



OAR NORTHWEST: EDUCATION

CWF Africa to the Americas Expedition 2013

Lesson 2.1: Ocean History



Introduction

The *James Robert Hanssen* (JRH) and its crew (Jordan, Pat, Markus, and Adam) are rowing on the shoulders of giants. Innumerable explorers and adventures have gone before the JRH and much can be learned from earlier voyages. Through this lesson, students will examine the history of ocean exploration throughout human civilization. Students will also study Ferdinand Magellan and Captain James Cook's exploration endeavors to provide examples of voyages during the Age of Exploration. Students will consider the CWF Africa to the Americas expedition within the historical context. Students will then continue to discover more about modern ocean exploration by connecting the JRH to the modern narrative.

Background

Human exploration of the ocean has a long and impressive pedigree. The first humans to travel across waters used very simple boats made from materials such as stalks from tall grasses (known as reed), lightweight wood from balsa trees and single hollowed tree trunks. Initially, ocean travel was only used to traverse short expanses. Yet, at some point, substantial distances were traversed. For example, people from Southeast Asia journeyed across the Pacific Ocean by gradual "island hopping."

Another great epoch of oceanic migration was The Age of Exploration, a period of rapid exploration and expansion that lasted from the 15th to 17th centuries and mainly involved European conquests. Development of technologies like the compass, telescope and sextant during this time period allowed explorers to navigate the ocean quicker and with more certainty. By the middle of the 16th century, explorers had the specific knowledge to voyage around the world.



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Of course, exploration of the ocean did not stop after the whole ocean surface had been charted. From Frank Samuelsen and George Harbo's historic row across the Atlantic in 1896 to the JRH and crew and their current record setting bid, rowing across the Atlantic has a storied past. See the following link for further historical information on ocean rowing: http://en.wikipedia.org/wiki/Ocean_rowing

Activity – Ocean Exploration

In this activity students will consider historical ocean voyages and the motivations for conducting such voyages. After students have had a chance to consider historical voyages they will focus their attention on the CWF Africa to the Americas voyage and consider the historic route. Students will also have the opportunity to chart their own course using ocean current and weather maps of the Atlantic Ocean.

Materials

<http://www.atmos.washington.edu/~angie/oarnwforecast.html>

<http://oceancurrents.rsmas.miami.edu/atlantic/atlantic-arrows.html>

Procedures

Begin by asking students the following questions:

Why did people explore the oceans in the past? To search for new lands, find more resources (food, arable space, fresh water sources, or habitable area), curiosity/adventure, open new trade routes and learn the geography of the world. Why do people explore the oceans today? To learn more about the ocean and the Earth, to find new species, to perform medical or science research, etc.

Spread out a map of the world. Ask a volunteer to go up to the map and find the Atlantic Ocean. Then, ask another volunteer to find the Pacific Ocean. After both have been pointed out correctly, ask the class as a whole what are some differences between the two oceans. The Atlantic Ocean is not as wide. The Atlantic is between Europe/Africa and the Americas. The Pacific Ocean is between the Americas and Asia.

Ask students to brainstorm what the earliest boats were like. Human-powered, canoes made with simple materials like reed and balsa, or dugout boats made from single large logs. Then, ask them to imagine that they are early humans using simple boats for transportation. If they had a choice between trying to cross the Atlantic or the Pacific Ocean, which would they rather cross? Many historians think that early humans were unable to travel across the Atlantic Ocean because it is so wide, and there are few islands between the continents. On the other hand, the Pacific Ocean is full of islands so people were able to make shorter journeys from one island to another.

Ask students if they can name any famous ocean explorers. Answers will vary. While individuals like Christopher Columbus or Henry Hudson may be mentioned, the

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OAR NORTHWEST: EDUCATION

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conversation should focus on other explorers like Ferdinand Magellan (the first explorer to sail from the Atlantic Ocean to the Pacific Ocean by sailing around the southern tip of South America) and James Cook (first to cross and explore the Antarctic Circle). Magellan is a Spanish explorer famous for sailing around the southern tip of South America in order to find a way to reach the Pacific Ocean, a task that many explorers before him sought to accomplish. James Cook was a British explorer who scouted Newfoundland and then made several voyages throughout the world's oceans.

