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Hundreds of treasure shipwrecks and new search & recovery technology changes the way marine archeologists must think about coins

By Gary Beals

The huge treasure galleons of Spain changed economic rules some 400 years ago. The recovery of their wrecks in this century has changed some old archeology beliefs as millions of dollars worth of gold and silver coins return to the marketplace. Archeologists cannot keep claiming "No artifacts can be sold!" And salvors cannot continue to say "marine archeologists are the enemy!" The compromises on both sides must continue with patience.

This is the 20^{th} anniversary of the UNESCO shipwreck draft — and after 20 years of mixed results it is long past time to fix it. There are good reasons why this program was rejected by both the USA and the UK. The key changes we propose relate to the recovery of ships hauling huge quantities of coins from about 1550 to about 1805. Note that where the money was headed helps us understand where the coins were lost.

This is the golden age of shipwreck search and recovery

Thanks to technological advances in shipwreck search and recovery, the world was impressed with the amazing scientific techniques used to find and bring up the tons of California gold coins and ingots from the 1857 wreck of the SS Central America 8,000 feet underwater — and that was 35 years ago. Think about the mobile phone and television set you owned in 1986 and the ones you have now. Improvements like those also taken place in the technology of treasure search and recovery.

Today all the elements of recovering coins from wrecks are in place. High technology scanning equipment for both underwater and sub-seabed has proven itself. Serious historical research on treasure wrecks has been done in historical archives as the first step in the recovery process. Governments have become both more strict and more cooperative about recovering lost history. There is now a better understanding by salvors of the vital role archeologists play in uncovering and studying shipwrecks.

This update of the UNESCO draft relates only to huge quantities of numismatic items from what we could call the Age of Exploitation — from 1550 to 1805 or so. The coins were homeward bound to Spain from the Americas or headed for the Philippines on what we now call Manila galleons. The gold and silver coins (often Spanish American ones) lost by merchants of Holland, England and Portugal were outward bound from those countries to the East Indies, Africa and Asia. Many of their treasure-loaded ships sank in the English Channel.

The huge cargos of coins on colonial shipwrecks are *special* artifacts that will someday pay marine archeologists' salaries. Dozens of shipwrecks, each loaded with a million or more gold and silver coins, have changed the rules about what to do with coins and other artifacts. It is now long past time for archeologists to change their out-of-date rules as well. Wrecks of Spanish, Dutch, English, Portuguese and French sailing ships await in the deep. Many highly educated archeologists should now realize that all those gold and silver coins can now finance the recovery of more lost history.

This article is not about ancient Greek, Roman or medieval coins lost at sea. When those coins are found in ancient shipwrecks or ruins, museums deserve to acquire many of them to exhibit. We are only discussing the coins produced and shipped during the Spanish American Colonial Empire starting about 1535 to about 1810. We are dealing with millions of coins coming out of the seas in the next few years — more than an archaeologist could sort through in a year.

Marine archeologists: Are you OK?

During my sport diving years I became used to that question and answer gesture to a distant fellow diver: curling an arm up with my fingertips touching the side of the head. That is a larger body version of the simple thumb and forefinger gesture: Are you OK? Well, the answer is no.



This diver 'OK' gesture artwork is the property of www.divingsignals.org

Marine archaeologists have braved sharks and barracudas but now they fear change. The bureaucrats of UNESCO have scared these intrepid folks into silence. While UNESCO has led the way for many vital protections for Earth's assets over the decades, the bureaucrats who drafted their warped viewpoints on shipwrecks in 2001 missed the mark. Unfortunately, many marine archeologists bought into that limited thinking.

I thought the ideal organization to talk to would be the Advisory Council on Underwater Archaeology (ACUA), but I was stonewalled. Ashley Lemke, who chairs the body told me: "ACUA does not condone the selling, bartering or trading of artifacts. We maintain public trust by ensuring that research is done in compliance with local, regional, and international laws. The UNESCO 2001 Convention on the Protection of Underwater Cultural Heritage outlines best practices…"

Best practices? The convention was drafted without the input of anyone from the salvor industry or the numismatic field. Trading artifacts is bad — even between museums? Then what happens to all those artifacts? And compliance with laws? It is ACUA's job to help create laws that support current archeology principles and historical norms — to lead as well as to follow. The very fact that the word *advisory* appears in the group's name implies 'thinking is done here.' Are you authorized to have ideas that support future situations? Who is doing the thinking for today's situations?

Today numismatists have important questions for marine archeologists:

- What should be done with 2,000,000 coins from a Colonial Spanish shipwreck?
- What kind of artifacts are such coins to marine archeologists? Redundant artifacts? trade goods?
- How many coins are needed to learn enough about each wreck? What shall we do with the rest?
- Where do you think salaries for marine archeologists in the future will come from?
- Should a museum improve itself by selling or trading its redundant, duplicate artifacts?
- What is your solution for the common problem of museums hoarding artifacts?

