

Day 67, Voyage 2, August 14, 2011

I think today was the quietest day of the entire expedition. Not much seen beyond a couple of dragonflies and flying fish. Andy and Cathy saw three dolphins from the midlevel platform, but it was during a short downpour and they figured no one would come on deck so they recorded it, but didn't radio it is. They were probably right, except Laura and I were checking the array during the downpour. We were soaked to the bone.

We did see one pelican just off the boat at about 6:30 pm and 70 miles from the nearest land. Sadly, it did not have the sweet tea we've been expecting. Of course the upside was - it didn't bring us any babies either. Picture attached.

This quiet day seems a good opportunity to share an answer to a frequently asked question that you may wonder about too. That is: how do we tell the whales apart so we know whether we have biopsied the same one more than once? The answer has multiple parts.

If we are on whales and there are a few, we can tell them apart while we are with them by scars and markings on their backs and dorsal fins. The biopsiers shout out which whale was sampled and what its markings were. It works for those moments we are with them. When there is uncertainty, Sandy is there with the digital camera and can check images to confirm which whale we biopsied. This approach only holds for the moments we are with them. It does not work well for whales seen the next day or a week later or a month later. We simply cannot identify them that well for that long... yet.

But, that is ok. We take such a small sample of skin from the whales (about the size of a pea) that one wonders if it is representative of the whole skin of the animal. Sampling a whale, more than once at different times gives us a chance to consider that question. Thus, the information from sampling the same whale more than once in a year yields valuable information.

We also want to sample some of the same whales each year as we work year to year. That requires a bit of serendipity as we simply do not know how to find the whales we sampled the year before. Thus, it is simply chance if we encounter them. But, if we do, their samples will allow us to look at the levels in individual whales over time. Thus, the information from sampling the same whale over several years yields valuable information.

How do we tell the whales apart in the lab later if we cannot do it at sea? Ah, that is done with a DNA fingerprint of the whales.

Much work to do when we return to Maine!

The sunset was lovely tonight. Pictures attached.

John

P.S. We are in the Gulf. Our current location is 28 degrees 29.5 minutes North and 85 degrees 30.5 minutes West, for those who want to track us as we go. For Google maps (not Google Earth - but maps) or Bing maps use (include letters and comma): 29.192 N, 86.057 W

For those of you who are new to this email diary - the previous days can be found at: <https://cms.usm.maine.edu/toxicology/dr-wises-voyage-leg-summaries-2011>



