



ed Nations The Protection of the entific and Underwater Cultural Heritage

UNIT 17

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Public Archaeology

Raising Awareness and Public Participation Projects in Underwater and Maritime Archaeolog



Published by UNESCO Bangkok Asia and Pacific Regional Bureau for Education Mom Luang Pin Malakul Centenary Building 920 Sukhumvit Road, Prakanong, Klongtoey Bangkok 10110, Thailand

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ISBN: 978-92-9223-413-3 (Print version) ISBN: 978-92-9223-414-0 (Electronic version)

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Technical editing: Martijn R. Manders and Christopher J. Underwood Copy-editing: Sara M. Mabelis Design/Layout/Illustration: Warren Field Cover photo: The Samed Ngam Shipyard and Museum, Chanthaburi province, Thailand © Christopher J. Underwood

Printed in Thailand

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UNIT 17

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Public Archaeology

Raising Awareness and Public Participation Projects in Underwater and Maritime Archaeology

Core Knowledge of the Unit

Many archaeologists and heritage managers consider raising public awareness as one of the most effective ways to protect underwater cultural heritage. To be able to encourage the participation of stakeholders in the protection and management of underwater cultural heritage, one should be able to identify the different stakeholder or interest groups and know how to influence each group. Only then can their mind sets be changed to be supportive of the protection and appropriate management of underwater cultural heritage.

This unit consists of two parts:

Part I: provides a general introduction to community or public archaeology.

Part II: explores a number of projects aimed at raising awareness and helping the public to appreciate the importance of underwater cultural heritage. These projects have been specifically formulated to include the public and to minimize the impact of recreational diving on underwater archaeological sites, while maintaining professional archaeological standards.

Part I: Raising Public Awareness

Core Knowledge of Part I

On completion of Part I of the Public Archaeology, Raising Awareness and Public Participation Projects in Underwater and Maritime Archaeology unit, students will:

- Be able to apply the concepts in the field of underwater archaeology
- (Paris 2001) has provisions relating to the public
- Understand that raising public interest can influence appropriate policies relating to underwater archaeology

Introduction to Part I

Public archaeology is used to describe archaeology's relationship with the public. It is essentially 'archaeology by the people for the people'.

According to Uzi Baram (New College of Florida), public archaeology:

- and materials
- Promotes awareness of cultural resources and heritage preservation
- Fosters individual or collective efforts to advance the ethical practice of archaeology

The scope of public archaeology comprises of many facets. The design, goals, communities and methods used in projects can vary greatly, but there are two general aspects that are common to all.

First, public archaeology involves communities having an input into the decision making process, particularly in cases where construction, infrastructure or research projects have a direct link to those communities. Secondly, public archaeologists generally believe they are making an altruistic difference by providing advantages to the communities.

There are also a number of common goals in public archaeology. Similarities can even be found in different countries and regions, due to commonalities in archaeological communities, laws, institutions and types of societies.

UNIT 17 PUBLIC ARCHAEOLOGY

Understand the concepts of public or community archaeology, raising public awareness

• Recognize that the UNESCO Convention on the Protection of the Underwater Cultural Heritage

Recognize that public archaeology is a key component of a heritage management framework

• Stimulates public interest in the study of archaeology through the demonstration of archaeological techniques and analyses, workshops, training in excavation and recovery of artefacts and features, site tours, displays and exhibits, or the development of educational programs

Common goals of public archaeology include:

- Encouraging historic preservation, conservation and public education
- The exploration of public memory, localized heritage and commemorations of the past
- Facilitating an active engagement with local and descendant communities regarding their history and cultural landscape
- Sustaining historic places as localities for civic engagement and civil discussions about the past
- Attempting to make archaeology more inclusive and multivocal

Source: Uzi Baram: http://faculty.ncf.edu/baram/public_archaeology.htm (Accessed March 2012.)

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- (Accessed February 2012.)

1 Raising Awareness

Raising awareness is often regarded as the best possible way to preserve our cultural heritage. Essentially, it is any activity that promotes an understanding and acceptance for the meaning and value of heritage, with the aim to conserve it for future generations. Only when we understand and accept not only the richness, beauty and historical significance of our heritage, but also how it is threatened, can we make judgements on how to treat it.

According to the classical trinity of heritage management, the future perspective of a tangible past is determined by political commitment, public awareness and economic feasibility. Without public awareness, political commitment will lose its legitimacy and economic feasibility will lose its sustainability. For that reason the support of public awareness is of primary importance.

To do this we must consider who the public is and how to effectively address them. Should this be a one way dialogue? Do cultural heritage professionals have the sole task in creating this awareness or is it the responsibility of everyone?

1.1 Raising Awareness of Cultural Heritage

The management of cultural heritage can only be effective when the main stakeholders are aware and actively participate in the management process. Stakeholder groups may differ; they can be school children, local communities, cultural experts or government units at the local, regional and national levels. Each of these different groups has to be approached in a specific manner, e.g. through school education, public archaeology projects, practices of communities, etc.

One effective way to raise awareness is to organize public participation projects that help non-professional stakeholders understand the value of research, protection and appreciation of cultural heritage.

1.2 A Focus on Underwater Cultural Heritage

Public participation plays a fundamental role in the management and protection of underwater cultural heritage. This has been recognized in the 2001 UNESCO Convention, as well as other international conventions and national policy documents. The 'public' is normally defined as stakeholders that are not professionally involved in heritage; this can either refer to the people as a whole or segmented into smaller, defined target groups.



For many, underwater archaeology has an adventurous appeal. Archaeologists are imagined wearing heavy helmets, entering mysterious shipwrecks that lie intact on the seabed. This attraction may lead to negative actions, such as looting or petty theft on shipwrecks, but can also have more positive effects, such as people wanting to become part of the community to protect underwater cultural heritage. Scaphandriers à la recherche d'épaves au Havre' in Le Petit Journal, 13 February 1892, pp.56. © M. Manders

Fishermen, recreational divers or the navy often discover shipwrecks. As a result, these groups have become the eyes and ears for underwater archaeologists. Despite being recognized as discoverers of underwater archaeological sites, these stakeholders have not always played an active role in the overall management of sites. However, there is a now a growing effort to recognize and include them in the process.

