

Offshore Renewables Protocol

for Archaeological Discoveries



Handout 1: Introduction

Protocol for Reporting Archaeological Discoveries Implementation Service and Awareness Programme

The Crown Estate owns around half the foreshore and nearly the entire seabed out to the 12 nautical mile limit, and has the rights to licence areas up to 200 nautical miles offshore for renewable energy. It is anticipated that by 2020 approximately one-third of all UK energy will be produced from offshore renewables.

Following the success of the British Marine Aggregate Producers Association (BMAPA) Protocol for Reporting Finds of Archaeological Interest, The Crown Estate commissioned Wessex Archaeology to establish and implement a protocol for the offshore renewables industry.

The aim of the Protocol for Archaeological Discoveries (PAD) is to provide a system for reporting and investigating archaeological finds encountered during construction and installation work. Activities associated with renewable energy such as: placement of turbines, cable-laying, geophysical surveys and seabed sampling all have the potential to impact on the historic environment.

Process

Under the Protocol, staff who make a discovery report it to a local 'Site Champion' onboard the vessel or on site. The Site Champion then passes this report to the company's 'Nominated Contact', the person identified to deal with PAD within each developer.

Once a find is reported through the secure web-based reporting system, Wessex Archaeology's 'Implementation Service' is automatically alerted to the presence of a new find. Staff investigate every find with the help of specialists from around the country and compile detailed reports. The reports are then sent to the finder and all relevant authorities.

Awareness

To support the Protocol, Wessex Archaeology is conducting an Awareness Programme which includes visits to sites and companies as well as regular newsletters. This programme aims to raise awareness of, and confidence in, the use of the Protocol amongst staff.

This pack contains advice and guidance in support of the Protocol Implementation Service.

It includes:

- Handout 1 – Introduction
- Handout 2 – What are 'finds'?
- Handout 3 – Reporting
- Handout 4 – Photographing finds
- Handout 5 – Conservation & Storage
- Handout 6 – Prehistoric Finds
- Handout 7 – Metalwork & Concretions
- Handout 8 – Munitions & Ordnance

If any of these are missing, or you would like further copies, please contact the Protocol Team at Wessex Archaeology.

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Or visit Wessex Archaeology's Protocol pages on the website:
<http://www.wessexarch.co.uk/projects/marine/tcerenewables>

Nominated Contacts should report discoveries through the secure reporting website:
<http://net.wessexarch.co.uk/orpad>

Offshore Renewables Protocol

for Archaeological Discoveries



Handout 2: What are finds?

What are finds? Why should they be reported?

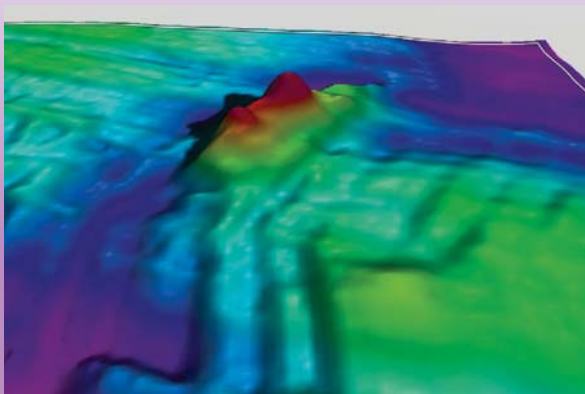
Finds

A 'find' is an object with archaeological potential; this means that it has been impacted by people and may be able to tell us about their past lives. A find can include objects on the seafloor as well as those brought to the surface. We include eco-artefacts as finds; these are remains of animals and plants, such as mammoth and peat, which help us to understand the past human landscape.



Anomalies

Anomalies are a little different from finds in that they are not automatically recognised as archaeological. Instead, anomalies are visual or digital differences that need to be further investigated. Anomalies should always be considered as possibly important archaeological sites until it has been determined otherwise.



Multibeam image of an anomaly

Importance

Archaeological finds are important because they can shed light on past human use of the landscape, sea and seabed. The information that discoveries provide can help archaeologists to understand the human past and protect it for future generations.



Example

The discovery of 28 handaxes with other flint implements and mammoth teeth from the seabed was described as the 'single most important find of Ice Age material from below the North Sea'. The handaxes are between 200,000-300,000 years old and their discovery is incredibly important as they indicate areas where prehistoric humans lived and worked. This example proved that evidence from the last Ice Age has survived underwater and can be found intact.



