



**NOAA Teacher at Sea
Clare Wagstaff
Onboard NOAA Ship JOHN N. COBB
June 1 – 14, 2008**

NOAA Teacher at Sea: Clare Wagstaff

NOAA Ship JOHN N. COBB

Mission: Alaskan Harbor Seal – Pupping Phenology & Critical Habitat Study

Geographic Area: Southeast Alaska - Kake

Date: June 5, 2008

Contact Information:

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Weather Data from the Bridge (information taken at 1200)

Weather: Overcast

Visibility (nautical miles): 10

Wind Speed (knots): 6

Wave Height (feet): 0

Sea Water Temp ($^{\circ}$ C): 8.8

Air Temp ($^{\circ}$ C): 11

Science and Technology Log

We are still anchored just outside of the native Alaskan village of Kake.

Apparently another NOAA ship, the Rainier, is on its way to tug us back to Juneau late tonight. There was good news though! Dave knew of some haulout sites that he had observed and recorded data from in 2004. They were within approximately seven miles of where John N. COBB was located. So once again, we boarded the JC-1 and off we went!



NOAA Teacher At Sea Clare Wagstaff, Jon and Dave getting ready to depart the COBB in the JC-1.

Equipment on the Skiff

The skiff is only a small-motorized

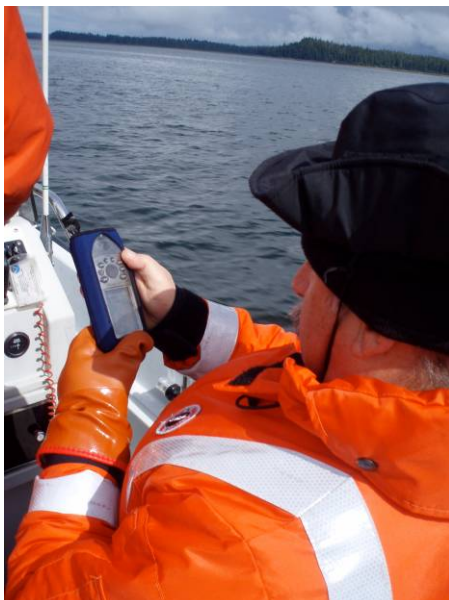
boat but it can safely carry seven people and is essential in getting scientists to places

unreachable by the COBB. The JC-1 is equipped with GPS, which also includes a Fathometer and depth gauge. Other basic equipment includes a magnetic compass and tachometer. Essential to any mission in the skiff is a console mounted and handheld radio so that we can stay in communication with the COBB. The operator of the skiff is required to have radio contact with the ship every hour and state our location for safety reasons. Flares, line bags and a first aid kit, all mean that our expeditions out on the JC-1 should be safe and enjoyable!

Seal Observations



Harbor seals near Kake. Photo courtesy of Dave Withrow.



Dave Withrow uses the GPS to record new sites as well as plot routes to old sites.

Although we saw lots of seals today, none of them from a distance of less than 200 meters. It seems these seals were much more skittish than at other areas we had previously visited and for good reason. Today's haulout sites were within a few miles of a local village. Here, native Alaskan's are still allowed to hunt seals. The seals we observed today seemed fully aware of their possible fate if they allowed us to get too close.

On a more positive note, I am getting better at making estimates of numbers from a distance and spotting the pups in a large group. When they retreat to the water it is quite easy to spot mother and pup, as they tend to be very close together, with one head much larger than the other!

Recording the Data

So what happens to all the data that we collect out at sea? Dave processes all the results we collect into a spreadsheet. Here the data is organized by 'waypoint' (name of location and/or latitude and longitude); it also displays the number of adult seals and pups, a long with environmental data such as tide height. Through some fancy

GPS work, Dave can also record and download the route we took in the skiff, our speed and time. Plotting all this information together, gives a clear picture of patterns in the results collected. With his digital camera, Dave can also download the photos he has taken of the seals and through the wonders of modern technology synchronized them with the GPS information. This then links pictures taken at a specific site electronically to the recorded data.

In the past five years of this study, the proportion of adult seals present with a pup has remained approximately the same: 25% on rock substrate and approximately 70% on ice. Unfortunately because we have been unable to study many sites this season, the data we collected is inconclusive. However, with the effects of global climate change it seems unlikely that these percentages, particularly of pups on ice haulout sites, will continue to be as high. Adding to this data over the preceding years seems an absolute necessity for scientists to get a greater picture of the harbor seal population and its relating habitat.

Personal Log

For the first time on the COBB, I slept through the night and well past my usual 04:00! I think I am starting to get used to this way of life. The crew on board the ship are light hearted, yet committed to their jobs: a good combination to be around onboard a ship like the COBB. Yet being stuck in Kake is really frustrating. Breaking down out at sea is not quite the same as doing it in a car: things take a lot longer to happen out here! Knowing that I will probably not get to see the glaciers, being so close is pretty heartbreaking. I'm keeping my fingers, toes and anything else crossed that the COBB gets fixed and ASAP!

“Animals Seen Today”

While Dave and I were exploring the tidal pools on one of the small islands around Kake, we found this interesting creature. Partially buried in water, Dave dug it out to expose a rather funny shaped animal that ejected water from one end!



A sea squirt? I will have to look it up when I get home.



The bald eagle, majestic and beautiful! Photo courtesy of Dave Withrow.