Protection of underwater cultural heritage can often be most effective on a local level, facilitated by communities that have an understanding of their shared heritage and history. In this case, archaeologists and other heritage professionals can facilitate as guides and advisors, and in the process help raise awareness. Examples of cooperation between underwater cultural heritage professionals and other stakeholders can be found in many countries, such as in Thailand, Sri Lanka, Indonesia, Australia, United States, Canada, United Kingdom and the Netherlands.

The UNESCO Convention (Paris 2001) has brought focus on underwater cultural heritage in many countries. Although only forty countries have ratified the Convention so far, many more are taking the management of underwater cultural heritage seriously. Many of them have adopted the code of good practice in accordance with the rules of the Annex of the UNESCO Convention and in compliance with national legislation that is already in place.

As underwater cultural heritage has a unique international character, the need for cooperation between governments (e.g. neighbouring countries or countries with a shared past) and other stakeholders, has become increasingly important. Most countries are connected by culture, religion and trade. The connection between countries may have been beneficial to both countries or may have been advantageous to only one. Whatever the nature of their past connection was, the concerned countries and their nationals must be informed about their shared or common heritage.

Underwater, we can find relics of these past connections between countries, often in an excellent state of preservation and providing us with 'time capsules' of the past. Unfortunately, most of these important sites are inaccessible at the present time or are under severe threat by natural or human interference. See *Additional Information 1*.

Our shared or common heritage sites found underwater need to be preserved in an appropriate manner. In some cases, they may be equally important or significant for more than one country (see Unit 6: *Significance Assessment*). Given this, information about the sites should be shared. Article 19 of the 2001 UNESCO Convention specifically mentions the sharing of information among interested States.

1.3 Inductive and Deductive Approaches

Article 20 of the 2001 UNESCO Convention directly relates to public awareness, stipulating that 'Each State Party shall take all practicable measures to raise public awareness regarding the value and significance of underwater cultural heritage and the importance of protecting it under the ADDITIONAL INFORMATION 1 Every shipwreck tells us something about the period of time when they sunk. Therefore, they can be considered as time capsules. Shipwrecks that yielded so much information about the past include the well-known Vasa in Sweden, the Mary Rose in the UK, the 17th century Dutch flute Ghostwreck and the Vrouw Maria, an 18th century Dutch snow found in the Baltic Sea. The Hamilton and the Scourge (1812) found on the floor of the Great Lakes in the USA are also very well preserved.

convention'. This insinuates a top down approach, from the government to the citizens, which may or may not be the most effective way to move forward.

Awareness of cultural heritage can be created by collecting and sharing information, either in an inductive or deductive manner. An inductive approach builds upon experiences from the past and is illustrated by cooperation between the discoverers of wrecks and the diving amateur archaeologists (see Part II of this unit). Increasingly, some groups are entrusted with more responsibility and freedom to decide what to do with the sites they have discovered.



A deductive approach creates heritage awareness by working from a theoretical base on how to do so. In the last decade, quite a few of these theoretical approaches have come into force, such as the Malta Convention, Faro Convention or even the Dutch Belvedere programme, all of which have a political backing. Although developed within a scientific framework, the thoughts have been taken over at a political level and put into force often within legal or policy frameworks. Essentially, a deductive approach is an effective, vigorous and professional approach that is similar to what is promoted by the 2001 UNESCO Convention.

In recent years the deductive approach has become more popular in Europe. By definition, a deductive approach is more methodical than an inductive approach. However, using a deductive approach may alienate some stakeholder groups, as it is predominantly based on academic setting. Furthermore, with little concern to stakeholder groups outside the professional cultural groups, heritage can easily be too dependent on external or government financing.

The inductive approach, which is often applied in Asia, typically works on a bottom-up approach. It depends primarily on the enthusiasm and commitment of the public. In this case, heritage is accepted as a functional part of the society and, therefore, maintains its relevance and importance in contemporary life. After all, shared cultural heritage is in the public domain; without public support heritage may disappear. The weakness of this approach may lie in the fact that it relies so much on the efforts of non-professionals, thus this approach can often become less effective and less vigorous. The inductive approach also runs the risk of using ethical standards that may differ from the professionally established norms. This may lead to serious conflicts regarding the interpretation of the significance of sites and ethical ways to deal with underwater cultural heritage (see Unit 6: Significance Assessment).

The inductive cooperation among other stakeholders can be beneficial if the professionals deal with the public at an equal level. The challenge lies in how to encourage cooperation and create awareness with mutual respect for all stakeholders. Is it possible for different interest groups to cooperate at the same level? How can an ethical basis for heritage protection be discussed and decided upon by all concerned groups?

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2 In Situ Preservation: A Blessing or a Curse for Raising **Awareness of Heritage?**

In situ preservation has been the preferred option for archaeological heritage management for the last 15 to 20 years (See Unit 9: In Situ Preservation). Legal and policy frameworks, such as the Council of Europe's Treaty of Valletta (1992), ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage (Sofia 1996) and UNESCO's Convention on the Protection of the Underwater Cultural Heritage (Paris 2001) support this. However, this strict approach has led to negative reactions claiming that politicians and cultural heritage managers are not giving some sites the attention they deserve. They argue that sites are left on the seabed and sometimes even covered with a protective layer, so

that not even the recreational divers can enjoy them. There could be some truth in these claims, as it has become increasingly difficult to investigate the past through the material source in an intrusive manner.

Even more problematic is the fact that sites are often left in situ without proper regard for its sustained protection in the future. Divers and fishermen are the first to complain, for they feel that access to these sites and the opportunity to enjoy the sites, which form a part of their environment, are already restricted. At present, heritage professionals are now becoming aware of the benefits of having other stakeholders involved in the management process. They now realize that local communities have a major stake about the heritage in their environment. Keeping the sites in situ strengthens their relationship with the environment and, therefore, strengthens the communities around it. It is important the wishes of all concerned stakeholders, including the source communities (which originally owned the site) should be respected.

Creating awareness and instilling shared responsibility offer greater opportunity for the successful protection and management of a site. The process of attributing significance to these sites should no longer considered the exclusive domain of the heritage professionals; instead, source communities and other stakeholders should also be invited to assist in determining site significance.

To successfully implement the *in situ* policy while involving other stakeholders in the process, strict rules must be made flexible. If history has to be learnt and shared to enrich our lives, then research may have to be done in both non-intrusive and intrusive manner. It is important to select wisely for the right reasons, with the right stakeholders and within the appropriate timeframe. This entails a delicate balance between research that may use some intrusive processes and *in situ* preservation for future enjoyment and investigation.