The search and recovery of lost treasure of all periods must be guided by trained marine archeologists. There should be no argument about that. Today a treasure salvor code of ethics expects a project archaeologist to work on any shipwreck recovery of historical significance. The coins, however, are to be evaluated by numismatists and most put onto the market.

Changes are needed in archaeological guidelines as enormous cargos of coins are found

There is no need for conflict between salvors and archeologists. Most archaeologists believe selling artifacts or putting a monetary value on objects of heritage is unethical. In many cases this is valid. Artifacts help clarify the archaeological record and provide clues about how people lived in the past. However, when a cargo of a million or more coins is recovered, the majority of those coins can and will be sold to collectors and dealers. Most importantly, those proceeds can be used to pay all involved in their recovery — culture-shocked archeologists included.

When a single type of artifact is 1,000,000 coins, the financial value plays a part along with historical value. No trade goods-related treasure of this size has ever confronted archeologists. Both learning and earning must now be goals of archeologists when dealing with Spanish colonial coins. No older gold or silver coins apply to this situation because none were ever produced and shipped around the world in such astounding quantities.

David J. Bederman (1961-2011) was a critic of the UNESCO's Convention draft in the years before 2001. He was a professor in Private International Law at Emory University, Atlanta. He wrote extensively on the doctrines of the law of the sea, international common resources and the history of international law. He was a legal adviser at The Hague. Sadly, he died in 2011 — the 10th year of the UNESCO Draft. Back in 1999 Bederman put his focus on the most glaring deficiencies of the UNESCO Draft and an alternative approach managing the resource of historic shipwrecks. And here we are on the 20th anniversary of this document which Bederman told us sends the message between each line: "Business people are evil."

UNESCO's subtle message about shipwrecks: "Businesses are evil" The UNESCO Draft was largely based on a 1998 effort by the International Law Association ("ILA") an international organization of international academic law specialists. The ILA to set up shipwreck rules for several years, during which time no input was invited from any person or entity other than those concerned with historic preservation values.

Bederman saw that the UNESCO draft suffered many key defects. They were and still are: A ridiculously over-inclusive definition of "cultural heritage" for shipwreck artifacts, a seriously flawed definition of *abandonment* for historic shipwrecks, giving authority to coastal nations that violates international law and an attempt to abolish commercial incentives for historic shipwreck recovery. We will not discuss the complex issues of admiralty law which include the concept of abandoned wrecks in this report. Remember, we are talking about millions of coins in shipwrecks lost for hundreds of years. Outbound for business, these ships were not carrying temples or school books, they were loaded with tons of coins. (At the end of this article is an incomplete catalog of galleon wrecks with millions of coins aboard.)

These fascinating coins represent nothing noble or glorious. They were tools of commerce and avarice. Tons of them were created by enslaved people using precious metals from recently conquered lands. Most of them were destined to pay national debts and fund wars rather than build industries or universities.

Some perspective is needed here: It is obvious today that the treasure salvor field is high tech commercial enterprise with proven successes. Like all businesses, it is subject to various amount of government monitoring and control, as it should be. Like many businesses there have been lapses of integrity in some activities. Somewhere between government over-control or completely ignoring a situation is the ideal path. But treating millions of coins as something too sacred to not be sold. The term 'non-profit' does not mean that profit is bad.

"The common good" is a phrase in the U.S. Constitution that outranks unfettered individual liberty. This gets frequently forgotten but must be recognized especially when historical details are being uncovered. In the case of shipwrecks recovered with a million coins or more aboard that common good is not that all the coins become museum artifacts for people to look at but that thousands of them can be bought by people who want to own a piece of history.

There have been incidents that enraged archeologists over the years. The sloppy salvage work in 1985 on the HMS *De Braak*, a 16-gun British sloop that wrecked off Delaware in 1798, is a good example. The ham-fisted removal of historical materials from that wreck annoyed many archeologists for good reasons. But proper salvor work with archeologists leading the process has greatly improved and can be expected today.

Salvor companies sell the coins recovered to coin dealers or consign them to numismatic auction houses. This has gone on for decades. The silver coins with less collector quality are sold to jewelry companies who usually frame the pieces with a gold band and sell them as necklaces. The unidentifiable silver coins are usually melted down and that .907-fine silver molded into ingots. Sometimes relic medals are struck using this shipwreck silver. Few treasure salvor companies have been successful as retailers of recovered coins. The coins' place in history becomes more uniform when are in the hands of numismatic dealers with decades of solid reputations and sophisticated cataloging of their inventories.