Show the students a picture of the Ferdinand Magellan and James Cook voyages. Tell the students that Ferdinand Magellan had to beg the King of Spain to support and fund his journey. He is also the person responsible for the Pacific Ocean's name. He gave the ocean its name because of its calm waters. While Magellan is often credited with being the first person to sail around the world, he was actually killed in the Philippines (roughly half-way through the journey), and it was his crew that completed the ultimate circumnavigation. Next, tell the class about James Cook who is considered one of the greatest explorers in human history. Though Cook made numerous discoveries and has many accomplishments to his credit, he is best remembered for his contributions to global navigation. He was also able to successfully prevent scurvy by giving his crew citrus fruit and sauerkraut. Scurvy is a disease caused by not consuming enough Vitamin C. (Note: These two explorers have been selected solely for their extra-ordinary feats of navigation. Both contributed greatly to human exploration of the planet, something that remained unparalleled until the modern era. However, their accomplishments do not dismiss the inexcusable acts of injustice carried out by these controversial figures. To learn more about teaching this aspect of the Age of Exploration, please visit the following resource:
http://www.educationworld.com/a_curr/curr167.shtml.

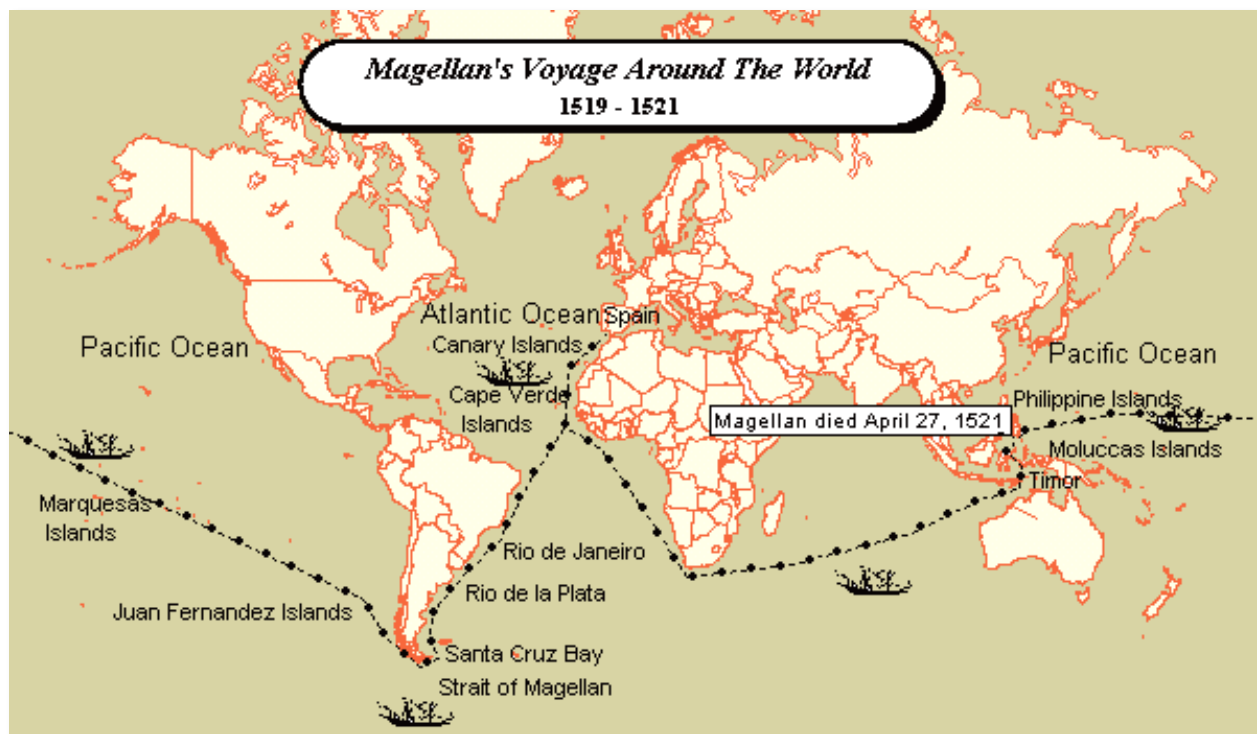
Ask students to imagine that they are planning an expedition across the Atlantic Ocean. What consideration should be made when planning a rowing expedition across the Atlantic? What should be the route? Using the links provided in the materials section to find a route that has favorable weather and ocean currents.

