







ising from the Pacific Ocean off the coast of Southern California, the Channel Islands have been a bustling hub of coastal life, exploration, travel and commerce for centuries. These rugged islands are beautiful, but can be dangerous. Unpredictable weather and hidden reefs have claimed hundreds of vessels since people first navigated these waters. Today, Channel Islands National Marine Sanctuary is home to numerous shipwrecks that hold the secrets of California's maritime past.

"I had just got to sleep, when I was awakened by a tremendous shock. I knew we had struck a rock and hurrying on a part of my clothes I hurried up on deck where I found a general panic... I had hardly taken a seat in the upper saloon when the steamer struck again, and with such force, that it seemed as if the ship was breaking into a thousand fragments."

— Asa Cyrus Call, Survivor, Shipwreck Winfield Scott 1853

Courtesty of John Call Emily

A Rich Maritime Heritage

From prehistory to modern times, maritime cultures have used the waters around the Channel Islands for everything from finding food to waging war. The ancestors of the Native American Chumash people lived on the islands for thousands of years



Modern-day Chumash paddlers crossing the Sant Barbara Channel in a plank canoe called a tomol

before European contact, crossing between the islands and mainland in plank canoes known as "tomols." Following the arrival of Europeans in the 16th century, the region became a busy route for trade, passenger and military ships sailing up and down the coast. These diverse vessels ranged from Gold Rushera passenger steamships to World War II destroyers, each representing a distinct chapter in the story of California's maritime heritage.

Sunken Relics of California's Coast

Every group of people that has visited the Channel Islands has left traces behind — submerged sites and artifacts that give us clues about how they lived, what they knew, and where they traveled. Shipwrecks, many of them caused by the islands' dense fog and strong currents, are some of the most recognizable of these historical relics. More than 150 historic ships and aircraft have been reported lost within the waters of Channel Islands National Marine Sanctuary and Channel Islands National Park, although just 25 have been discovered.

Channel Islands National Marine Sanctuary

Channel Islands National Marine Sanctuary was created in 1980 to document, protect and understand the precious natural and cultural resources in the waters around the islands. Today, sanctuary and park archaeologists and partners study shipwrecks to learn more about these relics of history, shedding new light on the remarkable stories of our maritime heritage.

CHANNEL ISLANDS NATIONAL MARINE SANCTUARY SHIPWRECKS





Comet The three-masted schooner *Comet* was sailing in heavy seas and fog with a cargo of lumber in 1911 when it struck a rock off San Miguel Island, then drifted until the crew was able to ground the ship in Simonton Cove.



Goldenhorn A four-masted sailing bark, the *Goldenhorn* was hauling coal from Australia for the Southern Pacific Railroad in 1892. It sailed too close to Santa Rosa Island in heavy fog and was carried onto the rocks by the current.



Grumman AF-2W Guardian The *Guardian*, a U.S. military aircraft designed for antisubmarine patrols, was searching for a missing aircraft in 1954 when engine trouble forced it to make a water landing off Santa Cruz Island.



Del Rio The *Del Rio* had a long commercial fishing career as a purse seiner, in addition to its military service as a minesweeper in World War II. In 1952, the vessel caught fire and sank while fishing off Anacapa Island.

The above is a partial map of shipwrecks in Channel Islands National Marine Sanctuary. To learn more about shipwrecks in the sanctuaries, visit

















ABOVE PHOTOS: Robert Schwemmer/NOA

Exploring Your Maritime Heritage

Diving Sanctuary Shipwrecks

National marine sanctuaries are places where everyone can explore and enjoy the wonders of the underwater world. Many of the shipwrecks in Channel Islands National Marine Sanctuary are accessible to scuba divers at depths appealing to a variety of skill levels. Some of the sanctuary's shallower wrecks are even visible to snorkelers and kayakers on the surface, depending on water conditions and seasonal kelp growth. Local charter boat operators offer dive trips to some of the wreck sites.

If you discover a new wreck site, note its location, take a picture, and report to Channel Islands National Marine Sanctuary, (805) 966-7107.