Some retailers promote the mystique of the pieces as momentos of a spectacular lost shipwreck but we may have passed that point as so many wrecks have been located. Gross over-pricing based upon the coins coming from a particular wreck should be at a minimum. With huge numbers of coins coming onto the market, prices of individual coins may come down in price or at least remain the same.

Consider the limited variety of coins which might be found among a typical cargo of a million pieces: There might be no more than 50 different types. The majority would be silver eight reales coins, perhaps of two or three varieties given the date of the wreck. Other coins would gold escudo pieces and lower denomination silver pieces such as four reales, two reales and one reales coins. When the cargo consists of some coins from a previous king mixed in with the ruling king that number of examples could double. Varieties created by a change in mint assayers or new designs are also a factor. There might be five to ten different dates in a typical cargo. And, of course, displaying obverse and reverse sides of each coin is a consideration in the inventory.

Cob-type coins minted before 1732 when coin presses began to be used in the Americas are usually so crude that a museum would want perhaps ten coins per type just to clarify the variety of coin shapes created. After 1732 two or so coins of each type would please most museums.

Coin collectors and numismatists are reliable guardians of history

Serious coin collectors are excellent stewards of history and culture. They take care of their coins and learn the details about them. These numismatists are the kind of people who pay \$100 to \$20,000 each for coins to add to their collections. They are the sort of guardians that museums can count on when some future study of particular coins is needed.

Some archeologists and museum managers are concerned that the sale of artifacts create a loss of access to the dispersed pieces. Coins are not part of this problem. Thousands of coins are in the hands of dealers and collectors, available to researchers who want to study them. Several excellent numismatic auction houses provide public access to past auction sales complete with coin details, year minted, sizes and weights, metal alloys, sale prices and razor-sharp photos of the coins sold.

The entry of shipwreck coins into private collections is carefully documented. Each year thousands of such coins are sold by specialized auction houses. Here is a typical coin's listing by Sedwick Coins accompanied by a razor-sharp photograph: "Mexico City, cob 8 escudos, 1714J, MS 62, ex-1715 Fleet (designated on special label), ex-Louis Ullian... 26.94 grams. Full cross-and-tressure and well-detailed shield, full date, nearly full crown, with ...light yellow color with trace of luster ... NGC #5939652-001." If archeologists need more information than that dealers might ask the collector to talk to them.

The category of "shipwreck coins" continues to fascinate some collectors and the number of vessels names on that list will grow as recoveries continue. It is always the details of mint, year, type and condition of coins that drive the true value. Unethical sales promotions using meaningless terms like "Pirate coins!" does little to support collectability. Coin cargos taken by pirates or privateers and then lost by them do not logically take on any particular importance.

Re-writing the outdated UNESCO draft on shipwrecks after 20 years

We reexamine here the main principles of the 2001 draft and then recommend additions and changes. This time, the new draft includes the viewpoints of salvors and numismatists — not just the bureaucrats who believed that business involvement in shipwreck recovery is evil. Perhaps this version can be approved by the USA and UK which rejected the original document in 2001. The first step is for current UNESCO members to admit that they have no idea whatsoever what to do with 2,000,000 coins when they are recovered from a single wreck. Then there will be similar amounts of coins that will be recovered from 20 or 30 shipwrecks in the next few years.

The 2001 convention draft wanted to preserve underwater cultural heritage and it encouraged scientific research and public access. There no argument with that, even as defining the specifics of 'heritage' needs to be clarified. Lumping rules for land archeology sites and ocean wreck together is a poor decision. The convention encouraged scientific research and public access.

Preserving wreck sites is an important responsibility which UNESCO does not discuss. Some unrecovered sites need costly monitoring using high tech equipment to protect it against piracy and fishing trawler damage.

The *in situ* preservation of underwater cultural heritage (i.e. in its original location on the seafloor) is the first option in the 2001 draft.

Preserving examples of underwater cultural heritage should be considered as the first option only if the site is fully protected against illegal, unscientific or financially unsound recovery. In many cases leaving the elements of a wreck untended is a mistake that endangers historical artifacts and knowledge. Policing of the site over time can be more costly than a recovery of wreck artifacts.

Many wrecks are scattered across miles of ocean floor and continue to be damaged by fishing trawlers, ocean storms, illegal plundering of wrecks, and the constant destruction to metal objects by salt water. Therefore, *in situ* preservation in the seas has a completely different set of criteria than on land. Today's highly refined technical equipment and skills of an archeologist-led salvor team can carefully recover materials and plot the wreck better than ever before. Only when that capability is fully funded should such work take place. Coins particularly are in constant danger of being harmed in salt water or stolen from many wreck sites.

