



Marine Science Club - Boat-based Science

Suggestions for meeting topics, activities, and resources

Brief Introduction

Research vessels have been around for as long as humans have explored the ocean. Research vessels are designed and equipped for carrying out research at sea. There are many types of operations that a research vessel may be designed to conduct. Some vessels can be designed for a single purpose or for many different types of operations. Modern operations include hydrographic surveys, oceanographic and atmospheric research, fisheries research, naval research, polar research, and oil exploration.

Resources & References

- Interesting Books**
- *The Log from the Sea of Cortez* by John Steinbeck, Richard Astro (Introduction)
 - *Sea of Cortez: A Leisurely Journal of Travel and Research* by John Steinbeck, Edward F. Ricketts
 - *Exploring Science: Ships & Boats: With 17 Easy-To-Do Experiments and 300 Exciting Pictures* by Chris Oxlade
 - *Ships and Science: The Birth of Naval Architecture in the Scientific Revolution, 1600-1800* (Transformations: Studies in the History of Science and Technology) by Larrie D. Ferreiro
 - *Challenger at Sea: A Ship That Revolutionized Earth Science* by Kenneth J. Hsü
- Videos**
- Ocean Exploration: Technology, National Geographic Society (<https://education.nationalgeographic.org/resource/ocean-exploration>)
 - Exploring History, NOAA Ocean Today (<https://oceantoday.noaa.gov/exploringhistory/>)
 - History of Oceanic Exploration, Maritime Museum San Diego (https://www.youtube.com/watch?v=a-UZ9pVE7PU&ab_channel=MaritimeMuseumSanDiego)

Activity/Service Project Suggestions

- Group Discussion**
- As a club, discuss what kinds of science is done on boats
 - Discuss what roles are there on boats and if there are career options
- Speaker Presenter**
- Invite a crew member or member of a research vessel to talk about their vessels, their career, experiences.
 - Invite a scientist who does ocean research to talk about conducting science at sea.
- Field Trip**
- Schedule a trip to the Marine Center and take a cruise on the R/V *Acadiana* to experience boat-based research operations.
- Activity**
- Imagine a world where humans never explored the ocean with vessels. How much would we understand about earth? Do a podcast.
- Virtual Tour**
- Do a 360 degree tour of the R/V *Pelican* (<https://roundme.com/tour/580514/view/1938032/>)