Heritage awareness is also about sharing responsibility. However, the specific roles of the professionals and other stakeholder groups need to be carefully determined and agreed upon.

2.1 Data, Information and Access to Sites

To effectively raise awareness of underwater cultural heritage, data and information regarding the sites have to be made available. The kind of information depends very much on the target group. Stakeholders can range from school children, local community members, the general public, the government or the archaeological community.

The government would need to know about the importance and significance of underwater archaeological site, and its positive effect on national identity. It may also need to know about the threats that the underwater cultural heritage is facing. To provide this kind of detailed information and analysis, some expertise is required, which is one reason why the heritage site managers need to participate in the UNESCO Foundation Course.

With assistance from Asian and European governments, underwater archaeologists and cultural heritage managers from the Asia-Pacific region have been trained. Through capacity-building programmes such as this, national governments are now more aware of the need to protect their underwater cultural heritage. In the process, national governments are now more knowledgeable and better equipped to raise public awareness through inductive and deductive approaches.

Other stakeholder groups have to be approached in different ways. As many as 500,000 recreational divers visit Thailand each year to dive. Even the dark and cold waters of the Netherlands are dived by more than 60,000 recreational divers each year. This significant global diving community wants to

enjoy the natural environment with underwater archaeological sites. The opportunity to learn from the past undoubtedly increases the attractiveness of diving enthusiasts.

In many coastal communities, a strong sense of cultural awareness has been developed. Due to their shared heritage, cooperation exists among the community members, the diving community, the service providers to divers and local authorities, as a result of the socio-cultural and economic benefits that responsible diving around underwater cultural heritage sites can provide. The diving communities are establishing their own shipwreck databases and are actively involved in discussion forums regarding their environment.

Here, the role for government agencies (often the competent authorities for underwater cultural heritage management) should be to facilitate and influence the discussions regarding research, protection and the accessibility of sites. To achieve this, authorities should have the right information and willing to share appropriate information with other stakeholders, including those from outside their country.

An example of this initiative is the development of MACHU, a Geographical Information System that can be used in the management of underwater cultural heritage. Funded by the European Union, this system contains data about underwater archaeological sites that can be shared through the Internet. At present, ideas are being explored to develop a similar kind of system in Asia (See Unit 8: Geographical Information Systems).

Although it is imperative that information about sites is shared, many databases are only available to heritage professionals, due to the sensitivity of the information contained therein. The exact locations of archaeological sites are considered restricted information, not readily disclosed to non-professionals, despite the fact that some locations may have originally been reported by these groups. This attitude, however, creates an atmosphere of distrust, which may result in a decrease of sites being reported. Partly to overcome this problem, a content management system has been developed by the same creators of the MACHU project. Accessible online, the system allows everyone to share their stories about underwater cultural heritage sites.

Stakeholder groups may have their own opinions regarding underwater cultural heritage that differ from those of the heritage professionals. Professionals have to think carefully about how these stakeholder groups should be approached and appropriately dealt with, so that an active dialogue on sharing of responsibilities can be facilitated.

There is, however, a disadvantage of identifying a target group and dealing with it separately. In the process, other groups may feel excluded or alienated. At times, stakeholders who have had a prolonged involvement in the management of a site may feel excluded if focus is suddenly shifted to a group who has not been involved from the very start. This is particularly experienced by professionals who suddenly appear to show their concern for a site.

Part II: Public Participation, the Advantages of **Working Together**

Core Knowledge of Part II

The aim of Part II of this unit is to explore some initiatives that raise awareness and encourage public participation in the protection and management of underwater cultural heritage sites.

Upon completion of Part II of the Public Archaeology, Raising Awareness and Public Participation Projects in Underwater and Maritime Archaeology unit, students will:

- Understand that there is a broad range of initiatives aimed at raising public awareness about the importance of underwater cultural heritage and the threats to its preservation • Understand that by providing public access to archaeological sites, there is a potential threat
- to the preservation and protection of underwater cultural heritage
- Recognize that the public can contribute to our knowledge of underwater cultural heritage
- Recognize that the public can become effective custodians of underwater cultural heritage • Understand that public inclusion projects should have specific objectives and follow a series of
- quidelines

Introduction to Part II

Part I of this unit highlights some of the main issues and challenges regarding the relationship between the professionals and the public. The initiatives presented in Part II of the unit represent a selection of initiatives implemented to raise awareness and involve the public in archaeological projects.

1 Involving the Public

As public interest in cultural heritage is increasing (as recognized intrusive access to in situ in the 2001 UNESCO Convention, see Additional Information 2), it underwater cultural heritage, is not surprising that public archaeology has become one of the and of the value of public most rapidly developing sectors of archaeology. This rapid develeducation to contribute to opment poses a problem, as this sector is absorbing a significant awareness, appreciation and part of management resources which could be used in research, protection of that heritage'. planning and actual management of sites. Unfortunately, the budget for archaeology has not increased to accommodate the rapid expansion of this sector. Therefore, any financial support for this sector needs to have both meaningful and measurable outcomes to justify the investment, such as in the form of a cost-benefit analysis.

Over the recent decades, an increasingly wide range of initiatives have been implemented, designed to raise the public's awareness and provide direct or indirect public access to archaeological projects. Many of these initiatives have been implemented by non-profit, non-governmental organizations (NGOs), whose activities are often funded by grants received from donors that includes cultural agencies. Some of the more common public archaeology initiatives are outlined in the following sections.

UNIT 17 PUBLIC ARCHAEOLOGY

ADDITIONAL INFORMATION

2 The introduction to the **UNESCO** Convention on the Protection of the Underwater Cultural Heritage (Paris 2001) notes the 'growing public interest in and public appreciation of underwater cultural heritage', alongside the 'public's right to enjoy the educational and recreational benefits of responsible non-

Training Manual for the UNESCO Foundation Course on the Protection and Management of Underwater Cultural Heritage in Asia and the Pacific

1.1 Stickers, Leaflets, Information Booklets and Posters

Stickers and leaflets usually aim to convey simple 'impact messages' to the public. Booklets and posters provide more space, so the message can be expanded to include more detailed information and examples of cultural heritage. If the message is focused on threats to preservation, booklets and posters can provide important information, such as who to contact in the event that a site is discovered, or when damage to a heritage site has been noted.