The 2001 draft demands that underwater cultural heritage should not be commercially exploited for trade or speculation, and that it should not be irretrievably dispersed. It is important to recognize that this program was rejected by the USA and UK because it could not clearly define "underwater cultural heritage."

The draft conforms to what it calls "the moral principles that already apply to cultural heritage on land" — and that is a mistake. It provides no guidance regarding handling huge cargos of gold and silver coins. This rule fits the recovery of small ancient Greek or Roman watercraft. But it is unrealistic for giant shipwrecks with a huge wealth in duplicate numismatic items. There are dozens of such wrecks scattered in seas around the world. There are plenty of objects (to use the UNESCO word) to both greatly improve museum inventories and to be sold to pay for their archeological recovery and analysis.

Speculation is a seedy old word that attempts to make investing seem dirty or poorly planned. It is investments that have always fueled progress in nearly every human endeavor. The prejudice against business enterprise at this UNESCO branch seeps out here. The draft ignores obvious historical facts: Commercial enterprise that launches most significant projects. It is business people who get things done. Inventions, discoveries, improvements and innovations are the stuff of industry and commerce. Government monitoring of this effort is always a good idea, but over-control leads to trouble.

The UNESCO people trying to set rules for shipwrecks were clearly not from the business world. Today we see businesses doing what the government organizations used to do. There are great examples of commerce and government working closely in many fields. For example, UPS and FedEx does what the U.S. Post Office used to do and commercial rockets do what NASA used to do. Many years ago the Olympics changed its rules to allow professional paid athletes to compete with amateurs. Times change and so do the rules.

The shipwrecks with millions of coins in them were the commercial exploitation of centuries ago. Those coins were and are artifacts of business. One way of looking at two million silver coins recovered from a long-lost galleon is that these pieces will now be returning to their original function as tools of commerce after hundreds of years in the sea.

The term "commercially exploited for trade or speculation" shows a prejudice by the UNESCO committee against business. This is a wrong approach when millions of coins found on shipwrecks. The term "speculation" simply means investment, which is a standard business reality. The market will control it naturally. Overlooked in all of this is that selecting a commercial enterprise with integrity is a key to any government-involved activity.

It is unfortunate that a few nations have taken this clause to heart with restrictive anti-treasure recovery laws. For example, the Philippines demands that a salvor company to be a non-profit organization. This is complete nonsense. The Cancer Society does not have side-scan sonar gear and the Heart Association has no underwater magnetometers. The Philippines already requires that 50% of the materials recovered be given to the national government.

In the case of huge shipments of gold and silver 400 years ago it is difficult not to say that the purpose of the voyage was greed, exploitation and further enrichment of wealthy men. Noble aims of our ancestors seem to fade away when we take a close look at shipwrecks of the age of colonization. Many of those coins and ingots were made by enslaved people. A realistic step would be to recover the lost money and get it back into use today to benefit thousands.

This clause was created while ignoring the realities of galleon wrecks containing tons of coins. It even ignores the amazing innovative recovery of tons of gold from the SS Central America in the 1980s. Certainly, those gold coins and ingots lost in 1857 were exploited on the open market and speculation in the items could be considered foolish in many cases. But such purchases are legal and rarely result in a major long term problem.

The UNESCO draft notes that objects from a wreck "should not be irretrievably dispersed." In the case of cargos of millions of coins, the pieces recovered from a galleon wreck will be dispersed, but not irretrievably so. If researchers want a large number of the coins in addition to those likely to be given to museums, they can buy them from dealers or collectors. The excellent photographs and documentation of each the millions of coins that have been and will be recovered should be sufficient for scientists. It certainly is for numismatists.

The 2001 draft notes "This regulation is in conformity with the moral principles that already apply to cultural heritage on land." Unfortunately, this is a failed concept. It confuses treasures found on land and oceans. Archeologically they cannot be equated. Those grand old ships were like floating banks — but they were ships, not banks, and we never hear archeologists saying "don't touch that bank ruin." There are entirely different aspects of marine archaeology that don't apply land based archaeological ethics. Cultural heritage under the sea is, as we have noted before, just the scene of an accident. Artifacts are not safe there forever. There are no known land sites with two million silver coins buried in them.

The galleons and other giant ships existed to support large scale commerce centuries ago. They supported, in many cases, greed and wealthy people's desire for exotic goods from faraway lands. Today a hardy lust for gold and silver drives major investments and motivates salvors' discovery and recovery of lost galleons' treasure. Coins pay for things, then and now.

The key rule to promote is that all treasure found is to be carefully cataloged and photographed. A quick look at shipwreck coins sold in the USA shows that all details of the pieces are catalogued. That the coins are sold and re-sold to sophisticated collectors does not harm the archeological 'collection.' The collection is information and it is not lost. We numismatists can quickly supply any archeologist or anthropologist with vast quantities of details about coins and minting during that age of colonization and exploitation.

