

## **Wednesday, April 12 – Day 2 by Dr. Wise**

Dear All,

Words escape me as I try to capture the essence of the Sea of Cortez. Eerie and majestic seem to be the best fit. Awe inspiring and spectacular also come to mind. Really it is a truly special and unique place and, if life allows you a visit, it is surely worth the trip.

Eerie describes the surreal landscape that surrounds this sea. Long stretches of craggy and sharp hills and mountains line the horizon along with long stretches of smooth and worn ones. Otherworldly imposing rocks and flat buttes and mesas that make you feel like you are on a planet other than earth. Majestic describes the rows of cliffs on the shore especially at sunrise and sunset. Layers of cliffs really, though that may conjure up images of lines of color in the rocks, which is here too, but not what I mean by these layers. Short ridges sitting in front of row after row of increasingly higher ridges each jutting higher than the one in front creating a depth to the landscape that fills you with and sense of awe and mystery.

Of course, there is awesomeness of the sea itself. Water stretching as far as you can see; teeming with life. Whales, dolphins, fish, sea turtles, birds – all here in abundance and diverse elegance. Above is an amazing sky, be it the brilliant sun that bakes us in light and heat or delights us with a spectacular show of stars and planets in the night sky. Indeed, whether land, sea or sky, the Sea of Cortez is something to behold. I have attached images of the landscape from different parts of the day, with a whale and with our lovely sunset.

Today graced us with a bit of both. We had the eerie as we came across scores of dead ducks. The cause of their death unknown and uncertain. But numerous bloated bodies floating like buoys in the water made it clear something untoward was going on. Could it be another an early warning of metal poisoning from gold mining, as was the case when the ducks disappeared from a village in Zambia a few years ago? There are and have been substantial mining efforts here. On the other hand, perhaps, it is a red tide that swept in? Either way, it is a puzzle and one we are unlikely to solve on this trip. The dead fish we saw yesterday, and the dead sea lion we passed today only serve to enhance the mystery and highlight the need for better surveillance and understanding of ocean pollution.

The majesty of the sea came when a large humpback whale breached in brilliant fashion right in front of the bow of the boat with all of us watching! For sure the breach left us admiring in stunned surprise with our mouths all agape. The second breach, that immediately followed, left us all cheering and abuzz with excitement. It is simply amazing how graceful and acrobatic these massive animals are. Fortunately, Rick caught an image of the second one on his iPhone, which I have attached for your enjoyment as well.

The day as a whole was a slow grinding day. We got our first biopsy of the morning from a feeding humpback with an excellent display of teamwork as Mark expertly guided us to the whale from the crow's news. Captain Fanch, carefully guided us into position. Both biopsiers, Johnny and Rick, released their arrows which ran true and each caught a biopsy. Our first mate, Mike, collected the arrows in the net and Rachel, my Ph.D. student, processed the samples. They'd be the only biopsies of the day as we missed on our attempts with the whale that breached (no we did not attempt during the breach). Our total is now 4 biopsies. If you want to follow us on Google Earth or something like that, we are at 25 degrees 16.031 latitude and 110 degrees 56.253 longitude.

All is well with us in the Sea of Cortez as we are at anchor and the sea rocks us gently to sleep under our blanket of planets and stars with the moon keeping its watch on us.

Good night from here until tomorrow.

John

P.S. We are without cell signal or internet. I am allowed to send this one email on the Captain's link to keep you all informed. Please do not confuse our lack of response to calls, texts and emails as anything more than lack of access as we have not received any yet. We do look forward to getting all those messages when we do get a signal so please keep sending them. JPW



















