The Impact of Treasure-Hunting on Submerged Archaeological Sites
Underwater cultural heritage encompasses some of the most precious cultural sites that the world has to offer, including ancient shipwrecks, sunken cities, sacrificial offering sites and prehistoric landscapes. For thousands of years it was largely unreachable and free from human intervention. Today, however, it has become accessible due to technological advancements, beginning with the invention of the aqualung in the 1940s. While modern equipment facilitates scientific research, it also allows treasure hunting to flourish. Pillaging, destruction and extensive treasure hunting is now taking place under water. Even sites located deep in the ocean, such as the Titanic, the Nuestra Señora de las Mercedes wrecks and, more recently, the Gairsoppa wreck, which lies 4,700 metres below the surface of the North Atlantic, have been subject to salvage operations. Underwater cultural heritage sites, therefore, require protection and surveillance, just like any other archaeological site.

This brochure illustrates the destruction of underwater cultural heritage by treasure hunting in the form of commercial salvage operations and pillaging, with the aim of raising awareness about and discouraging these phenomena. It also demonstrates the effectiveness of the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage and highlights solutions to allow for its full implementation.
PILLAGE

In the context of this brochure, “pillaging” or “lootning” refers to the theft of historical artefacts from a heritage site in violation of the law.

The pillaging of ancient shipwrecks in particular is an all too common phenomenon. A wide range of actors are implicated in the pillaging of these sites, from sport divers who engage in occasional souvenir hunting to specialized treasure hunting enterprises.

The resulting damage can be enormous. In one case, a sport diver in Turkey broke all the amphorae on several ancient Roman shipwrecks while searching for coins, which he never found.

Looting also desecrates grave sites, which are common to many wrecks. For instance, wreck sites from the Battle of Jutland in World War I have recently been stripped of metal and artefacts for financial reward.

The Nuestra Señora de las Mercedes, which sank in 1804 in a naval battle, was discovered near the Strait of Gibraltar and pillaged by the Florida-based Odyssey Marine Exploration Inc. in 2007. Odyssey claimed to have found the cargo, which they dubbed the “Black Swan treasure”, in international waters.

When Spain discovered that the cargo in fact came from the wreck of the Mercedes, once a Spanish state vessel, and that the 17 tons of gold and silver coins had been recovered without permission, it demanded their return. A court battle ensued for five years before the US courts ruled in 2012 that Odyssey had no claim to the artefacts and had to return the almost 600,000 gold and silver coins to Spain.

The treasure-hunting company had publicly estimated that the economic value of the pillaged Mercedes cargo was around 500 million USD. Its press release featured a picture of the company’s CEO surrounded by more than five hundred white plastic boxes. Only one was open and completely filled with well-preserved silver coins, making the venture look attractive to investors. With the announcement of the discovery the company increased the value of its shares by more than 300 million USD. Years later, when the cargo was returned to Spain, the actual contents of the boxes were analysed. They were only filled to a third of their capacity and most of the coins had not yet received the appropriate conservation treatment. Some of the coins had been damaged by heavy electrolysis treatment.

The actual value of the cargo did not exceed 13 million USD, not including costs related to equipment, boats and staff expenses, as well as conservation treatments, the latter being left mainly unattended to by the salvors. The real value of the wreck could have only been “recovered” if its scientific value had been carefully researched.

THE PILLAGING OF THE NUESTRA SEÑORA DE LAS MERCEDES - SPAIN

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COMMERCIAL EXPLOITATION

In the context of this brochure, the “commercial exploitation” of underwater cultural heritage refers to the legal recovery of artefacts from a heritage site with the aim of putting them up for sale.

Commercial exploitation operations regularly violate scientific standards of archaeological excavations, as they focus on the recovery of valuable materials. Conservation and documentation rules are generally not respected. In addition, commercial exploitation operations are often accompanied by investment fraud.