PELICRO EN EL MAR Algunos destruyen nuestra historia No seas uno de ellos!

Una campaña del Ministerio de Cultura y Fundación Erigaie





These leaflets illustrate how maritime culture has become a tourist attraction across the globe, from Portsmouth in England to Itaparica Island in Brazil and the Island of Wieringen in the Netherlands. © M. Manders



Leaflets of promoting conferences, programmes and projects focused on underwater archaeology. © M. Manders

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Promotional leaflets on the protection of the underwater cultural heritage. © M. Manders

1.2 Exhibitions

In 2010, UNESCO Bangkok organized a major exhibition on underwater cultural heritage, particularly from the Asia-Pacific region. Held at the Siam Ocean World in Bangkok, Thailand, the interactive exhibition featured underwater heritage scenes from around the world, a life-sized replica of an actual Thai shipwreck, showcases of artefacts recovered from the seabed, special demonstrations of maritime archaeologists in action and various play zones for children. The exhibition was visited by an estimated 150,000 local and foreign visitors over a three month period. Exhibit items now form part of the permanent collection of the National Maritime Museum in Chanthaburi, Thailand.



1.3 Conferences and Lectures

Due to its unique nature, underwater archaeology has always been a discipline where the public and the professionals have easily interacted. Archaeologists often attend and present papers at archaeological conferences, such as Europe's International Congress on Underwater Archaeology or the USA's Society of Historical Archaeology annual meeting. These archaeologists are often the ones who discover and investigate new sites, offering professionals an interesting perspective on pertinent issues.

1.4 Marine Sanctuaries, Preserves, Protected Areas and Parks

Across the world, unique underwater heritage trails and site museums have been established, such as the *Kronprinz Gustav Adolf* Underwater Park in Finland, the Oceanário in Portugal and the Baiheliang in China. Others, such as the Biak Underwater Park in Indonesia are currently under development.

In Europe, divers in the Baltic region will soon be able to gain access to the well-preserved wrecks located in the Nordic Blue Parks, while in the Netherlands, a large underwater museum/park is being developed in Lake Oostvoornse.



Catalina Flying Boat which will be part of a proposed maritime conservation area in Biak, West Papua, Indonesia. © Ministry of Marine Affairs and Fisheries, Republic of Indonesia.

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The E.B Allen, one of the more than fifty sites in Thunder Bay National Marine Sanctuary. © NOAA/Tane Casserley



The Great Lakes Maritime Heritage Centre has constructed a replica of a wooden schooner, designed to simulate a shipwreck. The Centre has also constructed a series of overhead tunnels that allows visitors to view the 'wreck' as if they were divers. © NOAA/Tane Casserley

1.5 Museums, Memorials (National or Community)

These can be traditional 'bricks and mortar' buildings, such as the community museum in Chanthaburi, Thailand (see Unit 16: *Museology*) or virtual concepts, such as that of Florida State Department's Museums in the Sea. Here, visitors can gather information from video guides about Florida's Underwater Preserves and Museum of Underwater Archaeology via their website.

For more information see: www.flheritage.com/archaeology/underwater/seamuseum/index.htm and www.themua.org. (Accessed February 2012.)

1.6 Publications and Reports

Aside from printed reports, field reports are now increasingly made public from online sources.

1.7 Terrestrial Maritime Cultural Heritage Trails

Heritage trails can take different forms. Some feature both natural and cultural heritage, while others focus on foreshore and underwater cultural heritage sites, such as the Underwater Shipwreck Discovery Trail in Victoria, Australia, the Cayman Islands Maritime Heritage Trail, and the 100 x Maritiem Texel in the Netherlands.

Viewing points, placed close to where the sites are located, usually have boards or even audiocasts that provide explanatory information. However, visitors may have to use their imagination to fully appreciate underwater sites and as such, site interpretation is a major challenge for site managers. Site managers have to be creative to raise public awareness and appreciation of site significance.



100 x Maritiem Texel explores maritime history on and around the island of Texel in the Netherlands. The book illustrates one hundred sites on land, as well as underwater. © Uniepers Uitgevers

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Texel, The Netherlands. This map has been published together with the book 100 x Maritiem Texel © RCE



This heritage trail in the Cayman Islands features thirty-six historical maritime sites, including lighthouses, maritime architecture, shipbuilding and anchorages. @ M. Leshikar-Denton



The Sarmiento Argentina is part of a heritage trail around Puerto Madero, a nineteenth century port in Buenos Aires. © C. J. Underwood



Information in several languages can be accessed by dialling the number shown on the plaque located adjacent to the ship. © C. J. Underwood

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1.8 Maritime Heritage Trails for Watercrafts

Various countries have established marine or even freshwater heritage trails using watercrafts, such as glass bottom boats, kayaks, canoes and even submarines. In the Cayman Islands, tourist submarines offer the non-diving public the opportunity to visit reefs and shipwrecks, while in Scapa Flow, Scotland, visitors can view the wrecks of the German High Seas Fleet, through the eye of a remotely operated vehicle (ROV).

2 Public Archaeology Initiatives Aimed at Recreational Diving

The popularity of recreational diving has grown rapidly over the last 40 years. The increased diving activities pose a major threat to the preservation and protection of underwater cultural heritage. This threat has to be balanced with the possibility that divers can also monitor underwater archaeological sites, acting as the 'eyes and ears' of archaeologists and site managers.

See Unit 3: Management of the Underwater Cultural Heritage and Additional Information 3 and 4.

Divers are a special stakeholder group. Unlike the general public, divers have access to underwater cultural heritage sites *in situ*, an activity that is often unregulated. While enjoying their sport, divers sometimes discover new sites, some of which are archaeologically or historically important. Therefore, heritage managers and archaeologists should maintain good relationships and regular contact with divers, the dive shops and owners of chartered boats, so that new discoveries are reported and known sites monitored.



Recreational divers preparing to explore wrecks in the Oostvoornsche Meer in the Netherlands. © M. Manders

Educating divers about the fragility of sites and leaving them undisturbed is very important. In countries where diving is a relatively new sport, there is the opportunity to raise awareness among the diving community before problems develop. This is particularly relevant in South-East Asia, where the recreational diving industry is developing rapidly.

