



NOAA Teacher at Sea
Richard Chewning
Onboard NOAA Ship *Oscar Dyson*
June 4 – 24, 2010

NOAA Teacher at Sea: Richard Chewning II

NOAA Ship *Oscar Dyson*

Mission: Pollock Survey

Geographical area of cruise: Gulf of Alaska
(Kodiak) to eastern Bering Sea (Dutch Harbor)

Date: June 5th, 2010

Weather Data from the Bridge

Position: Three Saints Bay, Kodiak Island, Alaska

Time: 1000 hrs

Latitude: N 57 10.480

Longitude: W 153 30.610

Cloud Cover: overcast with light rain

Wind: 12 knots from NE

Temperature: 10.3 C

Barometric Pressure: 1001.1

Science and Technology Log

While taking on supplies and preparing for our cruise, the NOAA ship *Oscar Dyson* had the pleasure of welcoming six kids from the United States Coast Guard (USCG) 2010 Summer Program



NOAA Ship *Oscar Dyson* tied up in Kodiak, AK.

for a visit.

These kindergarten through second graders were visiting from the USCG Integrated Support Command Kodiak, the largest Coast Guard base in the US. The *Oscar Dyson's* medical officer ENS Amber Payne and I gave the students a firsthand tour of the *Dyson*.

Highlights of the visit included a tour of the bridge with Executive Officer Lieutenant Jeffrey Shoup. The students were impressed to learn that the propeller of the *Oscar Dyson* is 14 feet across and specially tooled to be as quiet as possible so as not to scare away any fish that the scientists onboard want to study. The students also enjoyed looking through the BIG EYES, two high powered binoculars located on the flying bridge (the highest point on the vessel above the bridge) of the *Oscar Dyson* that will be used to survey marine mammals. Scientist Suzanne Yin of the



National Marine Mammals Laboratory told the students about how she and her colleagues would be surveying for whales during the upcoming cruise.

The highlight of the tour involved a demonstration by Safety Officer Ensign Russell Pate of one of the *Dyson's* Damage and Control lockers. The students also enjoyed trying on the immersion



suits with help of Ensign Payne. Immersion suits are designed to protect the wearer from exposure of the frigid waters that the *Dyson* will soon be sailing. The kids had great fun donning the firefighting equipment and helping Fisherman Glen Whitney test one of the *Dyson's* fire hoses off the fantail. The USCG



kids also learned how to tie a square knot with Glen's help. With a little practice, they were able to join their individual lines into one large line by tying each line end to end using the square knot they just learned. Each student was able to take their line home to practice their newly acquired knot tying skills.

Another fun activity was led by Senior Survey Technician Kathy Hough. After Kathy led the



students through a tour of the *Dyson's* dry and wet labs, the students acted as junior scientists by sorting an array of Alaskan fish and measuring and describing each species, just like the *Oscar Dyson's* scientists will do later during the upcoming Pollock survey.

After lunch, the students received a fun science lesson using the property of water's high surface tension. The students constructed two-dimensional boats out of plastic milk jugs and used soap



to propel their boats over a tray of water. This is a very fun activity for younger students that you can easily do at home. The materials required include cleaned plastic milk jugs, scissors, markers, trays of water, and soap (a bar of Ivory soap cut into small cubes). After tracing the outline of a boat (as if looking from the top down) on the flat surface of a milk jug, the kids cut out their boats and made a small notch on the back of the boat to place a small block of soap to serve as the engine. The kids then enjoyed racing their boats against each other across the trays of

water! If trying at home, you will need to replace the water in the tray after each race as the water becomes contaminated by the soap. This activity works because water molecules want to strongly stick to each other creating a strong but flexible surface. By disrupting the arrangement of the water molecules and causing the water molecules to push away from each other, the soap enables the boat to 'power' across the surface of the water.

After all equipment and supplies were loaded and crew members were boarded, the *Dyson* moved a short distance to take on diesel at the fuel dock. At 1820 hours, we departed St Paul Harbor and said goodbye to the *Oscar Dyson's* home port of Kodiak. The *Dyson* then sailed about eight hours south to Three Saints Bay, a protected harbor south on Kodiak Island. Three Saints Bay will serve as a location to anchor so the science team can calibrate their acoustic equipment and will shelter the *Oscar Dyson* from an approaching low pressure system producing gale-force winds.

Personal Log

Hello Everyone! My name is Richard Chewning, and I have the honor to be a part of NOAA Teacher at Sea program sailing with NOAA ship *Oscar Dyson*. For those who do not know, the National Oceanic and



Here I am holding a baby king crab.

Atmospheric Administration (NOAA) is a federal government agency charged with studying all aspects of the ocean and atmosphere. As you can imagine, these are broad areas of study. While large in scope, the work of NOAA affects everyone, whether you live on a coast or not. Have you ever heard of The National Weather Service or The National Hurricane Center? Both are NOAA divisions.

NOAA's Teacher at Sea Program (TAS) aims to increase the public's awareness and knowledge of NOAA science and career opportunities by having educators work alongside NOAA offices, ship's crew, and shipboard scientists. NOAA's TAS program invites both formal classroom teachers and non-formal educators alike to be a part of this amazing program. I myself am an environmental educator with the Jekyll Island 4-H Center. A Georgia 4-H program, the Jekyll Island 4-H Center is part of the University of Georgia. The Jekyll Island 4-H Center's Environmental Education program welcomes 1st-12th grade students for environmental education field studies teaching coastal ecology using Jekyll Island as an outdoor classroom. I am the Environmental Education Program Coordinator and have enjoyed working for Jekyll 4-H for five years. For more information, visit www.jekyll4h.org.

I am very excited to be selected as a NOAA Teacher at Sea Participant and look forward to sharing my experiences with you through these logs.

Animals Seen Today

Bald Eagles (*Haliaeetus leucocephalus*)

Kittiwakes (Genus *Rissa*)

Pigeon Guillemot (*Cepphus columba*)

Magpie (Family Corvidae)