Selection of handaxes, mammoth teeth and tusk

Offshore Renewables Protocol

for Archaeological Discoveries



Handout 3: The reporting process

The reporting process

On land

Discoveries found in the intertidal zone

A find is made during construction

Discoveries found after work on site

A find or anomaly is discovered during sample analysis or while reviewing geophysical data

At sea

Discoveries made on board a vessel

A find is made on board the vessel, in grabs or attached to anchors and cables

Discoveries found on the seabed

An anomaly indicates that an object or structure has been encountered on the seabed

Project Staff
Inform Site Champion

Site Champion

Avoid further disturbance work in this area (if found during works)

Note the occurrence, in a daybook, or site log

Photograph any find(s) recovered (see Handout 4)

Arrange for any recovered find to be immersed in seawater (if waterlogged) or in a suitable, clean, covered container as appropriate (see Handout 5)

Inform the Nominated Contact and pass on all available information, including a copy of the Preliminary Record and copies of any photographs, drawings or data files

Site Champion

Cease work that may impact the seabed in that area, or move to a new location

Examine any gear, such as grapnels or ploughs, coming up from the seafloor

Note the occurrence in the vessel's log

Mark the area on navigational/survey software

Photograph any find(s) recovered (see Handout 4)

Arrange for any recovered find to be immersed in seawater (if waterlogged) or in a suitable, clean, covered container as appropriate (see Handout 5)

Inform the Nominated Contact and pass on all available information, including a copy of the Preliminary Record and copies of any photographs, drawings or data files

Report to Nominated Contact

Offshore Renewables Protocol

for Archaeological Discoveries



Handout 4: Photographing finds

Photographing finds

What is the photograph for?

The photographs that we receive of new discoveries are very important. They provide a lot of information about each object and can be sent to specialists around the country.

Tips

Make sure there is a scale in the photo – if you do not have the scale sheet provided you can use a ruler or known object, such as a coin or biro, to help show the size of the find.



To avoid light spots in the photo make sure any excess water is wiped off.

Make sure the photo is sharp.

Do not include too many objects in one shot.

Take photographs at different angles; the more photographs and views, the easier it is to interpret the artefact.

Take additional close-up pictures of markings or features that you think are unusual.



Checklist

Can someone tell from the photos:

What size the object is.

What shape it is.

What type of object it is.

What it is made of.

Whether it has any unusual markings.



Take photos from different angles

cm

25
24
23
22
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Implementation Service Protocol
Scale correct if printed 100% at A4

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 cm

Offshore Renewables Protocol

for Archaeological Discoveries



Handout 5: Conservation and Storage

Conservation and Storage

Marine finds are very fragile and can dry out quickly. Don't be fooled; even seemingly robust objects such as cannonballs can quickly degrade if they are not treated correctly.

What do I do with a wet find?

1 – Place the find into a plastic container and completely cover with seawater. If the find is large, cover as much as possible with seawater and wrap the rest in wet fabric or polythene.

2 – Label the container or wrapping and store in a cool dark area.

Example: **Developer_0001 Nail from [Name] Offshore Windfarm Zone Discovered by J.Bloggs 01/12/2010**

3 – Check the condition of the find regularly. Change the seawater when necessary and note any cracks or flaking.



The detrimental effects of rapid drying on iron shot

What do I do with a dry find?

If a find is dry do not place it back into water. But it is still important to label it and place in a dark, cool place.

Further advice

Advice on conservation can be sought from the Portable Antiquities Scheme (PAS) which has a network of regional archaeologists (Finds Liaison Officers or FLOs). FLOs are responsible for recording finds reported by the public and providing advice. Contact details for your local officer can be found on the PAS website:

<http://www.finds.org.uk/involved/contacts.php>

Three rules

- Wet – Keep the object wet by covering with water in an appropriately sized container.
- Cool – The hotter something is the more likely it will corrode so place the artefact somewhere cool.
- Dark – Place the artefact away from direct contact with light, such as in a drawer or cupboard.

Things to avoid

- Supermarket bags – they contain harmful chemicals
- Drying – when wet finds dry quickly they crack and disintegrate
- Tissue paper – tissue will degrade in water
- Bubblewrap – textured wrapping can leave impressions on soft finds
- Placing different finds together – some types of material can be affected by contact with others
- Metal containers – metal can cause problems such as corrosion
- Glue – Some glues are harmful; if a find breaks don't fix it



Offshore Renewables Protocol

for Archaeological Discoveries



Handout 6: Prehistoric finds

Prehistoric finds

Some of the first things that spring to mind when you think of underwater archaeology are shipwrecks and aircraft wrecks. Whilst shipwrecks are important, there is a huge range of other exciting and significant artefacts that can be found under the sea.

Some of the most important finds from the seabed are stone tools. Stone tools are the oldest known technology used by man. These implements were first used in Africa 2.5 million years ago and until metal was discovered, stone was the primary resource for making tools.

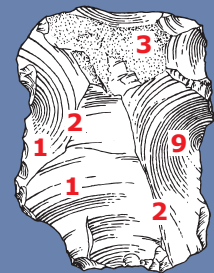
Whilst a large majority of tools are made from flint, in places where this was not available other stones were used instead.

It is not only the tools which are of interest to archaeologists, flint-knapping produces piles of waste flakes. Archaeologists examine the flakes to see what sort of tools were being made.

