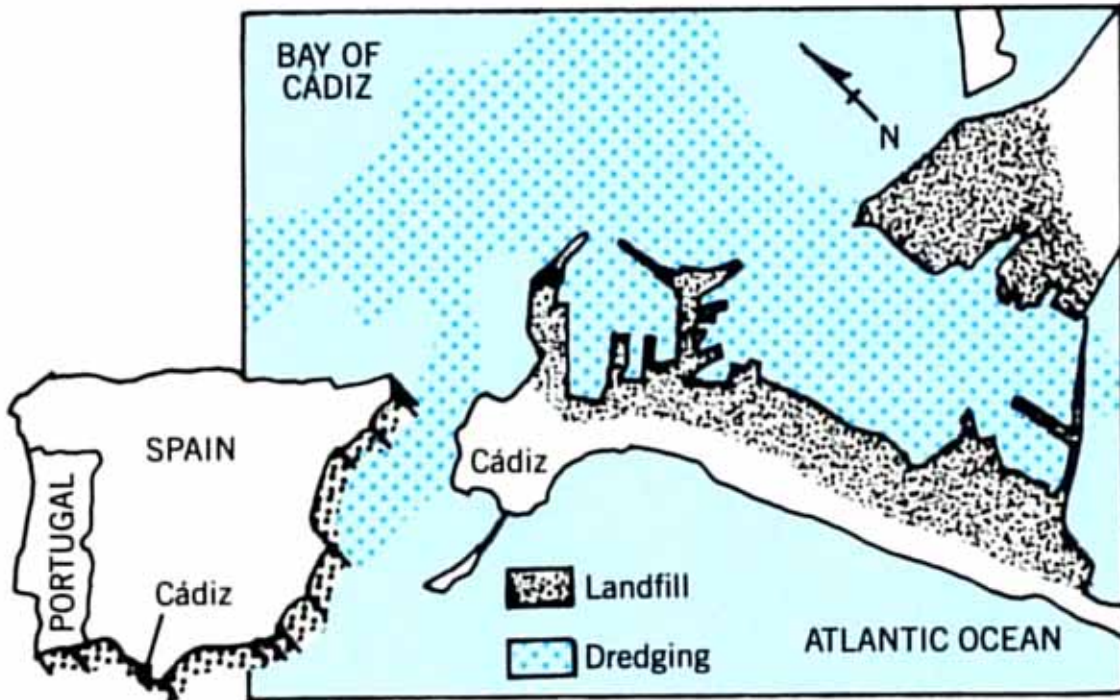


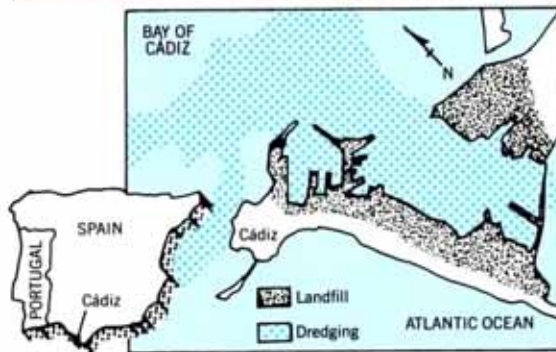
Why Cádiz must be saved

Text and photographs by ROBERT F. MARX



Susan M. Markley

RELICS OF THE PAST *lie buried in the mud below the waters of Cádiz. On the Atlantic Ocean, near Gibraltar, Cádiz has been a port for about 4,000 years. In reclaiming land for the expanded port and new development, large numbers of historic shipwrecks were either covered or destroyed. Further dredging and development may obliterate what remains of the shipwrecks of Cádiz.*



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WITHOUT A DOUBT, Cádiz is one of the most important underwater archaeological sites in the world. Under its waters are 4,000 years of history — history that, in the last few decades, is rapidly being destroyed.

Cádiz is reputed to have been founded by the Carthaginians in 800 B.C., but recent finds of Egyptian amphoras prove that the port was being used at least as far back as 2000 B.C. Documental research reveals that there are over 2,500 old shipwrecks and the remains of at least five submerged settlements (Phoenician and Roman) in these waters.

Shipwrecks of all ages

The earliest known shipwrecks were Phoenician, which were then followed by those of Greek and Roman merchant and warships. During the Medieval Period, Cádiz was one of the most important seaports, and countless ships of many European and northern African nations were lost there. Even the Vikings came to grief at Cádiz. In A.D. 957, after months of sacking various ports of the Mediterranean, a fleet of 70-odd Viking ships sought refuge from a bad storm in Cádiz Bay, and most went to the bottom. In the sixteenth

century alone, more than 600 ships were lost — the majority of which were ships engaged in the New World navigations.

Under the auspices of the Archaeological Museum of Cádiz, a visual survey was conducted during 1960–62. Within a 2-mile radius of the modern port, 54 classical-period shipwrecks and 97 of later dates were located. During a recent survey of the same area, it was discovered that more than two-thirds of these shipwrecks had been totally obliterated by dredging and landfill operations.

