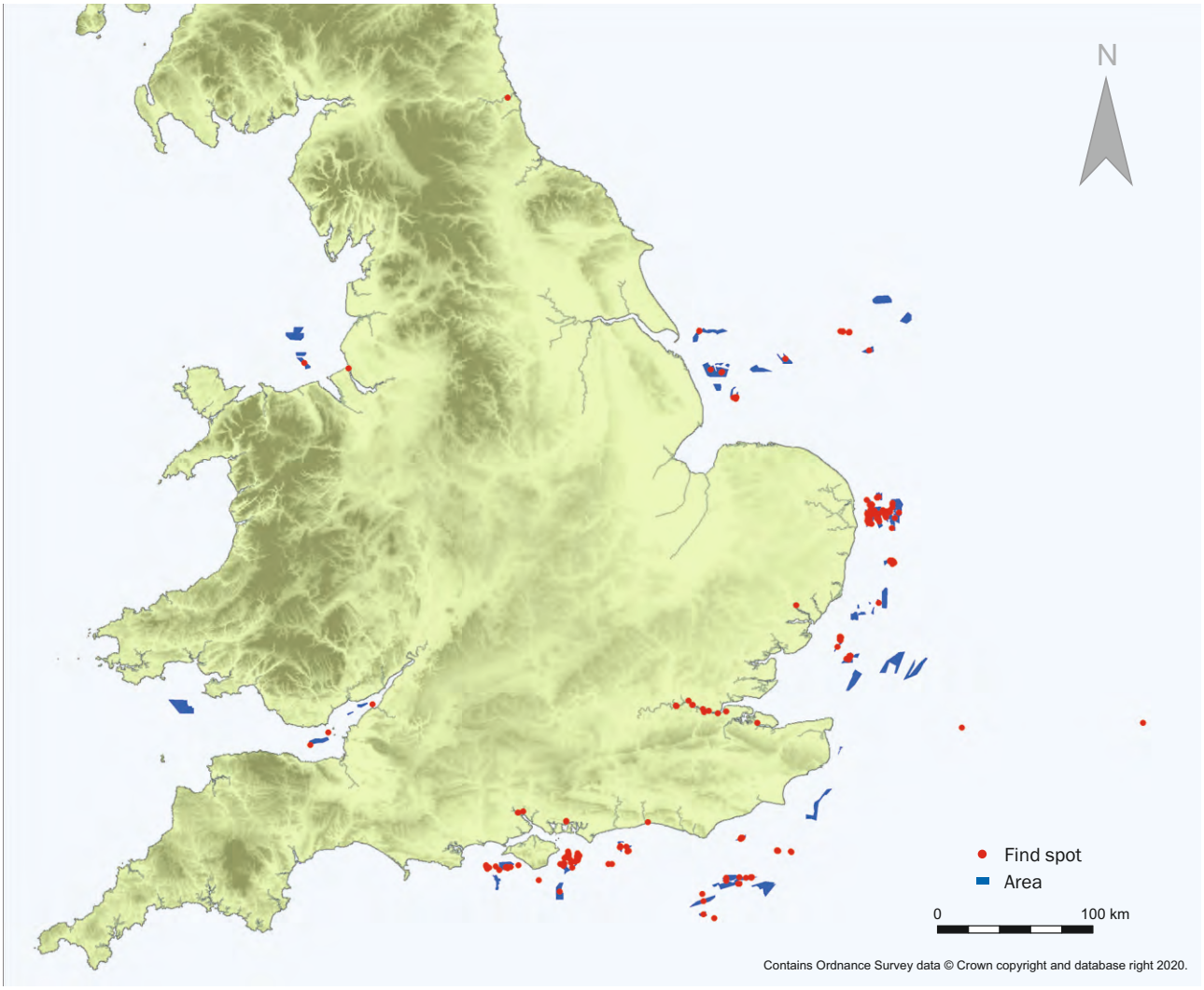
From the table it appears that areas 430, 360 and 240 have the highest number of reported finds since 2005, although no one area is more important than another.

Area 430 has produced several pieces of aircraft wreckage including engine components, structural elements and internal fittings, probably from a Junkers Ju 88. Several other undiagnostic pieces of riveted aluminium and a saddle magazine with ammunition from a German MG 15 machine gun has also been reported from the area.

Waterlogged and mineralised wood (250 pieces) from an eroding peat layer were reported from Area 360 along with mineralised bone, fragments of deer antler and bone, a fragment of worked flint, a mammoth tooth, and an elephant, or possibly mammoth, atlas vertebra.

Area 240 is famous for producing Palaeolithic material including handaxes, worked flints and a large quantity of animal bones and teeth belonging to a variety of animals including woolly mammoth and woolly rhino (see Case Study 2).