UNESCO does not admit that underwater research often requires the destruction of what little remains of a wreck on and under the ocean's floor. Duncan Mathewson, Mel Fisher's archaeologist, in court testimony long ago noted the intertwined relationship of search, salvage and archeology: "Search is very much part of the salvage efforts. I cannot really understand what happened to a shipwreck without digging, without salvage. Search, salvage, ongoing research, archeological mapping is all part of a whole operation."

UNESCO expects to see participants cooperate and exchange information, promote training in underwater archaeology and build public awareness on the importance of underwater cultural heritage. No problem. It is also important to recognize that a million coins in a typical shipwreck of the Spanish empire brings thousands of exciting opportunities for people to purchase some of these coins. This has just as much impact as adding hundreds of coins to museum exhibits. People with a passing interest in coins can look at museum exhibits. People with a serious interest in historical artifacts can buy such coins.

The 2001 UNESCO convention draft notes qualifications that people involved in shipwreck site search, recovery and management must meet. That is a good idea. Capitalism with controls can serve everyone well. Governments should monitor the planning and work of treasure salvors to meet contemporary business standards of safety and legitimacy. Salvors must provide a list of the qualifications and experience of key individuals including divers, tenders, managers and vessel captains.

Rules for search and recovery operations are important. Salvors should be properly funded in advance and have ample leadership from marine archeologists. The salvor must have insurance that covers hazards to life, limb, and property inherent in salvor work and include worker's compensation and employer's liability. A training program for divers, incident reporting system, decompression plan, equipment inspection program. The salvor contractor should hold harmless governments involved from any claim for injury, death, or loss from its work. The salvor must have bodily injury liability insurance coverage.

SIDEBAR:

This is a draft of points of view the ANA could ultimately establish if and when it chooses to participate. We await a discussion with marine archeologists to modify and improve this. Keep in mind: To date, none have defined what coins in a shipwreck are. We are still waiting for a marine archeologist to break silence on this and provide insights. GB

American Numismatic Associationpositions on shipwreck coinsDRAFT

• A marine archeologist should be involved in work on any historic shipwreck recovery operation.

• A shipwreck recovery with large quantities of coins and ingots should include the active guidance of a numismatist with experience in related items.

• The archeological definition of large coin shipments found on a shipwreck shall be that they are manufactured duplicate artifacts linked to trade goods and international commerce that are similar to each other.

• The ANA supports permanent exhibits of coins and numismatic materials recovered from shipwrecks and can provide guidance in the ideal ways of displaying them.

• The ANA and its members can assist museums that exhibit coin finds with both guidance and items to display.

• Collectors are encouraged to carefully track and document the provenance of coins recovered from shipwreck. Information about these items should be available upon request to assist archeologists or other scientists studying such coins.

• Leaving unguarded shipwrecks *in situ* that are known to contain valuable coins is often a bad policy. Historical sites on land have no comparison to shipwrecks, and the well documented forms of harm done to shipwrecks are distinct from terrestrial archeological sites.

• A well organized and property funded group led by experienced and reputable salvors employing marine archeologists is the proper point of origin for coins from shipwrecks.

• Making and marketing replica shipwreck coins does not support the best interests of numismatics and should not be allowed or supported. This is currently a problem.

• How coins historically were packaged and shipped is part of their numismatic legacy and is of interest to collectors. Thus, the information marine archeologists gather at a shipwreck site is important and worthy of the extra time and effort that might be involved.

• ANA encourages the continued high detail photography and careful gathering of details about coins recovered from shipwrecks. This work by salvors, coin dealers and auction houses supports future research by numismatists, historians and archeologists.

• Museum deassessions of redundant numismatic artifacts can serve the greater good when it leads to new investments in research and expanded understanding of shipwrecks.

• The ANA discourages hoarding coins and numismatic materials recovered from shipwrecks by museums and government bodies. A few coins of each type and denomination from a wreck selected by specialized numismatists is sufficient to define their purpose.

• UNESCO is against hoarding artifacts by governments and museums and ANA supports this. As wrecks with one or two million coins aboard are recovered this will become a more common situation. The ANA museum has a program of deassessioning of numismatic items that has worked well for many years. ANA volunteer specialized numismatists can provide ways of avoiding the problem of museums holding excessive coins.

The stockpiling of thousands of recovered coins by salvors or numismatic companies is not considered hoarding. As has been done for decades in the gemstone field, holding large quantities of rare coins and letting them flow carefully into the market is an accepted business practice.



A typical eight reales coin of the 1600s with extreme salt water damage mounted as a necklace.