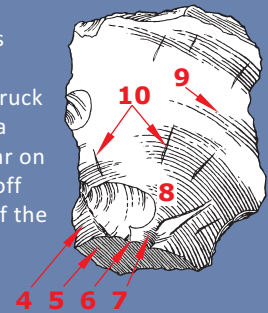
See below for some examples of handaxes, arrowheads and flakes.

How to recognise stone tools and flakes

Stone tools and flakes have recognisable features and shapes that indicate they were made by humans. The **negative flake scars** and **bulb of percussion** are some of the easiest to find.



The **bulb of percussion** is a curved raised lump left behind when a flake is struck off. The **negative scar** is a concave cone-shaped scar on the flake where it came off the core - the opposite of the bulb of percussion.



- | | |
|-------------------------------|------------------------------|
| 1 Negative Flake Scars | 6 Point of Percussion |
| 2 Ridges | 7 Cone of Percussion |
| 3 Cortex | 8 Bulb of Percussion |
| 4 Bulb Scar | 9 Conical Ripples |
| 5 Butt | 10 Fissures |



Offshore Renewables Protocol

for Archaeological Discoveries

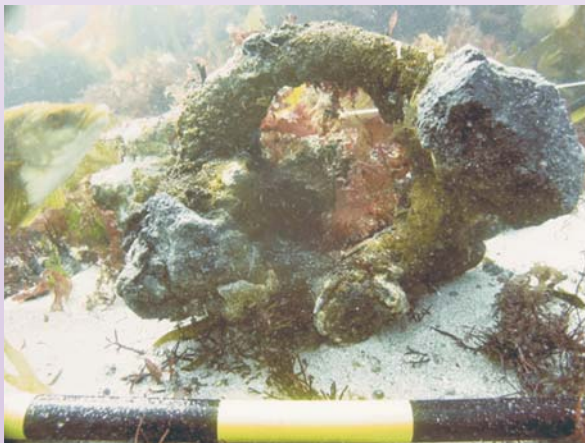


Handout 7: Metalwork and Concretions

Metalwork and Concretions

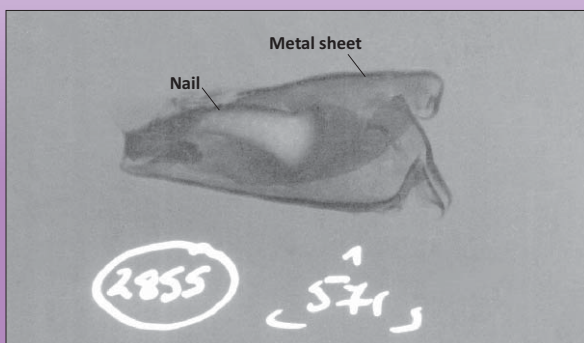
What is a concretion?

Concretions are dense clumps of hard material that develop on the surface of iron or other ferrous metals as they corrode. A concretion can form one clump around an object or become large sections on iron shipwrecks. Within a concretion the object gradually corrodes away, sometimes leaving only a hollow space. It is easy to see if a concretion has been freshly pulled off an iron object as it has a bright orange rust colour.



Why are concretions important?

Concretions can easily hide the shape of an object, making them impossible to identify. However you should not assume that concretions are unimportant; x-rays can sometimes reveal what lies underneath the concretion, or injecting filler can make a mould of the hollow shape.



Recording

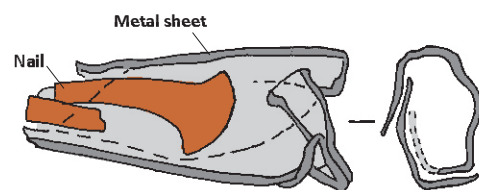
As with other types of artefacts, the more information we have the better. When recording concretions useful information includes length, width, diameter and thickness of concretion, where possible.

Keep your eyes peeled

Some people miss concretions as they can look like rocks from the seafloor. If you find something you're not sure about, report it.



A concretion can look like a rock



This x-ray and drawing shows a broken nail wrapped inside a metal sheet

Offshore Renewables Protocol

for Archaeological Discoveries



Handout 8: Munitions and Ordnance

Munitions and Ordnance

Always follow Company Guidelines on the
SAFE TREATMENT OF MUNITIONS
when they are discovered

Despite long periods spent underwater munitions can still be extremely dangerous and should always be treated with caution. The appropriate response when dealing with munitions is to report them to the police, coastguard or Ministry of Defence in line with your company policy.

How common are munitions?

Up to 10% of the bombs that fell on and around the UK during WWII failed to function and so far only a fraction of these have been recovered. In addition to these 'blind' munitions, ordnance from both world wars was dumped at sea and munitions on board sunken vessels are rarely salvaged.



Fuse cap



Reporting munitions

Always follow safe working procedures when dealing with munitions. Before reporting munitions via the PAD they must be made safe or identified as inert by the police or a military Explosive Ordnance Disposal Officer (EOD). Once the items have been confirmed as safe and suitable for handling they should be reported as normal through the protocol. If you have any queries regarding the reporting of munitions please contact a member of the Implementation Service team.



Vis or Random pistol



German WWII machine gun



Ammunition