CEMEX_0207 relish pot



Distribution of find spots and areas covering 15 years of the Protocol

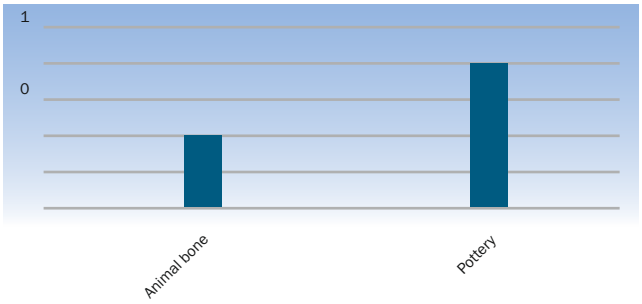
Region	Licence Area	Finds
Belgium	758	3
East Coast	202	1
East Coast	228	6
East Coast	240	327
East Coast	242	14
East Coast	251	12
East Coast	254	25
East Coast	296	19
East Coast	319	24
East Coast	328/1	1
East Coast	328A	1
East Coast	360	277
East Coast	361	15
East Coast	401/2	14
East Coast	401/2B	1
East Coast	430	338
East Coast	511	50
East Coast	512	6
East Coast	513/2	1
East English Channel	458	15
East English Channel	460	22
East English Channel	461	9
East English Channel	473	7
East English Channel	474	3
East English Channel	478	1
Humber	102	1
Humber	106/3	3
Humber	106C	4
Humber	107	10
Humber	197	1
Humber	408	5
Humber	484	1
Humber	514/1	5

continues right

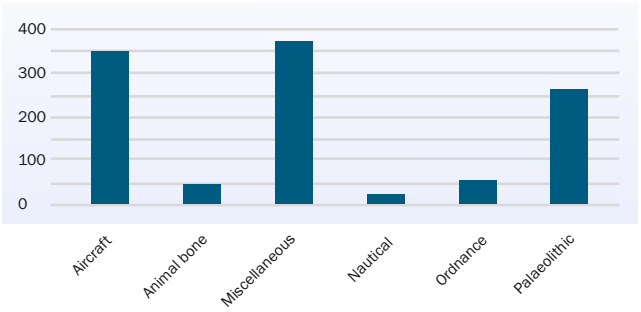
Region	Licence Area	Finds
N/A	Mixed	69
N/A	Unknown	114
N/A	N/A	1
North West	175/2	2
North West	392	2
South Coast	122/1A	4
South Coast	122/3	90
South Coast	122/3C	3
South Coast	123G	1
South Coast	124/1A	3
South Coast	127	158
South Coast	137	26
South Coast	340	40
South Coast	351	96
South Coast	372	1
South Coast	372/1	23
South Coast	395	2
South Coast	395/1	156
South Coast	395/2	2
South Coast	396	7
South Coast	396/1	3
South Coast	407	1
South Coast	451	4
South Coast	500/3	2
South West	377	1
South West	391	1
South West	472	2
Thames Estuary	509/2	5
Thames Estuary	509/3	2
Thames Estuary	510/1	2
Thames Estuary	113/1	8
Thames Estuary	447	23
Thames Estuary	498	5
	Total	**2081**