A sampling of the largest coin cargos on Spanish empire galleons that sank off the Americas and Europe

Listed below are shipwreck examples to show you the astounding amount of unrecovered gold and silver coins on the ocean's floor around the Americas and Europe. We have similar lists for Asia and Africa.

A '*peso*' referred to the eight *reales* piece or any principal silver dollar sized coin. Each such coin today is worth from \$40 to \$5,000 or so based on type and condition. When a galleon was loaded with 1,000,000 of these 27-gram coins the total weight of silver was 27,000 kilos - 59,400 pounds. Coins were placed in 1000-peso bags, called *talegas*, three or four to a wood chest.

Follow the money. Please note that is a summarized numismatic list of shipwrecks focused solely on vessels which sankwith huge quantities of coins and ingots. Each listing is just one line long. It was created from a more detailed study of shipwrecks with coins. Each listing on that report looks like this:

• In 1554 three Spanish galleons were driven onto sandbars off Padre Island, Texas. Some 250 died in the wreck and survivors later died of thirst and Indian arrows. A salvage operation from Veracruz far to the south sent four small ships to the site. More than 4,000,000 pesos in bullion were loaded on the salvage vessels but only one ship made it to Havana where it also sunk. Types of ingots and amounts of specific coins were not indicated.

The many wrecks of Manila galleons returning to Mexico are not listed here because their cargo was not principally coins. They carried cargos of Ming Dynasty porcelain and other Asian luxury goods bought with those Spanish colonial coins.

Research statistics for this report are mostly from the book *The World's Richest Wrecks: A Wreck Diver's Guide to Gold and Silver Treasures of the Seas* by Robert & Jenifer Marx.

The 1500s —

Americas:

- In 1541 two Spanish cargo ships with 1,300,000 pesos sank near the Dominican Republic.
- In 1551 the flagship of a fleet sank west of Bermuda with 2,500,000 pesos.
- In 1553 a fleet of 18 ships wrecked on Padre Island, Texas with 3,500,000 pesos.
- In 1559 the *Remedios* sank in the Bahamas Channel with 768,440 pesos in gold and silver.
- In 1560 the *Milagros* sunk near Bermuda with 2,000,000 pesos in treasure and Asian goods.
- In 1563 five galleons with 3,000,000 pesos in treasure crashed onto the reefs of Bermuda.
- In 1564 the Santa Clara with 1,217,000 pesos in treasure wrecked on Little Bahama Bank.
- In 1571 the San Ignacio and the Santa Maria sunk off Florida with 1,500,000 pesos in treasure.
- In 1574 four galleons were wrecked off Mexico's east coast with 2,000,000 pesos in treasure.
- In 1577 the Nuestra Señora de Lorento sank with 2,200,000 pesos in gold and silver at Callao.
- In 1584 near Bermuda three galleons sunk with 3,500,000 pesos of treasure.
- In 1586 an earthquake at Callao sank three galleons with 6,700,000 pesos of treasure.
- In 1588 the Santa Maria del Camino sank off Florida with 1,800,000 pesos in gold and silver.
- In 1589 the Magdalena with 1,250,000 pesos in treasure sank north of Miami.
- In 1599 a Spanish galleon loaded with 2,000,000 pesos in gold and silver sunk off Peru.
- In 1599 two galleons with 12,000,000 pesos in treasure sunk off Ecuador.

Europe:

- In 1566 Nuestra Señora de la Limpia Concepción 3,150,000 pesos sank near Lagos, Portugal.
- In 1577 the Nuestra Señora de Buen Viaje more than 2,000,000 pesos sank near Cádiz.
- In 1587 six galleons carrying 2,180,000 pesos in treasure were lost near Cádiz.
- In 1587 six galleons sank on the Sanlúcar Bar and 2,1180,000 pesos were lost.
- In the 1550s the Buen Jesús with 430,000 pesos wrecked in the Bay of Biscay.
- In 1596 63 Spanish ships near Cádiz with 25,000,000 pesos in treasure, sank in a huge storm.
- In 1552 the Magdalena and the Santiago sunk off the Azores with 1,650,000 pesos in silver.
- In 1554 Santa Maria del Camino with 1,000,000 pesos in treasure sunk in the Azores.
- In 1554 the 375-ton Santa Catalina with 1,350,000 pesos in gold & silver sunk in the Azores.
- In 1554 the 320-ton San Andres with 400,000 pesos in treasure sunk in the Azores.
- In 1560 the Trinidad and the Concepción sunk in the Azores with 1,400,000 pesos in treasure.
- In 1563 La Magdalena sunk in Angra Bay, Azores, with 2,000,000 pesos in gold & silver.
- In 1563 the Nuestra Señora de la Luz wrecked on an Azores beach with 700,000 pesos cargo.
- In 1586 the Concepción with 1,800,000 pesos in treasure sank off Angra, Azores.
- In 1588 two galleons wrecked near Angra, Azores with 1,000,000 pesos of gold & silver.
- In 1589 the *Trinidad* with 4,300,000 pesos in gold and silver sank in the Azores.
- In 1589 the Nuestra Señora de Guia with 1,235,000 pesos in treasure sank near the Azores.
- In 1590 the *Begoña* sank by Angra, Azores with 1,000,000 pesos in gold & silver.
- In 1591 treasure fleets of 150 ships with 45,000,000 pesos in treasure sunk near the Azores.
- In 1593 six galleons sank in the Azores with 11,000,000 pesos in gold & silver.
- In 1596 two galleons sunk near port in the Azores with 3,000,000 pesos in gold & silver aboard.