Have students sketch a route on a map of the Atlantic. Have students justify their route using data from the web resources provided. In addition, have students outline the supplies they will need to row across the ocean and considerations they will need to make for a safe journey.



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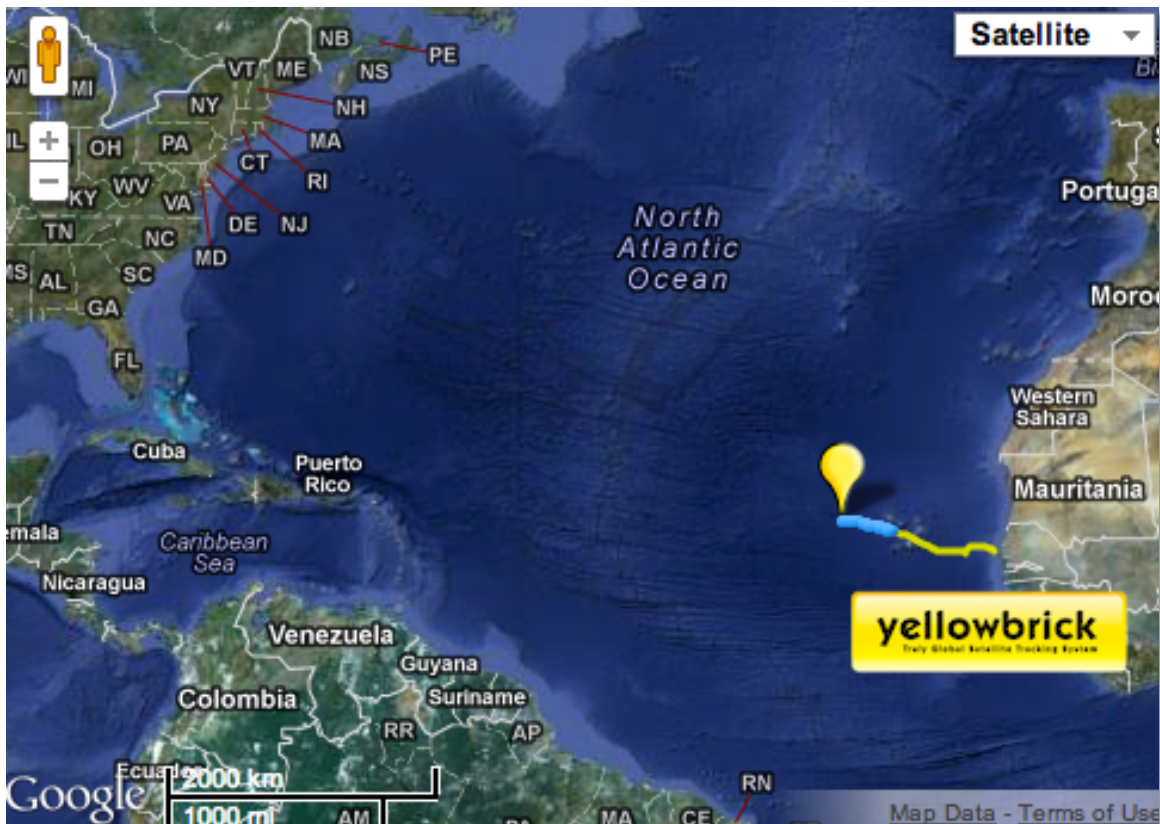
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Lesson Wrap-up

What questions do students have for the crew of the JRH concerning the route chosen, equipment used, and consideration made in preparation for the CWF Africa to the Americas voyage?

Share lesson artifacts with us at education@oarnorthwest.com. We would love to hear from you and your students.

Citations

http://eeweek.org/assets/files/EDN%20Ocean%20and%20Oil%20Spill/Human_Exploration.pdf