Summary of discovered objects by Region

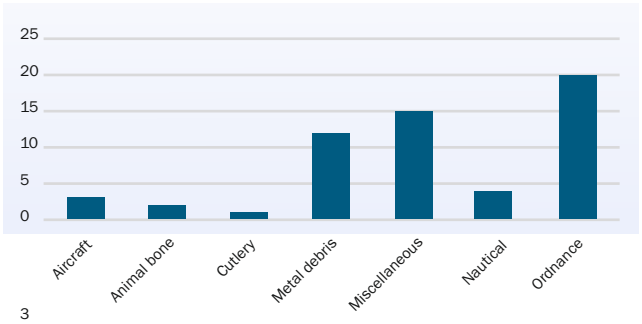
Belgium



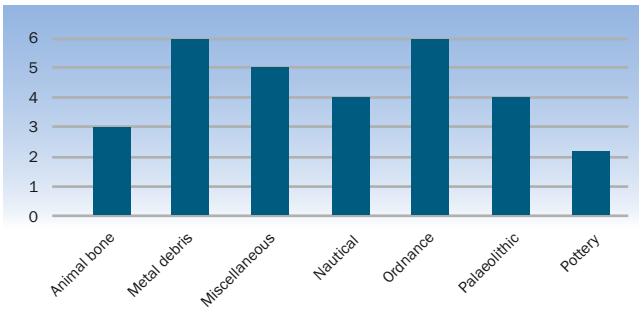
East Coast



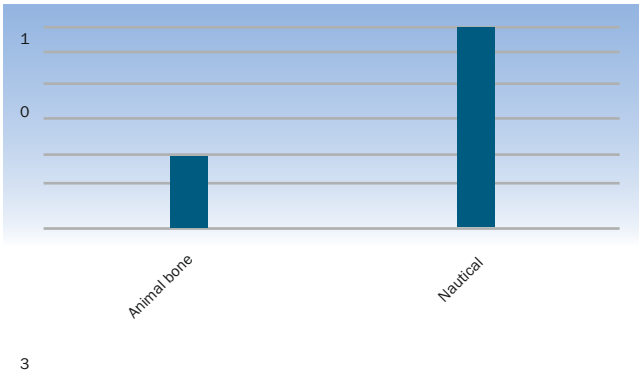
East English Channel



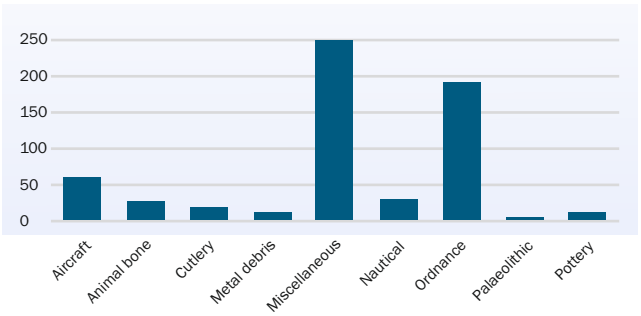
Humber



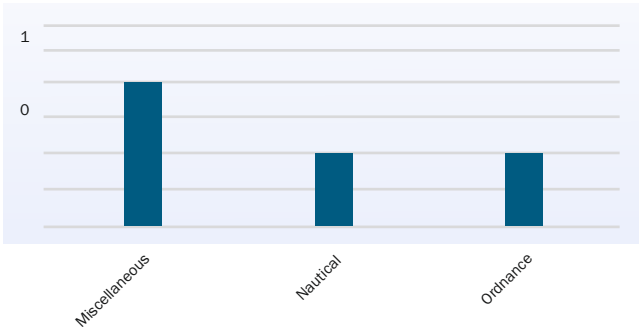
North West



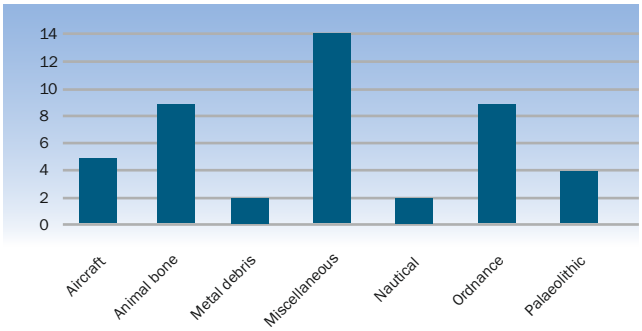
South Coast



South West



Thames Estuary



Case Study 2 – Dagenham Wharf

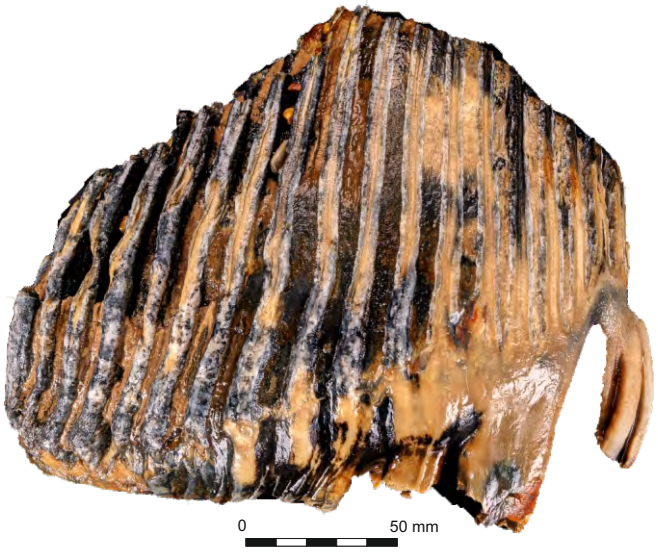
As well as the Marine Aggregate Industry Archaeological Protocol awareness visits, we also visit CEMEX Northfleet and Hanson Frindsbury Wharves a few times a year to carry out a programme of two-day archaeological operational sampling. This involves the assessment of oversize cargo at the receiving wharf by a team of two or three archaeologists.

Operational sampling was implemented as a result of the discovery, in 2007/2008, of Palaeolithic artefacts including handaxes, flakes and cores, as well as a series of prehistoric animal bones, by Mr Jan Meulmeester in stockpiles of gravel at SBV Flushing Wharf, Netherlands and reported through the Protocol. The finds were recovered from aggregate dredged from Licence Area 240, off the east coast and subsequently published by Wessex Archaeology as a monograph (Tizzard *et al.* 2015).

These discoveries from Licence Area 240 were of national significance, and they were found to meet several of the criteria set out in *Identifying and Protecting Palaeolithic Remains* (English Heritage 1998) in relation to whether Palaeolithic remains have particular importance. The high quality of the finds being discovered suggested that: they were in an undisturbed, primary context; the remains belong to a period and geographic area where evidence of human presence was particularly rare or was previously unknown; there are well-preserved indicators of the contemporary environment (ie: floral, faunal, sedimentological); and one deposit containing Palaeolithic remains has a clear stratigraphic relationship with another. In addition, Historic England's *Sites of Early Human Activity: Scheduling Selection Guide* (Historic England 2018) notes that the discoveries from Licence Area 240 are comparable to the prehistoric sites of Boxgrove and Happisburgh, where rare *in situ* deposits were discovered, dating to over 800,000 BP (Parfitt 2010; Lewis *et al.* 2019).