In 2003 local Indonesian fishers caught Chinese ceramics in their fishing nets in the Northern Java Sea, Indonesia. These objects belonged to a shipwreck now known as the Cirebon wreck. It sank in the Java Sea at the turn of the first millennium and was transporting a large amount of Yue yao (Yue ware), a Chinese porcelain produced in the ancient region of Yue.

In April 2004 the 10th century Cirebon wreck was exploited by a private Belgian company, which raised some 500,000 pieces of the cargo, throwing however half of the artefacts back into the ocean to destroy them, as these were judged not sellable for a good price, demanding too much conservation and - if left on site - nevertheless sellable by local pillagers in competition to the salvage firm. The study of the wreck could have taught us more about the Maritime Silk Road and its daily life. The Cirebon wreck held unique artifacts such as ceramics and religious offerings. Unfortunately, the commercial exploitation damaged all artefacts and destroyed many, including the hull. Conservation work was poor. The biggest part of the artefact collection left Indonesia in 2013 to be sold on the international market. This example shows the destructive impact of commercial exploitation of wrecks in Asia and underlines again the need of a universal ratification of the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage.

THE COMMERCIAL EXPLOITATION OF THE CIREBON WRECK - INDONESIA

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THE HARM DONE BY COMMERCIAL SALVORS AND PILLAGERS

As early as 1974, studies showed that all known wrecks off the Turkish coast had been looted. This trend has greatly increased over the years and has become global, intensified by large-scale commercial salvage operations. Many wrecks have been unearthed, for instance, in the Strait of Malacca in Asia, but most in the context of pillaging or commercial exploitation. Countless ancient wrecks have been robbed of millions of artefacts, in addition to the destruction of their scientific value. Few wrecks hold commercial riches, but treasure hunters nonetheless destroy thousands of them in their search.

Looting by leisure divers, amateur archaeologists or the local population heavily impacts historic wreck sites. In Malta, the wreck of the SS Polynesian was looted by leisure divers, while the Jeanne Elizabeth wreck in France was emptied by amateur archaeologists. By the same token, following pillaging by locals, nothing remains of the precious Portuguese vessel Sao Idefonso, which sank in 1527 off the coast of Madagascar.

Legally permitted commercial exploitation is no less problematic than illegal pillaging. When an excavation has to be made profitable through the sale of artefacts, it focuses on the sellable parts of the cargo, disregarding scientific information and inappropriately treating artefacts. For example, commercial treasure hunters have opened a fragile wreck site off the coast of Mozambique, possibly the N. S. de Conceição (1608), in search of treasure. They subsequently left its timbers exposed to destruction by the waves. The salvaged historic lead ingots were sold to the microchip industry, where they are used due to their low irradiation.

Weighing the damage done against the advantages gained by commercial treasure hunts shows that the loss of heritage largely outweighs the financial gains a State can achieve. In the Bahamas, for example, only one payment was received by the Government after 71 permits were issued over 27 years of salvage recovery. This came from the Nuestra Senora de las Maravillas salvage, but repaid only a tiny part of the considerable amount of artefacts exported by the treasure hunters. At the same time, dozens of the most important heritage sites in the region were fully destroyed.

In addition to seeking artefacts for financial gain, larger treasure hunting enterprises often function in a context of illegal side-activities. In some instances, they permit investors to avoid paying taxes by investing in their companies or help in money laundering through trafficking ancient artefacts. Similarly, the promise of valuable cargo is used as a fraudulent ploy to attract naïve investors. For instance, in 2007, 17 people appeared in a German court for fraud in disadvantage of 1,500 trusting investors after the treasure-hunters had claimed to recover valuable cargo from ancient shipwrecks in Latin America and Asia, without ever coming close to finding any treasure.

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"With metal detectors it is like with poison and medicine, in the hands of the wise they are a gift, in the hands of treasure-hunters they are a threat."