The 1600s —

Americas:

- In 1610 the *Nuestra Señora de la Piedad* sank off Peru with 1,000,000 pesos in gold and silver.
- In 1610 a galleon sunk north of Trujillo, Peru with 1,000,000 pesos of treasure lost.
- In 1624 the Espiritu Santo el Major sank near Cape Canaveral with a 2,200,000 pesos load.
- In 1634 the Los Tres Reyes with 1,545,000 pesos in treasure in Cartagena exploded.
- In 1647 San Nicolas with 2,000,000 pesos in gold and silver caught fire near Arica and sank.
- In 1656 the Maravillas wrecked on the Little Bahama Bank with 5,000,000 pesos in treasure.
- In 1669 the *Esperanza* with 3,250,000 pesos of treasure wrecked on the Little Bahama Bank.
- In 1673 two large galleons sunk at Arica with 3,000,000 pesos in gold and silver aboard.
- In 1683 the Santissima Concepción sank off Cape Canaveral with 1,800,000 pesos in treasure.
- In 1684 the San Salvador with 2,000,000 pesos wrecked on Bermuda's western reefs.
- In 1685 *San Jose* with 3,000,000 pesos in silver and gold aboard wrecked near Paita, Peru. Europe:
- In 1602 at Coimbra, Portugal a flagship with 1,240,000 pesos in treasure was sunk.
- In 1605 the Rosario and Santa Monica were lost with 1,000,000 pesos in treasure near Cadiz.
- In 1610 the Nossa Senhora da Oliveira with 410,000 cruzados in gold & silver sank off Lisbon.
- In 1610 the Nossa Senhora da Livramento with 673,000 cruzados in treasure also sank nearby.
- In 1616 five galleons with 2,300,000 pesos in gold & silver wrecked off Almería.
- In 1625 the San Juan with 875,000 pesos in gold & silver wrecked on the Shoals of Cachopos.
- In 1639 a flagship loaded with 1,500,000 pesos in gold & silver coins sank off Galicia.
- In 1643 the galleon *Santa Ana*, with 690,000 pesos in treasure, sank in a storm off Portugal.
- In 1656 the San Francisco Xavier sank in Cádiz Bay with 2,000,000 pesos of treasure on board.
- In 1662 the San Esteban with 1,000,000 pesos in Mexican silver and gold sank in Cadiz Bay.
- In 1666 the St. Michael Archangel with 1,720,000 8 reales coins sank off Scotland.
- In 1693 HMS Sussex, with nine tons of gold coins and all hands sank off Gibraltar.
- In 1695 the Santa Teresa de Avila with 1,200,000 pesos of gold and silver. sank near Setúbal.
- In 1608 the *Capitana* with 3,000,000 pesos in gold and silver sank at Angra, Azores.
- In 1608 another galleon sank with 1,788,600 pesos in treasure while anchored in Angra Bay.
- In 1614 the Socorro y Buen Viaje sank off the Azores with 1,000,000 pesos in gold & silver.
- In 1636 The San Mateo with 4,800,000 pesos in treasure sunk near the Azores.
- In 1663 three galleons with 4,000,000 pesos in treasure sank near the Azores.
- In 1664 four galleons sunk near the Azores with 6,580,000 pesos.

- In 1690 12 galleons with a total of 8,000,000 pesos of treasure sank off the Azores.
- In 1690 the del Mar and Santa Maria ships sunk in the Azores carrying 3,000,000 pesos.
- In 1692 the *Remedios y las Animas* with 1,300,000 pesos sank off the Azores.
- In 1695 the Jesús Nazareno sank with 2,000,000 pesos in treasure off the Azores.