Hanson Dagenham Site Champion, Aaron Chidgey with his finds

In September 2019, during the dredging and processing of cargo from a new lane in Area 240, lane F10, three megafaunal finds were reported by *Arco Beck* and Dagenham Wharf; Hanson_0927 a single lamella (enamel plate) of an upper molar of a woolly mammoth, Hanson_0929 a second neck vertebra of an elephant, likely woolly mammoth, and



Hanson_0935 mammoth tooth from Area 240

Hanson_0931 a section of tusk. In early November 2019, a large mammoth tooth (Hanson_0935) was discovered on board *Arco Avon* from the same area. Professor Adrian Lister from the Natural History Museum concluded that this was a virtually complete 3rd (last) molar of a woolly mammoth aged about 35 years old. He said the top edge of the molar is extremely worn, whereas the roots are in pristine condition indicating that the roots were protected by being buried in the skull until recently.

Further reports were made to us from Dagenham Wharf of several worked flint tools and animal bones, one of which displayed unusual cut marks thought perhaps to be evidence of butchery marks (Hanson_0937_001). Thanks to the rapid reporting of finds by vessel and wharf staff, and early recognition of their probable importance, it was possible to plan an operational sampling visit for the following week to assess the remaining cargo.

The oversized material was transported via a mechanical shovel by an appointed machine driver to a concrete slab a short distance away and spread. Two archaeologists from Wessex Archaeology and one from Historic England along with three staff members from Hanson visually inspected the cargo for any archaeological material.

Once lane F10 had been identified as producing significant material, an archaeological exclusion zone was placed around the lane and dredging ceased to minimise disturbance to the area and other potential finds.

In total, 30 flint artefacts (Hanson_0936 and Hanson_0938) and 111 animal bones (Hanson_0937 and Hanson_0939) were recovered from the cargo prior to and during the monitoring works. Although artefacts from operational sampling visits are usually reported on separately, in this case, the finds were reported through the Protocol to ensure the entire assemblage of 144 artefacts could be recorded together.

One of the bones (below) was identified by Hanson's own Aaron Chidgey as having unusual markings, initially considered to be possible butchery marks.

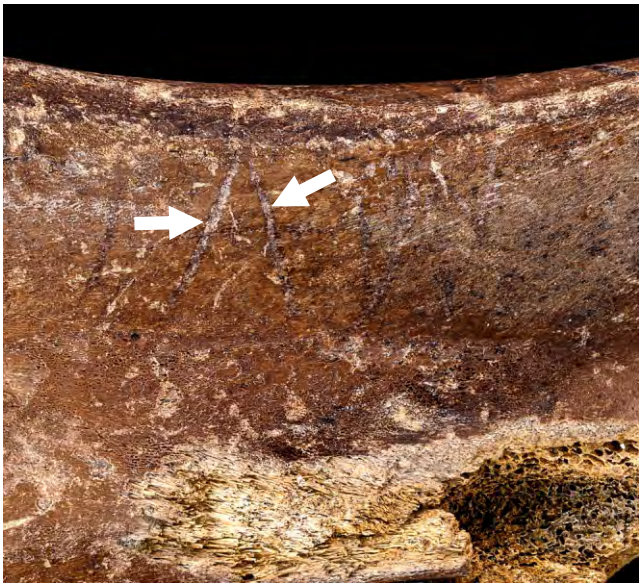
All the finds were bagged during the visit and transported back to Wessex Archaeology's Salisbury office where each individual item was given a unique ID number, washed by the finds team and photographed before being analysed by our in-house specialists.

Phil Harding, in-house flint expert, analysed all the flints and determined that there were five handaxes dated to the Middle Palaeolithic as well as 18 flakes, two possible flakes, a flint blade, a core, and three natural flints that showed signs of thermal fraction (Hanson_0938).

New bay at Dagenham Wharf for isolating Area 240 cargoes

Hanson_0937_001 Woolly Rhino scapula (shoulder blade)

Hanson_0938_001 hand axe from Area 240



Teeth marks on Hanson_0937_001 scapula bone

Detail of fine butchery marks on an animal bone from Boxgrove

Lorrain Higbee examined all the animal bones (Hanson_0937 and Hanson_0939) and reported that most of the bones belonged to mammoth but also included deer, aurochs, cattle, horse and undiagnostic large mammals. The bone with potential butchery marks (Hanson_0937_001) was taken to the Natural History Museum to be inspected by animal bone expert Simon Parfitt and marking specialist Dr Silvia Bello in order to confirm what the marks were as well as the species it belonged to. Simon instantly identified the bone as a rhino scapula. Silvia analysed the bone under the microscope and determined that the bone was not butchered/modified by humans but had been chewed by animals, possibly hyenas.