Dolores Elkin of the UNESCO STAB
In dealing with fragile submerged heritage sites, scientific knowledge and methodologies are crucial. Treasure hunters often damage sites and artefacts through inadequate approaches and lack of scientific understanding. This results in serious damage, such as the peeling of earthenware glazing, timbers disintegrating or splitting, ferrous materials rusting away and metal coins disintegrating. When several tons of coins were returned to Spain in 2012 after a major pillage, the conservators noted, for instance, that silver coins treated by the pillagers, around 5,000 pieces, had undergone overly aggressive electrolysis treatment. The silver and copper contents of the coins became detached from one another, destroying the artefacts.

In other cases, artefacts were taken out of the water in such quantities that the commercial enterprise could not handle them all and feared the lowering of the market prices due to the exceptional increase in supply. In such cases, items are often held in long-term storage without proper conservation and security, or are thrown back into the ocean for destruction.

A wreck site holds tremendous information, which salvors often irreparably destroy. Artefacts are incorrectly identified, the positions of items are not documented, or only sellable artefacts are extracted. Many commercial excavations are badly prepared and treasure hunters often operate in ignorance of the importance of scientific knowledge. For instance, the recovery of the cargo of the Belitung wreck in Indonesia was prepared in eight days, while, by contrast, an archaeological excavation of a site of such importance is typically prepared over the course of months of careful study.

Treasure-hunting companies often prioritize the quick removal of sediment to unveil sellable artefacts. A mission by the UNESCO Scientific and Technical Advisory Body (STAB) of the 2001 Convention to the San José site in Panama found that the treasure hunters employed powerful water jets using propeller deflectors to remove sediment, causing considerable damage to both the heritage value of the site and its natural environment.

THE IMPORTANCE OF SCIENTIFIC APPROACHES

On the right: an unconserved cannonball taken by looters from the Mary Rose, United Kingdom. On the left: a cannonball from the same wreck, but which has been treated scientifically © Mary Rose Trust.

A silver coin from the Panamanian San José damaged due to excessive electrolysis © X. Nieto.

The Belitung wreck site in Asia. It was the only known Arab Dhow from the 9th century ever found. It was destroyed by commercial treasure hunters © A. Sudaryadi.
COMMERCIAL EXPLOITATION: A POOR INVESTMENT

Experience shows that commercial salvage operations are not profitable. A majority of opera-
tions do not find treasure, yet result in the loss of both the investment and heritage. If a wreck with valuable artefacts is found, those artefacts are rarely handed over to the authorities. Oftentimes they are sold on the black market, and in some cases they are misused to increase share values and investments in the company.

Treasure hunters, moreover, intentionally over-
estimate the value of cargoes to attract investment. Treasure hunting is popular with the public and with the media. Salvage ventures thus continue to draw massive sums of money from investors expecting a big return, although detailed research shows that returns are extraordinarily rare.2


Treasure hunters counting coins from a wreck site in Africa (Arqueonautas S.A., a treasure hunter firm, website screenshot).
COINS FORM A KEY PART OF OUR HERITAGE

Coins have an important scientific and cultural value and the international community opposes treasure hunting for ancient coin cargoes through the 2001 Convention.

Coins that were hand-struck using hand-carved dies, the primary method of manufacturing coins up until the mid-18th century, are especially informative. Their study can contribute to our overall understanding of coinage and the administrative processes behind it, especially when experts can study the context in which the coins were found.

Remarkable information can be found in their conglomeration forms. Copper and silver coins, for example, corrode under water and form a mass that takes the form of the container they were in when they sank.

Moreover, knowing the mass and quantity of the coins and the context of their transport can tell us how much gold or silver was collected in a certain moment in time from a particular region, what labour forces were employed, and what pressure was exerted on a population.

Coins are cultural artefacts that are just as important as textiles, tools and timbers.

Coins from the Nuestra Señora de las Mercedes, which preserve the form of the trunk they were in when the ship sank © Ministry of Culture, Spain.
The preservation of underwater cultural heritage can foster sustainable development much more effectively than commercial exploitation.

