



**NOAA Teacher at Sea**  
**Kimberly Wolke**  
**Onboard NOAA ship RAINIER**  
**July 24-August 11, 2006**

**Mission:** Hydrographic Surveys of the Shumagin Islands, Alaska

**Day:** Tuesday, August 8, 2006

**Weather from the bridge at 1400:**

**Skies:** Cloudy (CL)

**Visibility:** 4 nautical miles (nm)

**Wind Direction:** Light

**Wind Speed:** <3-4 knots

**Waves:** N/A

**Sea Water Temp. (°C):** 8.9

**Sea Level Pressure:** 1017.8 millibars (mb)

**Temp. (°C):** 12.8 (air temperature)

**Log 12---Winding down**

I've been keeping a running list of the Alaskan wildlife that I'm seeing along this excursion. Some of the animals I've mentioned already are the puffins, bald eagles, Orcas, and Dall's porpoise. Occasionally while out in a kayak or survey boat or on a beach along the coastline I've also spotted harbor seals. Their adorable little faces will emerge from the beneath the water and bob around, almost appearing at first to be kelp floating in the water. While kayaking I've also seen two hauled out on rocks where they were almost mistaken for pieces of logs washed ashore. They are very



**A harbor seal (*Phoca vitulina*) on a rock. Unknown photographer.**



**TAS Kim Wolke raising the American flag on the fantail of NOAA ship RAINIER**

quiet and easily disturbed if you get too close.

Harbor seals (*Phoca vitulina*) are marine mammals most often associated with coastal waters. They periodically haul out of the water on sand and gravel beaches, reefs, sand bars, and glacial and sea ice to rest, give birth, and nurse their pups. Unlike many marine mammals, harbor seals do not make long annual migrations, however, they do move around considerably in a more localized area. At birth harbor seals weigh about 24 pounds. They gain weight rapidly during a month long suckling period.

Average adults weigh 180 pounds. Until about 5 years of age, there are approximately equal numbers of male and female harbor seals in a population. After that, mortality rates are much higher for the males, therefore female harbor seals becomes much more abundant. Adapted to life in the sea, they can dive up to 600 feet (183 meters) and remain submerged for 20 minutes! Some adaptations that allow for oxygen conservation in harbor seal are reduced peripheral circulation, reduced heart rate, and high levels of myoglobin (an oxygen binder). Harbor seals move

under water by using their hind flippers for propulsion and their fore flippers as rudders. In Alaska harbor seals commonly eat walleye, pollock, Pacific cod, capelin, eulachon, Pacific herring, salmon, octopus, and squid.



**The NOAA ship RAINIER in the distance in East Bight, Nagai Island, AK**

### **Personal Log**

Today after all of the survey boats return we will begin our journey back to Seward, AK. This leg of the RAINIER'S travels, as well as mine, are winding down. All of the surveying is complete until the RAINIER leaves Seward, AK for its next leg early next week. I've already taken some meclizine to hopefully ward off any potential seasickness, as we will be underway for about 2 ½ days once we take up the anchor. It appears that with this end of surveying and the turning back of the ship there has also been a rather symbolic turn in the weather. It has gone from incredible weather yesterday to a falling barometer, heavily cloudy skies, and a forecast calling for higher winds and waves. I'm glad I went kayaking the past 2 days! ☺

Kim Wolke  
Teacher at Sea