For comparison, the Protocol Implementation Team were shown other rhino scapulae from the Natural History Museum's collection; one from the site of Kent's Cavern that had been similarly chewed by hyenas and one from Boxgrove that had actually been butchered by hominins. The butchery marks on the Boxgrove bone (pictured) are so fine, they look like they have been done with a needle, showing how sharp a handaxe can be! The chewing marks appear much thicker. It is important that any future bones found on any aggregate vessel or at any wharf is examined for any visible markings that may add to its archaeological value.

The analyses of the finds were included in a report produced by Wessex Archaeology and sent to Hanson and Historic England that outlined the importance of the finds discovered and gave suggestions as to the potential of the new dredging lanes within the exclusion zone.

A big thank you to all those who helped with the monitoring work, and a special thank you to Dagenham employee Aaron Chidgey who discovered several finds including handaxes and the possible butchered bone, as well as being a valuable asset to the archaeologists during their time there.

It was an honour to be able to return some of the finds to Dagenham Wharf in September 2020 where a finds cabinet has been purchased to showcase their finds. The finds were consolidated and boxed at Wessex Archaeology which will hopefully enable them to be admired for many years.

New display cabinet at Dagenham showcasing Area 240 finds

Liaison and accessibility

Details of each discovery have been sent to:

Mark Russell	British Marine Aggregate Producers Association
Stuart Churchley	Historic England, Marine Planner
Neil Guiden	Historic England, National Record of the Historic Environment
Andrew Cameron	The Crown Estate
Nick Everington	The Crown Estate
Mark Wrigley	The Crown Estate

Details of discoveries regarded as wreck under the *Merchant Shipping Act* 1995 have been forwarded to the Receiver of Wreck, Camilla Moore. In 2019–2020 the following reports that have droit numbers were deemed to represent items of wreck:

Report ID	Droit number
DEME_0932	231/19
CEMEX_0933	237/19
CEMEX_0934	243/19
Hanson_0940	262/19
Hanson_0941	263/19
Hanson_0943	265/19
CEMEX_0944	015/20
CEMEX_0945	016/20
CEMEX_0946	018/20
CEMEX_0947	019/20
CEMEX_0948	026/20
Hanson_0953	025/20
Hanson_0954	030/20
CEMEX_0956	039/20
DEME_0957	040/20
Hanson_0959	047/20
Hanson_0960	048/20
DEME_0961	049/20
CEMEX_0962	056/20
CEMEX_0964	057/20
Hanson_0965	054/20
Hanson_0966	055/20
Hanson_0967	073/20
CEMEX_0968	121/20
CEMEX_0971	148/20

In the fifteenth year of the Protocol, one discovery was made relating to aircraft (CEMEX_0948).

Although the Protocol received a number of reports of artefacts which may relate to vessels as wreck material, none of them was thought to directly relate to unknown and uncharted wreck sites. Consequently, no reports were forwarded to the United Kingdom Hydrographic Office in the 2019–2020 reporting year.

Information on each find has been forwarded to each county HER relevant to the location of the archaeological discovery. In the case of a discovery where the original location is known, this will be the HER closest to the dredging licence area. Discoveries made at wharves where the licence area is unknown are reported to the HER nearest to the wharf.

Further details of liaison and the dissemination of data to interested parties are included in the wharf reports appended to this report.

Discussion

Covid-19

Despite the Covid-19 pandemic, the number of reports has remained relatively consistent this reporting year. The distribution of *Dredged Up* Issue 26 was affected by the pandemic as the delivery of the newsletter from the printers overlapped with uncertainties as to presence of staff at wharves, whether physical copies of newsletters could be left out and shared between staff, and members of the Implementation Team working from home. Wharf visits that normally take place between April and August were also affected due to non-essential travel and social distancing rules. We aim to visit 10 wharves a year and this year we were unable to visit any to deliver awareness training. The Implementation Team did visit two wharves to conduct Operational Sampling which is separate from the Protocol.

Importance

Thirty five individual reports were raised during the 2019–2020 reporting year, although less than the number of reports last year and less than the Protocol Implementation Service's expectation of around 50 reports a year, the reports comprised 202 individual finds, and therefore over doubled the 96 finds reported in the 2018-2019 reporting year..

Shoreham Wharf staff

CEMEX_0968 pottery sherd

The finds reported through the Protocol this year represent a diverse range of periods, emphasising that the awareness training is successful in providing background information from all periods. The majority of the finds were Middle Palaeolithic in date (Hanson_0938: Assemblage of Worked Flints) and they ranged through to the modern period (Hanson_0954: Bullets). The various archaeological material and the amount that is still reported reiterates the importance of the Protocol and demonstrates the wealth of archaeological material still on the seabed. Investigations into these finds expand our knowledge of the past and contribute to our understanding.

Success

Hanson Dagenham have bought a display case to house the finds discovered at the wharf from Area 240 which illustrates their enthusiasm for the finds. Aaron Chidgey, who discovered most of the finds, voluntarily became the Site Champion at the wharf as of November 2019 and has continued to do great work there.

New contacts

Being updated with the most recent contacts for each company has ensured that we are able to keep in touch and request data from the correct people. This has helped the Implementation Team get the latest information such as trackplots and the news of a vessel retirement.