**THE BELITUNG WRECK**

The Indonesian Belitung wreck, the only 9th century dhow ever found, was commercially exploited and destroyed in 1998. The cargo was sold for 32 million USD to a private entity. The share given to Indonesia was only 5 million USD. Indonesia lost an extremely rare wreck that could have provided scientific information and fostered sustainable development. A maritime museum close to the shipwreck site could have drawn tourists and generated local employment. However, the artefacts that would have constituted a museum collection were sold and there is nothing left of the shipwreck today.

**THE SUSTAINABLE BENEFITS OF LONG-TERM SAFEGUARDING**

**THE FLORIDA KEYS WRECKS**

Researching the exploitation of some 35 wrecks of the Florida Treasure Fleets proves similar. As early as 1990, Peter Throckmorton wrote: “what had been a relatively gentle weekend hobby as practiced in the Keys [...] became a gold-rush. [...] Florida’s policy towards its underwater antiquities has cost the State millions. The State’s 25 per cent share from the treasure grabbing of the past 20 years is a collection worth only about USD 5 million today. The Florida State Museum has in its possession approximately 1,500 gold coins worth on the market about USD 2,000 each, and about 20,000 silver ones, worth USD 80 to USD 150 each. This represents the State’s 25 per cent of all treasure recovered in Florida pre-1962. The collection has cost more than its value to maintain, especially if one includes the cost of the continual legal cases that have resulted for the State’s policy. If Florida had used that State money, and invested USD 10 million in two great maritime museums back in the 1960s, instead of giving leases to salvors, the State would be nearly half a billion dollars richer each year. If the Swedish example [of the Vasa museum] applies to Florida”[3]

**THE SWEDISH VASA MUSEUM**

The Swedish Vasa Museum features a warship that sank in 1628. The exceptionally well preserved shipwreck was scientifically recovered from the bottom of Stockholm harbour in 1961, and is now exhibited in an exemplary museum. The museum welcomes 1 million visitors a year and is the most visited museum in the country. The ship has been visited by over 30 million people since 1961. Typically, these tourists spend an additional day in Stockholm, spending an average of EUR 200 per day on hotels, meals and other expenses. This amounts to the attractive sum of EUR 200 million (USD 260 million) of increased spending in the city of Stockholm per year. In this case, preservation has paid off for Sweden.
HOW DOES THE UNESCO 2001 CONVENTION HELP FIGHT THE PILLAGING AND COMMERCIAL EXPLOITATION OF UNDERWATER CULTURAL HERITAGE?

The UNESCO Convention on the Protection of the Underwater Cultural Heritage was adopted in 2001 to combat the pillaging and commercial exploitation of this heritage. It fully addresses these issues in all waters, increasing the legal protection of sites in situ and prohibiting the illicit and/or unethical recovery and trafficking of artefacts. It provides the “largest museum of the world,” the seabed of the oceans, with guardians, an alarm system and legal safekeeping. The Convention sets a legal framework for measures to be taken in harmony with UNCLOS and ensures that legal assistance is provided to States to protect sites in international waters. It permits States Parties to agree on a common strategy and protection standards to take a firm stand against the destruction of sites. Only the universal ratification and effective implementation of the 2001 Convention can protect underwater cultural heritage in the long-term.

Some of the anti-exploitation and anti-looting measures that must be taken pursuant to the Convention include:

- States Parties must protect underwater cultural heritage sites (Art. 2), and prohibit pillage and commercial exploitation.
- States Parties must prevent the entry, sale, or possession of illicitly or unethically recovered underwater heritage within their territory (Art. 14).
- States Parties must prevent any part of their territory (e.g. ports or islands) from being used to support activities directed at underwater cultural heritage that do not conform with the Convention (Art. 15).
- States Parties are required to seize and manage underwater cultural heritage within their territory that has been recovered in a way that does not conform with the Convention (Art. 18).
- States Parties are required to impose appropriate sanctions against those who violate the Convention (Art. 17).