The 1700s —

Americas:

- In 1702 the Santa María de Teasanos with 1,750,000 pesos in treasure sunk near Veracruz.
- In 1708 the San Jose with 11,000,000 pesos in treasure sank near Cartagena, Columbia
- In 1715 the Nuestra Señora de la Regla sank off Florida with 3,000,000 pesos in treasure.
- In 1725 the Nuestra Señora de Belén with 2,000,000 pesos in treasure sank near Campeche.
- In 1737 the Nossa Senhora da Assuncao sank at Salvador, Brazil with 44 chests of gold coins.
- In 1746 the San Fermín sunk off Callao with 3,000,000 pesos of gold and silver.
- In 1750 four galleons sunk off North Carolina with 2,000,000 pesos in treasure unrecovered.
- In 1752 five galleons with 2,800,000 pesos in treasure sank off the Tabasco coast.
- In 1761 the British ship *Success* sunk off Charleston with £1,000,000 in gold and silver coins.
- In 1765 the Santiago el Grande sunk in the Bahamas with 2,000,000 pesos in treasure.
- In 1770 a ship sank near Valparaíso, Chile with 4,000,000 pesos in gold and silver coins.

• In 1785 the *Rosario* with 1,500,000 pesos in treasure wrecked near Montauk Point, USA. Europe:

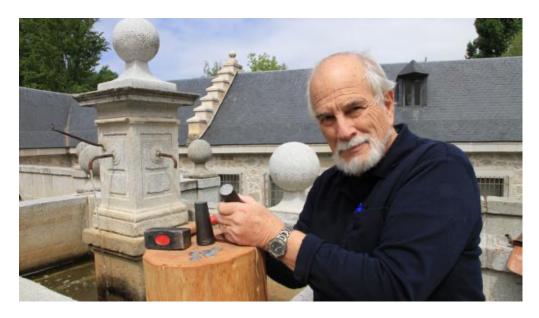
- In 1700 a Knights of Malta ship with 55,000 Venetian gold ducats sank off Palermo, Sicily.
- In 1702 a Spanish convoy with 2,000,000 pesos in gold and silver sank off Portugal.
- In 1712 the Almirantra with 1,870,000 pesos in gold and silver wrecked near Faro, Portugal.
- In 1713 a galley with 80,000 gold ducats sank off the Tuscan coast.
- In 1718 the Boa Viagem with 1,000,000 & 24 tons of gold bars wrecked off, Portugal.
- In 1751 the Santissima Trinidad with 3,000,000 pesos in treasure sank in Cádiz Bay,
- In 1765 the British ship Albion with £6,550,000 in gold & silver wrecked near Ramsgate.
- In 1786 the San Pedro Alcántara with 7,000,000 pesos in gold & silver sank near Lisbon.
- In 1791 the Dutch Zaabstroom sank with 690,000 guilders in gold & silver coins & bullion.
- In 1795 the Catherine, with 21 chests of gold coins sank near Weymouth, England.
- In 1718 a hurricane sunk 15 galleons hauling 11,000,000 pesos in treasure off the Azores.
- In 1720 a tsunami hit the Azores sinking 38 ships more than 12,000,000 pesos in gold & silver.
- In 1755 five galleons with 4,850,000 pesos in treasure sank near Angra Bay, Azores
- In 1755 the San Francisco Xavier sank in the Azores with 1,000,000 pesos in gold and silver.
- In 1758 a galleon with 2,000,000 in gold & silver coins wrecked on the Azores' Terciera island.
- In 1761 Some 16 galleons and naos with a treasure of 14,000,000 pesos sank in the Azores.

The 1800s —

• In 1805 the Popolo and the Barcelona with 3,000,000 pesos aboard sank near Cádiz.

About the author of this article:

Gary Beals a numismatist, author, photographer, scuba diver, Spanish speaker, and news media directory publisher. Gary is a Hispanic Society (founded 1905) member and donor, a volunteer and donor at the Royal Mint of Segovia (built in 1586) and has lived in Spain for more than 20 years. He spent 30 years as the owner of an advertising and public relations agency in San Diego, California.



Gary Beals at the Royal Mint of Segovia, Spain with the replicas of hammered dies he had made for the museum.

The author of this article is pro-museum and pro-archeologist. Gary Beals has:

- Donated more than \$2,500 worth of coins and numismatic items to three museums in Spain.
- Written two books on Hispanic numismatics, most recently the Numiscadero dictionary.
- Experienced Scuba dives in California, Bahamas, Mexico, Philippines & Tahiti.
- Served 170 days digging at California's oldest Spanish site, the Presidio Real de San Diego.
- Donated his collection of photos of Spain worth thousands of dollars to the Hispanic Society (New York City, founded 1905) in 2020.
- Received a historical designation of a large 1911 Craftsman style home in San Diego that he bought in 1987. Most owners fight this as it limits building use even as it is the right thing to do.