Other initiatives are aimed specifically at divers and snorkellers. Public archaeology programmes, for example, typically focus on educating divers about the threat they pose to the preservation of the heritage. Aside from poor diving techniques that can disturb the site environment, artefacts and parts of shipwrecks are also taken as souvenirs by divers.



ADDITIONAL INFORMATION

3 Between 1970 and 2010 the number of PADI Diver training certifications (all level of qualification) awarded annually has risen from 24,000 in 1970 to over 920,000 in 2010. A copy of the PADI statistics report is available at: www.padi.com/scuba/ uploadedFiles/2010%20 WW%20Statistics.pdf (Accessed February 2012.)

4 New technical diving techniques using trimix, semi and closed circuit rebreather systems are enabling divers to access wrecks in deeper waters. Wrecks that were traditionally beyond the reach of the majority of divers have become accessible. Raising awareness and encouraging a 'look and don't touch' policy provides a continuing challenge.

2.1 Underwater Heritage Trails

Public access to underwater archaeological sites poses a number of significant challenges for site managers. Site managers should ensure that access to the sites does not accelerate site deterioration. By the very nature of the sites, monitoring the impact of site visitation on a daily basis is very difficult, if not impossible. if not impossible, particularly as the sport divers are not usually accompanied by archaeologists or guides.

In the United Kingdom, recreational divers can apply for a license to dive in any of the protected sites. Permission to dive in specific sites can be restricted, depending on site fragility and whether the site is currently being researched. This restriction conforms with Rule 7 of the 2001 UNESCO Convention that states, 'Public access to in situ underwater cultural heritage shall be promoted, except where such access is incompatible with protection and management'.



Though the remains of the German High Seas Fleet in Scapa Flow, Scotland are protected by legislation, a diving license on the site is not required. In this case, divers must be encouraged to adopt a 'look but don't touch' approach. Monitoring of this site is obviously difficult, thus the cooperation of the local diving industry is required to effectively safeguard the site.

2.2 Low Impact Diving

This Canadian initiative encourages divers to treat sites with respect and to adapt a 'look but don't touch' approach. The initiative includes a code of non-intrusive diving that aims to reduce a diver's impact on sites. The code encourages improved diver's buoyancy skills, non-disturbance of artefacts and the protective silts, avoidance of physical contact with parts of the shipwrecks and not to anchor on the sites. An information leaflet about the initiative includes a 'Crime Stoppers' telephone number, so that anchoring at shipwreck sites or the removal of artefacts can be reported.

A Finite Resource



ow Impact Diving course m nderstanding of their maritime egacy, the impact that they can

Dive To Preserve

SOS Dive



ess: anything being re

If you waters any unity being tennors in from a heritage site; anything lese heritage related like an anchor or ship part being moved or removed from the water; any damage or digging on a site; PLEASE (it's your dury) CALL: OPP or CRIME STOPPERS 1-888-310-1122 1-800-222-TIPS

2.3 Respect Our Wrecks Initiative

This initiative, which has similar aims to Low Impact Diving, is specifically designed to curb poor wreck diving practices. Adopted by various international diving organizations, such as the Professional Association of Diving Instructors (PADI), British Sub-Aqua Club (BSAC) and the Confédération Mondiale des Activités Subaguatiques (CMAS), the initiative encourages codes of ethical diving practices, reminds divers about their responsibilities and describes the importance of respecting the integrity of wreck sites.

2.4 Protecting Sites from Anchor Damage

Initiatives, such as Low Impact Diving and Respect our Wrecks, aim specifically at preventing damage from anchoring directly on a site. Anchor damage has a measurable impact on wrecks. Grapple anchors are sometimes used to drag the seabed to find the wreck prior to beginning diving. It has also been guite a common practice to tie a line to a part of a wreck to make diver's access and egress easier. Over time, these parts weaken and are tear away from the wreck. These factors accelerate the 'wrecking process'. Raising awareness of the impact of these processes and by creating fixed anchors close to, but not on the site help to reduce the impact of sport divers to the underwater archaeological sites.



A leaflet promoting low impact diving. © Save Ontario Shipwrecks/ Vlada Deking

2.5 Training Courses

A number of heritage and archaeological organizations run training courses for the public, such as the Nautical Archaeology Society, the Florida Public Archaeology Network's (FPAN) and the Maritime Archaeological and Historical Society's (MAHS). Recreational diving organizations, such as PADI also have special courses that focus on archaeology and raising awareness.

3 Inclusion of Recreational Divers in Archaeological Projects

The concept of involving recreational divers in archaeological projects is contentious, with the opinions of heritage professionals divided on whether or not amateurs should be involved. Most, if not all, accept that managed public access to in situ cultural heritage sites is acceptable, provided adequate safequards are put in place to minimize impacts. Access to the most fragile and important sites should remain restricted.

Fewer are convinced that amateurs should have a more direct role, such as working on sites either with or without the supervision or presence of a trained archaeologist. Questions are raised about the value of their contribution, whether the results meet acceptable professional standards or whether amateurs can be trusted (see Case Studies on pp. 29-36).

These issues are not discussed here, as the focus of this unit is to illustrate how public involvement can be successfully managed to provide positive results. It is not suggested that recreational divers should participate in commercial marine infrastructure projects, but it can be valuable to provide them with a defined role that enables them to make a positive contribution. In cases where amateurs are included in archaeological projects, there are a number of recommended principles.

3.1 Principles

- Archaeological standards must be maintained. Trained archaeologists should provide guidance and support amateurs
- Volunteers must receive training and be able to demonstrate skills in the archaeological techniques required for the project
- Volunteers must be qualified for the anticipated diving conditions
- Volunteers must be fully briefed and provided with all appropriate information about the project
- Safe diving practices must be adopted at all times
- The results of the project should be disseminated as widely as possible

3.2 Archaeological Standards

All archaeology projects should meet acceptable archaeological standards, a principle that should not be sacrificed because a project includes volunteers. The Nautical Archaeological Society (NAS) utilizes a project design that follows principles similar to those outlined in Rule 10 of the UNESCO Convention on the Protection of the Underwater Cultural Heritage (Paris 2001).