Although Cádiz Bay is large, the shipwrecks are not spread over the entire bay but rather are heavily concentrated close to the shoreline. The reason is that the vast majority of these ships were lost as a result of striking submerged rocks, reefs, and shoals, hazards for which Cádiz is famous. Thus, the average depth of these wreck sites is around 33 feet, and many are in only 10 to 13 feet of water right along the shore. Due to

2 miles = 3 kilometers
33 feet = 10 meters; 10 to 13 feet = 3 to 4 meters

the shallow depth, many of the wrecks have been subjected to damage and destruction by the forces of nature, such as huge seas caused during storms. Nothing can be done to prevent this from occurring in the future, other than the actual salvaging of the shipwrecks to prevent their further destruction.

Damaged by dredging

On the other hand, much greater destruction has occurred to the shipwrecks around Cádiz in the last three or four decades than has occurred to them through the forces of nature over thousands of years. The greatest damage has been done by the dredge boats that are constantly making and maintaining the depths of the channels into various parts of the ports. Also, considerable dredging is done along the shorelines to deepen the water so that the areas can be used for docks, wharves, marinas, and other things. During the dredging operation around Rota for the naval base constructed there, no fewer than 50 old shipwrecks were totally destroyed. It is now estimated that around 50 percent of the areas containing old shipwrecks near Cádiz have been obliterated by the dredges. At the rate that Cádiz is growing as one of Europe's most important seaports, it is only a matter of a few more decades before all remaining untouched portions of the bay will also be dredged and the rest of the shipwreck sites destroyed forever.

A few miles to the east of Cádiz lies Santri Petri which is on the tip of an island where first the Phoenicians and later other people had settle-

ments. Some of the most important finds recovered from the sea, such as bronze statues, have come from this area. Plans are now underway to build a recreational marina and fishing port on the mainland opposite Santri Petri, and the first stage of this development entails dredging all of the area between them. When this occurs, probably later this year, many other underwater sites will be lost forever.

Land reclamation has also resulted in the destruction of many shipwrecks in the Cádiz area. In some cases, the land is being extended seaward, covering them. In other cases, the sea bottom where they rest is being pumped up by the dredges to provide the landfill needed to build the land out over the sea. In 1982, a

THE MURKY WATERS off Cádiz hide a treasure-trove of shipwrecks. A brass sword handle, offering a glimpse into the past, rewards these divers for their work in the low visibility waters. Protected in their muddy graves, whole wooden ships can be found, revealing, to marine archaeologists, how they were constructed and rigged.

1.2-square-mile section of the harbor was filled in to construct a storage depot for containers from container ships. This resulted in the permanent loss of more than three quarters of the anchorage used during the colonial period, including at least 50 old ships. Notwithstanding, hundreds of other shipwrecks have also been destroyed by this necessary practice of modern commerce.

Destroyed by carelessness

Underwater sites are being destroyed by an ever-increasing number of other means as well. Ships' anchors are dropped unwarily over underwater archaeological sites and, when they are pulled back to the surface, they act much as a plow does on

1.2 square miles = 3 square kilometers

land, digging deep into the bottom sediment and cutting through the wooden hulls of ships and smashing things such as amphorae to pieces.

Fishing boats also account for a great amount of destruction to shipwrecks. Not only are things caught in their fishnets, but the cables pulling these nets cut across the seafloor destroying things as they move. Many fishing boats in the Cádiz area (Arastre) actually use equipment that digs deep into the seafloor in search of mollusk shells and other marine life, and these boats cause even greater destruction than those using only nets.

Divers were used in the construction of the bridge across Cádiz Bay, and they report that pilings from the bridge actually went through





SEEMINGLY ANCIENT, a vast anchor, perhaps from a Spanish galleon, is only centuries old. In comparison, amphorae, also found in the Cádiz harbor, are thousands of years old. Recovered in 1962, these Phoenician amphorae are from the seventh century B.C.

three different shipwrecks and destroyed what was on them. Similar destruction has occurred during the past few months. In the area known as La Caleta, there are so many known shipwrecks that the local people refer to the place as Cádiz's "Underwater Museum." The Escuela Náutica began building a large pier there, but the local government has since stopped its construction. The damage has been done, however, for more shipwrecks were destroyed.

History looted

Since skin diving became popular in the 1950s, a great amount of underwater plundering has been going

on in the Cádiz area despite laws to prevent it. Not only are weekend sport divers active in this business, but also professional divers who make a good living from plundering these sites.

Plundering can be stopped by increased vigilance by the police, but there is little likelihood that progress and commerce are going to be stopped in the Cádiz area to protect these sites from dredge boats. Thus, the only possible solution, in the author's opinion, is to start an intensive and major underwater archaeological project in the Cádiz area to save the many treasures still remaining there. □