Visit Shipwrecks without Getting Wet

For those who want to learn about California's maritime heritage without putting on a wetsuit, the Santa Barbara Maritime Museum immerses visitors in the history of Channel Islands shipwrecks through interactive exhibits and a state-of-the-art multimedia theater. The museum offers visitors the opportunity to experience what maritime archaeologists and recreational divers see underwater, and to find out what scientists and historians are learning from ongoing field research. For information on current and upcoming shipwreck exhibits, visit http://channelislands.noaa.gov/cr/exhibit.html.

Protecting Historical Resources

Resource Protection

Underwater cultural resources like shipwrecks are vulnerable to damage from boat anchors, trawling gear and other ocean uses. To prevent damage, Channel Islands National Marine Sanctuary staff educate divers and boaters about safe boating practices and sensitive archaeological sites. Sanctuary shipwrecks and historical sites are protected by regulations that discourage activities that can harm or disturb these archaeological resources. To enforce the regulations, the sanctuary partners with the National Park Service, U.S. Coast Guard and state of California. The sanctuary also relies on reports from recreational divers and other members of the community.

Regulated Activities

Archaeological sites and other cultural resources, such as shipwrecks and Chumash Native American artifacts, are protected under state and federal law. It is illegal to disturb or damage these sites. To protect these resources from damage that may permanently erase historical information, the following activities are prohibited without a permit:

- Removing, damaging, or attempting to remove or damage, historical or cultural resources, including shipwrecks and other artifacts.
- Altering the seabed, with the exception of anchoring a vessel. (For complete sanctuary regulations, please refer to 15 CFR 922.)

Partners in Preservation

■ Channel Islands National Park, http://nps.gov/chis

Shipwreck Science

- California State Lands Commission, http://slc.ca.gov
- Coastal Maritime Archaeology Resources
- Santa Barbara Maritime Museum, http://www.sbmm.org









MAPPING THE SHIPWRECK S.S. CUBA

Maritime archaeologists expand our understanding of history by mapping wrecks like the Pacific Mail Steamship Co. vessel Cuba (above), which ran aground on San Miguel Island in 1923. Below, a detailed plan shows the layout of the wreck site.



Locating Shipwrecks Historical records suggest that more than 150 historic ships and aircraft have gone down in the sanctuary, but only

a handful have been discovered. The turbulent conditions here can quickly degrade wood and iron, making the search for wrecks a race against time, weather and corrosion. Today, scientists are using sonar, submersibles and robotic vehicles to find these lost "time capsules" before they are disturbed by strong currents, buried by shifting sands or eaten away by wood-boring worms.

Mapping Shipwrecks

Once a shipwreck has been located, creating an accurate map of the wreck site is an important step in revealing its identity and uncovering its secrets. To map a wreck, archaeologists sketch the site on an underwater slate, measure its dimensions, and collect photos and video images of the area. Those images are then used to identify key artifacts and build a photo-mosaic of the site. In addition, researchers search through archived historical documents for further clues that can tell us more about a wreck's history and demise.

Monitoring Shipwrecks

As shipwrecks deteriorate in the ocean, efforts like the Channel Islands Shipwreck Reconnaissance Program work to monitor how quickly they are degrading, and why. The program, a collaboration involving the sanctuary and Channel Islands National Park, surveys wreck sites for new artifact discoveries and evidence of environmental and human impacts. By documenting how underwater archaeological sites are changing over time, this effort helps us better preserve and protect these fragile pieces of history.



Today, the wreck of the Cuba (above, map) is an artificial reef that supports diverse marine life like California sheephead, pictured with the anchor windlass and capstan at the bow of the ship (1). A diver explores one of the massive triple-expansion steam engines (2), while another is dwarfed by a pair of mooring bits (3) to which mooring lines were once secured.

NATIONAL MARINE SANCTUARY SYSTEM



 National Marine Sanctuary ▲ Marine National Monument Proposed for sanctuary designation

Thunder Bay

Gray's Reef

Florida Kevs

Stellwagen Bank

Scale varies in this perspective. Adapted from National Geographic Map

The Office of National Marine Sanctuaries serves as the trustee for a system of 14 marine protected areas encompassing more than 150,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. For more information on the National Marine Sanctuary System, visit: http://sanctuaries.noaa.gov

AMERICAS UNDERWATER TREASURES