The NAS project design includes:

- An evaluation of previous or preliminary studies
- The project statement and objectives
- The methodology to be used and the techniques to be employed
- The anticipated funding
- An expected timetable for completion of the project
- team member
- Plans for post-fieldwork analysis and other activities
- authorities
- A site management and maintenance policy for the duration of the project
- A documentation programme
- A safety policy
- An environmental policy
- institutions
- Report preparation
- Deposition of archives
- A programme for publication
- Project direction

To help achieve acceptable archaeological standards, it is strongly recommended that volunteers are supervised by a trained archaeologist. However, the level of supervision will depend to some extent on domestic regulations and the aims of the individual projects.

3.3 Qualifications of Volunteers

Volunteers must be qualified to dive on the site, noting that diving organizations specify parameters, such as the recommended maximum depths. They must be experienced or trained in archaeological techniques, to help ensure that they are competent enough to be able to successfully achieve the archaeological objectives of the project.

3.4 Resources

It is important that all archaeological projects are appropriately resourced. For the projects outlined in the case studies at the end of this unit, this has been achieved through successful grant applications that provide funds for the archaeological direction, logistical support and for the diffusion/publication of the results.

In addition, it is normal practice for volunteers to contribute:

- To the direct costs of the project
- To the costs of training
- By providing their own diving equipment associated costs mentioned above.

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• The composition of the team and the qualifications, responsibilities and experience of each

A conservation programme for artefacts and the site, in close cooperation with the competent

Arrangements for collaboration with museums and other institutions, in particular, scientific

In some cases, local community support has been provided to cover some of these

3.5 Safety

The projects must comply with relevant safety legislation, have a competent person responsible for diving safety and have safety protocols appropriate to the prevailing conditions of the site.

3.6 Dissemination

The results of projects involving the public should be treated in exactly the same way as those involving professionals. Results must be published. Depending on resources and the aims of the project, the results of a project may be disseminated through an academic publication, newsletter, public media, websites, posters, leaflets and presentations.

3.7 Conclusion

Before involving the public in projects, the possible consequences of public participation should be carefully considered. Factors such as archaeological standards and outcomes for projects are important and should not be compromised. However, under the right circumstances and with a high level of archaeological direction, the results can be worthwhile.

Suggested Reading

Nautical Archaeology Society. 2009. *Benchmarking Competence Requirements and Training Opportunities related to Maritime Archaeology*. www.nauticalarchaeologysociety.org/research/images_PDFS/benchmark-ingcompetency_final_report.pdf (Accessed February 2012.)

- Underwood, C.J. 2008. The Development of the Nautical Archaeology Society's Training Program and Div-
- ing with a Purpose. Collaboration, Communication & Involvement: Maritime Archaeology & Education in the 21st
- Century. Pydyn, A. and Flatman. J. (eds.). Toruń, Nicolaus Copernicus University.

Useful Websites

- NAS current list of adopted sites:
- www.nauticalarchaeologysociety.org/projects/wrecks.php (Accessed February 2012.)
- Remotely Operated Vehicle (ROV) tourist experience: www.orknet.co.uk/rov/rov.html
 (Accessed February 2012.)
- Tourist submarines: www.caymanislandssubmarines.com (Accessed February 2012.)
- Florida Public Archaeology Network: **www.flpublicarchaeologynetwork.org** (Accessed February 2012.)
- Save Ontario Shipwrecks: www.saveontarioshipwrecks.on.ca/_Downloads/SOS_LID_brochure.pdf (Accessed February 2012.)
- British Sub-Aqua Club: www.bsac.com/page.asp?section=1006§ionTitle=Underwater+Heritage (Accessed February 2012.)
- Project AWARE: www.youtube.com/watch?v=z02J4P4WWjo (Accessed February 2012.)

Unit Summary

Raising public awareness is recognized as a key factor in the effective management of underwater cultural heritage. Raising awareness is not only about influencing broad public opinion by the cultural heritage managers. It should also target the different stakeholders, such as the governments units at the local, provincial or national levels, local and federal enforcement agencies, coastguards, divers, diving instructors, school children and even cultural heritage managers themselves.

It takes skill to convince different stakeholder groups; they need to be approached at their own level and using the language that they understand. It is important for groups to be involved in data gathering and information sharing. For the effective management of underwater cultural heritage, it is important to provide a platform for an active dialogue among the various stakeholder groups, letting them speak openly and play their roles. Raising awareness of heritage can utilize either a deductive (top-down) or an inductive (bottom-up) approach.

Regardless of the approach to be used, professionals have their own role to play. Underwater cultural heritage managers should provide guidance and be part of an underwater cultural heritage community consisting of different stakeholders sharing the same aim - the research, protection and enjoyment of their shared underwater cultural heritage.

This unit has described a number of initiatives that effectively raised public awareness. A number of organizations, such as Florida's Public Archaeology Network (FPAN), has been established with the engaging sole purpose of the public in the field of underwater archaeology.

Suggested Timetable

30 mins	Introduction: Raising Awareness
40 mins	Examples of the Deductive and
	Break
30 mins	In Situ Preservation
20 mins	Introduction: Public Participation
30 mins	Discussion: Public Participation, th
	Break
40 mins	Lecture: Introduction to Public Archaeolog
40 mins	Public Participation: Case Studies
20 mins	Concluding Remarks and Closure

5
Inductive Approaches From the Asian-Pacific Region
Projects
he Effectiveness of Working Together
y Initiatives in Foreshore and Underwater Archaeology

UNIT 17

Teaching Suggestions

Throughout this unit students are introduced to public archaeology and awareness raising, and are provided with an understanding of how they can be used in the protection of underwater cultural heritage. Discussions can enhance the student's understanding. Although not all relevant aspects can be covered, a few topics that may be most useful to talk about are listed below.

Part I: Raising Awareness

To complement the first series of lectures, it is recommended that trainers discuss:

- The goals of public archaeology
- Examples of deductive and inductive approach in countries in the Asia-Pacific region
- The general public's perception of in situ protection

Part II: Public Participation, the Effectiveness of Working Together

It is recommended that before the lecture begins, trainers encourage students to discuss the benefits, risks and associated ethical issues, involved in raising awareness and allowing recreational divers and the public to participate in archaeological projects. A discussion before the lecture has the benefit of enabling the students to express their personal views and experience of public participation, without being influenced by the trainer's own views.

Trainers need to take into account that other countries have different recreational diving traditions. The United Kingdom (UK), for example, has a well established practice that is highly focused on wreck diving. Not all countries share the same tradition. In the UK, diving is relatively unregulated and divers have access to all but a relatively small number of protected sites within defined boundaries, without prior permission.