A state cooperation mechanism helps to fill existing gaps in jurisdiction at sea. In international waters, and in harmony with the United Nations Convention on the Law of the Sea, States Parties:

- must request that their nationals report discoveries and activities directed at underwater heritage,
- must share this information with the other States Parties through UNESCO,
- may declare their interest to be consulted in regards to particular sites, and decide together on a course of action,
- promise jurisdictional help to each other and may take action in cases of immediate danger,
- take action to protect underwater cultural heritage together through a Coordinating State.
Many States have questions about how to effectively protect their underwater heritage sites. Site surveillance at sea is possible by implementing the 2001 UNESCO Convention. The inventorying of sites is the first step to achieve this. A State authority can acquire data collected for other purposes, such as navigation safety, mapping of other resources, clearing of navigation channels or fishing. Surveys in the field can then be undertaken in order to control and identify more sites. The collected information can be fed into sea maps used by ocean surveillance personnel for monitoring, along with other tasks, such as the surveillance of smugglers or drug traffickers.

Satellite surveillance can also be used. Most ocean-going vessels use obligatorily satellite systems and have to report their movements. Authorities can therefore be alerted when satellite systems are deliberately switched off, when ships remain in one spot for a long period of time or when they undertake sweeping movements over the ocean floor (as is typical of vessels that use sonar equipment to search for shipwrecks).

Similarly, control dives are advisable for particularly valuable or fragile wrecks, in order to regularly check for possible pillaging. In some cases, dive clubs or amateur archaeological associations can be contracted for monitoring.

International cooperation and operational or desk based criminal investigations under the 2001 Convention is critical. Often enterprises involved in heritage pillaging operate internationally. Vessels travel under flags of convenience and enter the territorial waters of a country from the High Sea, before leaving through international waters without touching port. Under these circumstances, a close cooperation network of national and international police services is crucial to identify criminal networks.

Finally, the true protection of heritage can only be achieved if there is a serious law enforcement effort in the long term. Even if illegal excavations cannot be prevented in some instances, the surveillance of borders and of art markets can halt the destruction of underwater sites through the seizure of stolen materials. Awareness-raising and cooperation between the various authorities according to the 2001 Convention is crucial.
IN CASE OF NEED

EMERGENCY ASSISTANCE THROUGH THE UNESCO SCIENTIFIC AND TECHNICAL ADVISORY BODY

The UNESCO Scientific and Technical Advisory Body (STAB) is an essential organ of the 2001 Convention. Consisting of 12 leading experts in underwater archaeology and related fields, it provides advice to the Meeting of States Parties regarding questions of a scientific or technical nature and assists States Parties in matters related to underwater cultural heritage.

States Parties that lack underwater archaeologists, and face problems due to chance discoveries, treasure hunting, or need information on scientific issues can call on the STAB for assistance. Its experts are readily available to offer advice or, if necessary, to conduct a mission to the requesting State Party.

The STAB can intervene in a timely and low-cost manner, as demonstrated by the STAB’s recent assistance missions.4

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FOSTERING RESPONSIBLE ACCESS AND AN AWARE SOCIETY

Promoting responsible access to underwater cultural heritage is crucial to raise awareness of the beauty and significance of humanity’s submerged archaeological sites. Sport diving communities have always been instrumental in discovering and reporting new underwater sites, and over the years divers have played a crucial role in fostering an appreciation for underwater heritage. Since sport divers experience this heritage first-hand, it is imperative to encourage them to strengthen the protection and preservation our shared heritage for future generations.

UNESCO has established a Code of Ethics for Diving on Submerged Archaeological Sites. Please respect it, and respect the 2001 Convention. Whether you are a diver, a tourist or a heritage manager, let us work together to make the Convention work. Together we can support responsible research, museum exhibitions or in situ access to underwater cultural heritage.

Archaeologist conducting research at a wreck site. © P. Larue.
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