

## Monterey Bay Shipwrecks

A Classroom Activity for Ocean Gazing Episode 20: The final frontier

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**Credits:** Channel Islands National Marine Sanctuary, NOAA National Marine Sanctuaries

**Grade Level:** 9-12

**Lesson Time:** 1- 3 hrs. (depends on number of sanctuaries and shipwrecks explored)

### Materials Required

[Monterey Bay National Marine Sanctuary Chart](#)

### Summary

Explore shipwrecks from the Monterey Bay National Marine Sanctuary on the West Coast of the U.S.

### Objectives

- ✓ Report on the historical background of shipwrecks within a sanctuary
- ✓ Practice using latitude and longitude by plotting shipwreck locations on a map.
- ✓ Assess the environmental factors contributing to shipwreck locations
- ✓ Discuss ocean navigation in a historical and modern context

### Vocabulary

Radar, Seamount

### Introduction

The [Monterey Bay National Marine](#)

[Sanctuary](#) embraces more than one-quarter (approximately 350 miles) of the California coast. It spans approximately 5,300 square miles of coastal waters extending from Cambria (just north of Morro Bay) to Rocky Point (just north of San Francisco's Golden Gate Bridge), where it joins boundaries with the Gulf of the Farallones National Marine Sanctuary. Within its boundaries is a rich array of habitats, from rugged rocky shores, sandy seafloors and lush kelp forests to one of the deepest underwater canyons on the West Coast.

The richness of the ocean's harvest in Monterey Bay brought [explorers](#) to this area from many nations. The Spanish arrived in the late 1700's, establishing a pastoral lifestyle and an extensive network of missions, which relied heavily on livestock. Monterey was established as the region's capital under Spanish rule, and as a port through which cargoes were certified. The Spanish exported valuable otter pelts gathered by Russian and Indian hunters to Asia, Europe, and the Americas. New England whalers often hunted along the central coast in the late 1700's and early 1800's, feeding a voracious East Coast market for oil, baleen and meat.



A wealth of shipwrecks in the Monterey Bay National Marine Sanctuary are a result of the significant maritime exploration and trade which has occurred here, coupled with a coastline dotted with shallow, rocky headlands and largely exposed to fog, prevailing winds and storms. More than 140 shipwrecks have been documented in this region, and there are undoubtedly more that are not recorded. The shallow, rocky areas of Point Lobos, Cypress Point, Point Pinos and Santa Cruz have the highest known frequency of recorded shipwrecks for this sanctuary.

### **Data Activity**

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#### *Part 1: Be a Shipwreck Detective*

Print out the [chart for the Monterey Bay National Marine Sanctuary](#). (This requires Adobe Acrobat Reader. [Click here](#) to download this for free).

Go to the [Monterey Bay National Marine Sanctuary Shipwreck Database](#), and plot the shipwrecks listed in the data table by placing a small x and the shipwreck's name at the spot on the map where the latitude and longitude intersect.

1. Are there certain areas within your sanctuary that seem more prone to shipwrecks than others? Can you think of any reasons why this may be the case?
2. Are there certain times of year when there seemed to be more shipwrecks reported? Can you think of any reasons why this might be the case?
3. How many shipwrecks were reported in your sanctuary before 1942? How many were reported after 1942? Can you think of any reason for this difference?

Check your answers with our answers.

#### *Part 2: Be a Shipwreck Historian*

It will be easiest for your students to study the individual historical reports if you have printed them out ahead of time and made copies. In each sanctuary's database, click on the name of the ship to access the historical report. In some cases, a report may contain another link to an image and more information; be sure to print out that information also.

1. What small town suddenly "blossomed in white paint" after a central coast shipwreck?
2. Name the shipwreck that mistook a red caution light relating to a sewer construction project on land for a wharf light, causing the vessel to strike an offshore reef.
3. Name the ship that rounded Cape Horn in the 19th century while on her maiden voyage and was lost before reaching her final destination.
4. Salvage is a dangerous business. Name the shipwreck that was being salvaged when a vessel and barge were lost in the operation.
5. Name the ship whose SOS distress signal could be received by local residents on their television sets.
6. Name the shipwreck that used a "breeches buoy" to transport survivors to shore on a line secured between the shipwreck and land.
7. Mariners now have modern technology assisting them in navigating the Pacific West Coast. Would you consider ocean travel? Explain why you are excited about or hesitant about going to sea.

Check your answers with our answers.

## Answers

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### Part 1

1. Are there certain areas within your sanctuary that seem more prone to shipwrecks than others? Can you think of any reasons why this may be the case?

**Answer:** Monterey and Carmel. Reasons - shallow, rocky coastal areas, fog, winds, and storms.

2. Are there certain times of year when there seemed to be more shipwrecks reported? Can you think of any reasons why this might be the case?

**Answer:** There are no particular times of year when there were more shipwrecks reported. Ships could encounter bad weather and fog in any season on the West Coast, and this factor, combined with navigational hazards, led many ships to their graveyards.

3. How many shipwrecks were reported in your sanctuary before 1942? How many were reported after 1942? Can you think of any reason for this difference?

**Answer:** Number of shipwrecks before 1942: 29; number of shipwrecks after 1942: 1. This difference can be attributed to the refinement of radar technology needed for use in World War II.

### Part 2

1. What small town suddenly “blossomed in white paint” after a central coast shipwreck?

**Answer:** Pescadero (*Colombia*)

2. Name the shipwreck that mistook a red caution light relating to a sewer

construction project on land for a wharf light, causing the vessel to strike an offshore reef.

**Answer:** *Gipsy*

3. Name the ship that rounded Cape Horn in the 19th century while on her maiden voyage and was lost before reaching her final destination.

**Answer:** *Carrier Pigeon*

4. Salvage is a dangerous business. Name the shipwreck that was being salvaged when a vessel and barge were lost in the operation.

**Answer:** *Rhine Maru*: vessel *Panama* and barge *S. Catania* were lost

5. Name the ship whose SOS distress signal could be received by local residents on their television sets.

**Answer:** *Rhine Maru*

6. Name the shipwreck that used a “breeches buoy” to transport survivors to shore on a line secured between the shipwreck and land.

**Answer:** *Frank H. Buck*

## Related Resources

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[National Marine Sanctuaries Shipwrecks DATA Activity](#), [Maritime heritage](#), [Archeology](#), [Conservation](#)

## References

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Monterey Bay National Marine Sanctuary. NOAA National Marine Sanctuaries. <http://montereybay.noaa.gov/>

“A Recent History of the MBNMS Region.” Monterey Bay National Marine Sanctuary.

<http://montereybay.noaa.gov/sitechar/rechist.html>

Monterey Bay National Marine Sanctuary  
Shipwreck Database. NOAA National  
Marine Sanctuaries.

<http://channelislands.noaa.gov/bridge/mbnms1.html>

### **Sources**

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The related podcast episode for this activity can be found by going to the podcast section of [www.oceangazing.org](http://www.oceangazing.org)