Timely reporting

The Receiver of Wreck must be notified of any wreck-related material within 28 days of it being removed from the seabed. Wreck-related finds include any artefacts that have come from a ship or aircraft. The reporting time limit is a legal requirement of the *Merchant Shipping Act* 1995 that exists regardless of the presence of a Protocol, and this is why the Protocol Implementation Team will urge all finds to be reported through the console as soon as they are found. It is vitally important that any material discovered at the wharves or on vessels be reported to the Protocol Implementation Team as soon as possible. In addition to complying with legislative requirements, timely reporting can lead to important success stories, such as the discovery of a significant assemblage of Palaeolithic finds from Licence Area 240 this year (as discussed in Case Study 2). This would not have been possible without prompt reporting, as the rest of the cargo would no longer have been available for Operational Sampling and archaeological assessment.

There have been instances in the past where recovered material accumulates over time before being reported as a batch at a later date, most likely due to how busy the Nominated Contacts are in their daily roles. The longer the items are kept without being reported, the more detail is lost. We therefore ask that all material is reported in a timely fashion. The Protocol Implementation Team will notify the Receiver of Wreck with the positional details of the find as soon as possible and will follow up with additional information as the find is assessed and a Wharf Report will be produced.

Recently, the reporting of finds has occurred soon after the items are discovered which is a big improvement.

Angerstein Wharf staff

Key issues

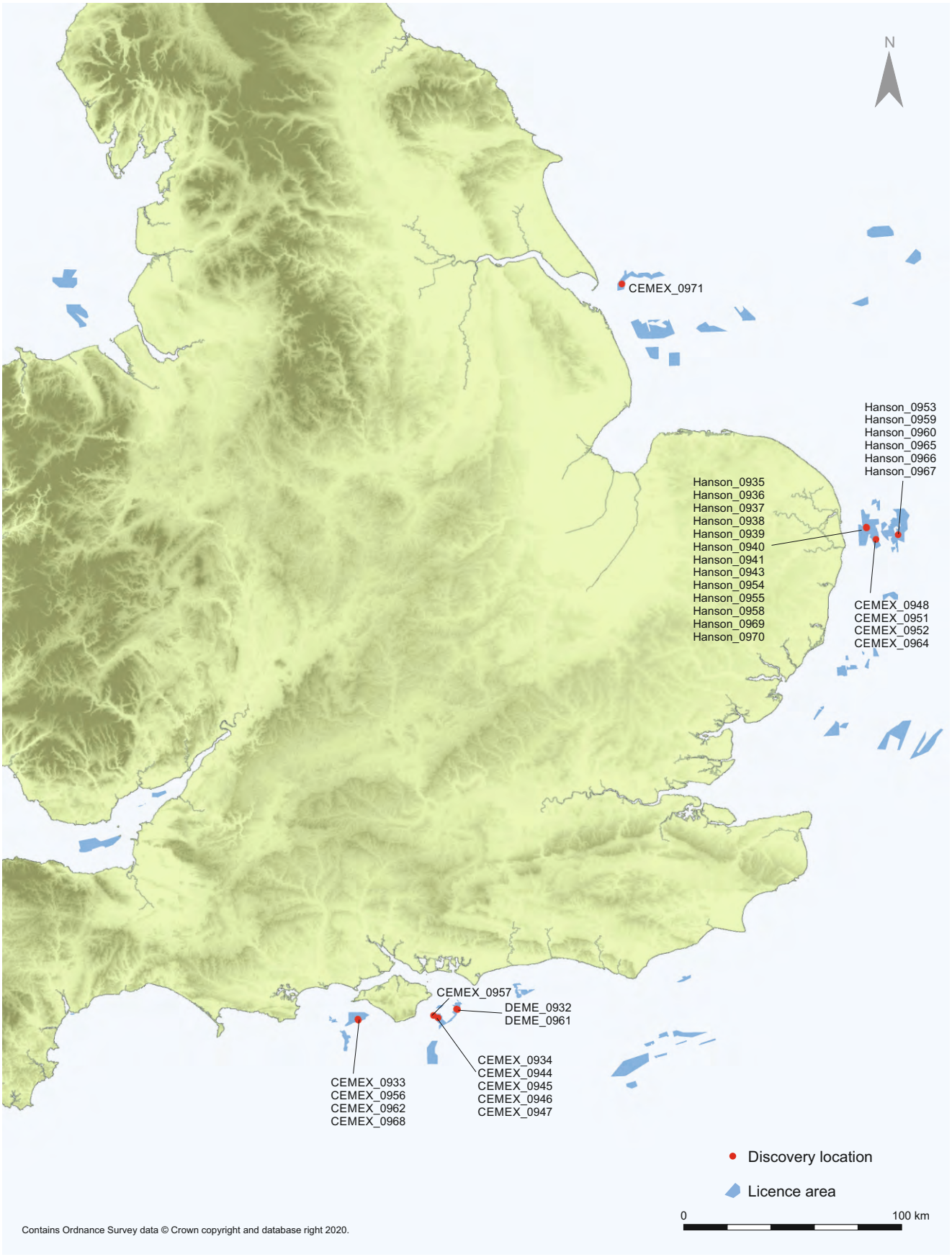
The Protocol has not been rewritten since its inception and has only had minor addendums appended to it relating to the handling of specific finds, demonstrating the robustness and effectiveness of the scheme. During each year of Protocol implementation, minor operational situations are recognised, and the Protocol Implementation Service develops and adapts to overcome these. This year the following points have been raised for discussion.