To conclude, trainers should explore whether the unit lectures have changed the opinions of the students or revealed other issues that were not raised during the opening discussion.

Case Studies: Projects for Amateurs

The projects outlined in the following case studies have similar aims, such as:

- cultural heritage
- To promote local custodianship of sites
- To provide opportunities for the public to take part in archaeological projects that contribute information to local and national cultural heritage site archives
- To utilize the archaeological skills learned during NAS training courses
- To disseminate the results of the fieldwork

Case Study 1

Sound of Mull Archaeological Project (SOMAP)

The Sound of Mull is a 34 km long stretch of water that separates the Isle of Mull from the Scottish mainland and has provided a relatively sheltered passage for watercraft since prehistoric times.

The area has an important and diverse underwater cultural heritage resource that includes two sites, Swan (1653) and Dartmouth (1690) which are both designated under the Protection of Wrecks Act (1973). A variety of steamships, sailing vessels and isolated finds can also be found. The Sound of Mull has become a very popular dive location due to the diversity of the wrecks, many of which are in excellent condition with abundant marine life and surrounded by spectacular coastal scenery.

Introduction to the Project

The project was initiated in 1994 by the Archaeological Diving Unit (UK) and NAS. The aim of the project was to utilize volunteers to resurvey the site of the Dartmouth (1690), a protected wreck and the John Preston, a nineteenth century schooner and unprotected wreck, from where artefacts are suspected to have been removed. See Additional Information 5 and 6.

Archaeologists from the Archaeological Diving Unit and NAS provided on-site training and supervision, to help maintain archaeological standards throughout the fieldwork.

The resurvey of the Dartmouth revealed that two cannons and two anchors were either missing or buried in the sediment (the absence of the cannon and anchors was confirmed in 2003 by the government's archaeological inspection team). A baseline survey of the John Preston was also achieved. Subsequent diving seasons were under the supervision of a local archaeologist, with grants from Historic Scotland. Approximately 200 volunteers participated in the project between 1995 and 2005.

UNIT 17 PUBLIC ARCHAEOLOGY

• To encourage the public to participate in the recording and preservation of underwater

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Project Objectives

The scope of the Sound of Mull Archaeological Project widened from its original objectives on the two sites to include additional initial assessments of more wreck sites, anchorage sites, structural remains and isolated finds. These assessments were designed to determine the extent, character, condition, date and origin of each of these sites. Outputs from the assessments would include baseline maps, accurate locations, seabed bathymetry and recorded evidence of human activity.

The project involved desk-based research, diver and geophysical surveys. In total, public and private support enabled four geophysical surveys to be carried out, although these were carried out separately from the volunteer field activities. Further to this, licensed visitor schemes on the *Swan* (1653) and the Dartmouth (1690) were implemented.

Interdisciplinary Approach

The project adopted an interdisciplinary approach. Voluntary research was carried out on the character of the burial environments, followed by metallurgical and biological assessments on the Thesis and the Pelican. The Marine Conservation Society also utilized its own volunteers and undertook qualitative biological mapping of several of the wrecks in the study area.

Archive

On completion of the SOMAP monograph in 2007, the entire site archive was deposited with the Royal Commission on the Archaeological and Historical Monuments of Scotland (RCAHMS), which will curate the archive. The site continues to be managed by Historic Scotland.

Results of the Project

The project produced preliminary surveys of a number of the sites in the project area, with a more detailed recording of the steamship Thesis, the schooner John Preston and an isolated group of cast iron cannons. The Thesis and the John Preston have been subsequently adopted under the NAS' Adopt a Wreck programme.

Reports and Publications

The results of the fieldwork (1994 to 2005) and information gathered from project reports, submitted as part of the NAS training programme, were published in a monograph (BAR 453, 2007). The results of the project were also disseminated through the NAS website and presentations at archaeological or heritage conferences.

ADDITIONAL INFORMATION

5 The Archaeological Diving Unit (ADU) was the team responsible for inspecting the designated wreck sites and advising the British government on potential designations.

6 The Dartmouth was originally designated in 1974, but following three seasons of archaeological works, the site lost its status. In 1992, the site was redesignated following reports that cultural material had been removed.

6 SOMAP **Geophysical Surveys**

1995: Sonar search by the Royal Navy in two sections of the project area

1999: Side scan and proton magnetometer survey by the School of Ocean Sciences, University of Wales

1999: Side scan sonar on two wreck sites in the area 2004: Sound of Mull Mapping Consortium utilizing multibeam sonar.

Acknowledgement of the Project's Success

The project's success is recognized in the policy document Towards a Strategy for Scotland's Marine Historic Environment. The document stated that, 'projects such as the Sound of Mull Archaeological Project have been successful in developing skills at the community level and in involving the public in the recording and conservation of historic assets around Scotland's coasts' (Historic Scotland, 2005).

Suggested Reading

Dissertation, Geological Oceanography, Bangor, University of Wales. Archaeology. 2000/4. Nautical Archaeology Society.

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www.nauticalarchaeologysociety.org/projects/somap.php (Accessed March 2012.)

Case Study 2

Adopt a wreck

Introduction to the Project

The Adopt a Wreck scheme was created after the UK's Wreck Amnesty (2001), during which discussions concluded that **8** In 2001, the UK Maritime divers should be encouraged to take more responsibility for the wreck sites which they dived.

The scheme, with funding from PADI's Project Aware, enabled the development of a project starter pack that promoted the scheme and disseminated results through a series of newsletters.

Aims and Objectives

The aim of the scheme is to encourage volunteer teams to develop a sense of ownership and stewardship for coastal and underwater cultural heritage.

The objectives are to:

- Add information to the records of archaeological and environmental organizations
- Disseminate information about coastal and underwater sites to the public
- Enhance and widen the understanding and appreciation of underwater cultural heritage Understand the impact that factors, such as recreational diving, are having on underwater
- cultural heritage.
- Conduct baseline surveys
- Monitor subsequent changes to the adopted site
- Conduct wider historical research
- Disseminate the research results

Baseline Surveys

Adopt a Wreck encourages groups to conduct baseline surveys and to monitor changes noted during subsequent visits to sites. Groups can use a variety of techniques, such as video, still photography, sketches and tape measure survey. Although the project initially targeted recreational divers, non-divers are also encouraged to participate.