- *Companies with nil return*
  It is unfortunate that no finds have been reported from Tarmac during the 2019–2020 reporting year, despite emails between the Implementation Team and the Nominated Contact enquiring whether any finds had been discovered. In previous years, Tarmac have reported the most finds and therefore it is unusual not to have any finds reported.

- *Less use of the console*
  There has been a decrease in the number of finds reported through the console. Alternatively, Nominated Contacts or wharves are emailing protocol@wessexarch.co.uk with their finds and a member of the Implementation Team will upload the information to the console on their behalf. There are some issues with this as it is felt information can be lost if only images are sent to the email address, however, those who report this way have started including the key details needed. If not, the sender is contacted with a preliminary discoveries form that requests details such as which Licence Area the artefact was dredged from, the date it was dredged and who found the object.

- *Regions with nil return*
  This year, there were no reports of finds among material dredged from the Thames Estuary, North West or South West regions.

Discoveries 2019–2020



Artefact patterns and distribution

Through the use of a Geographic Information System or GIS (ArcMap 10.6), patterns and trends such as artefact discovery location and concentration can be studied. During the reporting process, the Site Champions or Nominated Contacts are asked to give the licence area number of the object, if known or even the dredging vessel trackplot, if available. Patterns in artefact concentration can potentially identify sites of archaeological interest or debris fields or alternatively, licence areas which are more likely to yield finds of archaeological interest in the future. When a large concentration is discovered from one area, it is useful to look back at previous years to compare what that particular licence area has yielded in the past.

Archaeological Exclusion Zones (AEZs) are positioned around areas of significant archaeological material and it is prohibited for dredging vessels to enter these areas. All AEZs located within Licence Areas are included within the GIS, which is useful when plotting finds of a contentious nature to note the distance of discovery from a previous AEZ as tides are able to move lighter objects from within these zones. The GIS is updated any time a new AEZ is put into place which occurred in November 2019 (Case Study 2).

Archaeological material is not distributed evenly on the seabed. Some areas have a higher potential than others to contain material that entered the archaeological record either accidentally or deliberately. Some areas, such as the East Coast, are known to have had Palaeolithic activity when sea levels were lower than the present day. Other areas are known to be post-Second World War dumping grounds which has become apparent from artefact type and quantity in that area. We also know which licence areas tend to yield more munitions and should be approached with caution.

The kind of vessel used to dredge the seabed material may also play a role in the quantity of archaeological material recovered. Third party contract dredgers are larger and more powerful, therefore they usually cut deeper into the seabed while dredging. This may result in more material being discovered in the cargo which is why information of the delivering vessel is requested.

The survival of artefacts will depend on the marine environment in which they lie. Many of the finds reported this year, in contrast to previous years, were Palaeolithic in date. As in previous years, there were also several modern finds reported, made of metal which tends to be a more durable material in a harsh underwater environment in comparison to organic finds. Finds such as wood or bone and teeth from submerged prehistoric landscapes or shipwrecks may be poorly preserved unless they are buried beneath fine grained sediments, which may account for the generally low percentage of finds received of this material. The high number of artefacts of this type discovered this year may be due to the discovery of an *in situ* site that has been buried for thousands of years and that has not previously been exposed by dredging (see Case Study 2). For finds to be discovered, the high potential for loss or discard must coincide with a high potential for the preservation of archaeological materials.

Based on potential and survival, some licence areas will therefore contain more archaeological finds than others and may be associated with more specific time periods than others. Other factors, such as whether finds are discovered in isolation or grouped with similar items, also add to their context. In most cases, objects are reported as single isolated finds, but we do occasionally receive reports of multiple items found in the same location; this year aircraft material and munitions being prime examples. The significance of a find can therefore depend on its location as much as the nature of object in itself.

Distribution of artefacts by dredging region

There are seven dredging regions around the UK:

- Humber
- Thames Estuary
- South Coast
- East Coast
- East English Channel
- South West
- North West

In the 2018–2019 reporting protocol year a trend established as in previous years whereby most of the finds come from the South Coast. However, this year, 20 out of the 35 reports came from the East Coast.

Twelve of this year's 35 reports came from the South Coast and one from the Humber region. Two reports came from a mixed cargo that may have come from the East Coast or the East English Channel, therefore they are documented as being from an unknown region.

No reports were received from cargoes dredged from the North West, South West or Thames Estuary.

Region	Millions of tonnes of construction aggregate dredged in 2019 (2018 quantity)	Number of finds reported in 2019–2020 (2018–2019 number)
Humber	3.48 (2.78)	4 (1)
East Coast	4 (4.24)	174 (32)
Thames Estuary	1.3 (1.75)	0 (0)
East English Channel	4.3 (4.08)	0 (7)
South Coast	3.3 (3.44)	19 (53)
South West	1.37 (1.24)	0 (0)
North West	0.23 (0.29)	0 (0)
Unknown	–	5 (3)
Totals		**202 (96)**

Table source: https://bmapa.org/documents/BMAPA_CE_22nd_Ann_Rep_2019.pdf

Distribution of artefacts by archaeological typology

Palaeolithic finds

During the 2019–2020 reporting year, the majority of the finds were determined to be Palaeolithic in date (Hanson_0936, Hanson_0937, Hanson_0938 and Hanson_0939), with most originating from Area 240 which has produced previous finds of this date. Most of these finds were discovered through a programme of Operational Sampling (Case Study 2) that was initiated through finds being reported through the Protocol.

Medieval artefacts

No medieval artefacts were discovered this year, although two are believed to be from the post-medieval period (DEME_0957: Jug) and (Hanson_0941: Pottery Sherd).

Maritime artefacts

Most of the finds reported this year are believed to be terrestrial while one is thought to relate to a boat or ship. This report was made up of metal finds including a pipe cover and gasket (Hanson_0953).

Hanson_0953 is not thought to be related to a wreck site, but is an isolated discovery. It could have been lost overboard, purposely dumped at sea, or moved along the seabed from a wreck site elsewhere.

Aircraft

One discovery was made relating to aircraft (CEMEX_0948).

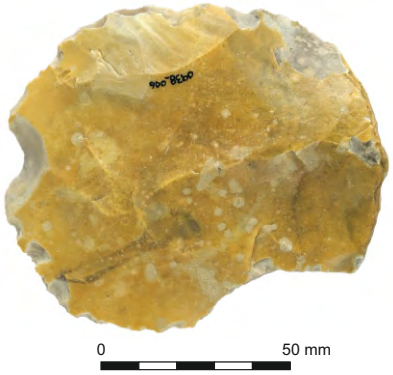
Ordnance and munitions

Several munitions were reported through the Protocol this year ranging from a Palliser round (DEME_0932) and 6-pounder Hotchkiss head (CEMEX_0945) to a Browning heavy machine gun (CEMEX_0944).

Staff should adhere to company health and safety policies before any ordnance is reported through the Protocol.

DEME_0932

CEMEX_0945



Hanson_0938_006 Middle Palaeolithic Levallois flake

Hanson_0941

Hanson_0953

Conclusion

The Marine Aggregate Industry Archaeological Protocol continues to be a relevant mitigation programme for licensed marine aggregate extraction. It also continues to be a model from which other industries draw inspiration and a framework for reporting. It remains a successful and applicable template for recording and preserving heritage on the seabed, for gaining understanding about the unexpected discoveries and for reaching audiences within the aggregate industry to improve their knowledge and understanding of archaeology. This is reiterated by the reports received this year from wharf and vessel staff and the contact that has been maintained with Nominated Contacts and Site Champions this reporting year.

The application of the Protocol ensures that archaeological information is preserved through recording and timely reporting and is disseminated as widely as possible, so that everyone can enjoy and explore our underwater cultural heritage. The fact that reports and images are uploaded to the website and on to social media platforms, and that *Dredged Up* is handed out at several outreach events has targeted a wider audience than just the marine aggregate industry. When work experience students visit the Coastal & Marine team, the work they do with us often revolves around the Protocol and the finds that have been reported. Recently, photogrammetry models were made of finds that each student found most interesting and the results have been published on Wessex Archaeology's social media platforms. This year's student placement, Daisy Turnbull, an MA student at the University of Southampton, was unfortunately cut short due to Covid-19 restrictions, however even in her short time in the Salisbury office, she had the opportunity to explore data of discoveries reported through the Protocol.

The enthusiasm and diligence of wharf and vessel staff ensures the success of the Protocol. This was particularly true this reporting year when Dagenham bought a display cabinet to showcase the finds discovered there. Everyone's support has ensured that the Protocol has become embedded in commercial processes, which in turn reduces the impact of dredging on underwater cultural heritage, by making the archaeological record available for future generations. The commitment of Hanson Wharf and vessel staff was also highlighted by the rapid reporting of discoveries in aggregate dredged from Licence Area 240, and the assistance of wharf staff during Operational Sampling was greatly appreciated.

Despite the challenges of Covid-19, contact has been maintained with the wharf and vessel staff via email and the online and hard copy circulation of the *Dredged Up* newsletters. It is also a success that reporting has not suffered despite the pandemic.

The Protocol Implementation Service Team would like to thank everyone who has helped to support the Protocol during the 2019–2020 reporting year.

The future

Protocol Implementation continues to be run by Wessex Archaeology and finds are reported regularly. If you have any questions about finds reporting and the Protocol, please contact us via protocol@wessexarch.co.uk.

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