Project Pack

NAS has developed a 'project pack' CD, which includes:

- · Case studies from previous winners of the Adopt a Wreck Award
- Guidance on working safely
- Information on useful equipment
- Information on project planning, recording and research
- Fourteen different recording forms
- Relevant legislation that might affect projects
- Guidance on reporting, archiving and funding
- Applications for the Adopt a Wreck Award
- Information on appropriate training

and Coastguard Agency held a three-month amnesty from prosecution for failing to declare artefacts retrieved from wreck sites, a statutory duty defined by the Merchant Shipping Act (1995). Over 30,000 objects

were reported, with approxi-

mately 900 of them consid-

ered historic (over

100 years old).

ADDITIONAL INFORMATION

Annual Award

As an incentive, an annual award is presented to the 'person or group that has made the most significant contribution to maritime archaeology and research through the adoption process'. (NAS, 2011)

The Award criterion includes:

- Number of people involved
- Time spent on site
- Type of work undertaken, such as video, photography and sketches
- websites and lectures, and whether information has been submitted to competent authorities as contribution to historic records

Summary

One hundred and twenty sites have been registered under the scheme, mostly in the UK, with others in Gibraltar, the Maldives and Poland. Not all of the adoptees remain active, but it can be concluded that the scheme has proven successful in providing a framework for groups to fulfil the project's original aims and objectives. It is hoped that the achievements of these outstanding groups will inspire others to undertake similar projects on sites that are not yet protected and, therefore, under the jurisdiction of state management.

Trainers should note:

- That the scheme is totally voluntary
- Nautical Archaeology Society
- That an adoption does not result in any legal entitlement or fees payable

Suggested Reading

- tion, Dept. of Archaeology, University of Bristol.

Useful Websites

(Accessed February 2012.)

• Dissemination of historical research through various media, such as TV, radio, newspapers,

• That there is an administrative process to adopt a site, between the adoptees and the

Bailey, C. Georma, F. Mayger, C.M.G. Micha, P. Sa Pintao, S. Soussi, E. and Taylor, J. 1998. Site Report on the Cannon Site at Scallastle Bay, Sound of Mull, Scotland. Unpublished MA Disserta-

Adopt a Wreck scheme: www.nauticalarchaeologysociety.org/projects/adoption.php

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Case Study 3

The Big Anchor Project

Introduction to the Project

This project is aimed at members of the public from all age groups. The archaeological justification for this project is that although anchors are a ubiquitous symbol of maritime heritage, little archaeological work has been done to collate where they are or the information that they may contain.

Anchors have been used by seafarers for millennia and have become emblematic of the maritime landscape and represent humanity's relationship with the sea. They come in many shapes, sizes and are made of a variety of materials. Each represents evidence of technology, shipwrecks, trade and exploration.

They can be found in many locations:

- Associated with a sunken vessel
- As an isolated find lost as a result of being fouled on the seabed or during a sailing incident
- In maritime and other local museums
- Private and public places

The image of the anchor is also used in other contexts:

- As logos for business and merchandise
- The fouled anchor is the symbol of the British Admiralty dating back more than 400 years and appears on equipment used by the Navy and Royal Marines.
- As the name of public meeting places with maritime names such as The Anchor or Ship and Anchor
- Decoratively in the form of body art tattoos

Educational Resource

To help participants record anchors, NAS has developed a set of recording forms that can be downloaded from the website. These records can then be uploaded to a database that can also be used for research purposes.

Specialist courses are also organised to help participants to categorize, record and date anchors.

Range of Anchor Types

The project database and the reporting procedure are currently divided into two broad categories: stone anchors and stock anchors. The database will also include information about stockless anchors in due course.

Results

To date, 500 anchor records have been submitted by the 120 registered users from Europe, Asia and the Americas.

Submit your anchor record to www.biganchorproject.com

Section 1. General Informatio

Context	Features
Category:	Stock:
Site:	Squaring of shank:
acation:	Ring:
	Shackle:
	Number of arms:
Reference # :	Inscription
Ship name:	
Ship type:	Features
Ship size:	Shape of f
Function:	Stock type
Anchor type:	Stock sect
Category:	Stock shap
15	Stock faste
Date and Origin	Stock key:
Date:	Shank for
Doriedt	Comunity

	10000000000000000000000000000000000000
Date:	Shank for
Period:	Crown:
Nationality:	Arms:
Certainty:	Weight:

Section 2: Anchor Dimensions (red rded in m, cm, mm

Shank	Key	
Length of shank:	Height of key:	
Diameter of top of shank:	Distance of key:	
Diameter of bottom of shank:	Fluke	
Diameter of stock eye:	Width of fluke:	
Arms	Length of fluke:	
Length of one arm:	Ring	CHIL!
Amplitude of arms:	Diameter of ring:	
Height of bills:	Diameter of eye of ring:	
Distance between bills:	Thickness of ring:	
Shackle	Stock	
Diameter of shackle:	Length of stock:	
Diameter of eye of shackle:	Max. diametre:	
Thickness of shackle pin:	Min. diametre:	
Opening of shackle:	Max. thickness:	
	Min. thickness:	
The Big Anchor Project is coordinated by the Nautical Archaeology	Max. width:	
Society - www.nauticalarchaeologysociety.org	Min. width:	

ABOVE: A recording form used as part of the Big Anchor Project. © Nautical Archaeology Society

RIGHT: A rare bronze stocked anchor that was recovered from Monterey Bay in 1944. © C. J. Underwood



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Iron Stocked Anchor Recording Form



THE REAL PROPERTY OF
D

Recorders	
Names:	
Date:	
Group/Org:	
Big Anchor ID:	

ikes:	
on:	
e:	
ners:	
2	

A broad range of anchors have been recorded, from ancient to relatively modern stone fishing anchors, as well as various metal anchors. A significant number of these anchors are of rare patent types rather than the common admiralty pattern anchors. Some may be unique, but this needs to be verified through further research.

Future Developments

Subject to funding, the project intends to develop an interactive GIS world map of anchors featuring the records of those submitted. This would be followed by the creation of a Big Anchor App, allowing participants to record and upload submissions from smart phones, direct to the anchor database.

For more information about the Big Anchor Project see: www.biganchorproject.com/ (Accessed February 2012.)

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UNIT 17 PUBLIC ARCHAEOLOGY

British Sub-Aqua Club (Underwater Heritage): www.bsac.com/page.asp?section=1006&se

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