

STAR2000: DAVID STARR JORDAN Weekly Report - Robert Pitman

SCIENCE SUMMARY: 19-23 August 2000

We departed Manzanillo, Mexico, mid-day on 19 August and bravely headed out on our second leg. For those of you who haven't noticed, our dolphin survey encompasses the largest study area in the history of biological science. In order to put this undertaking into perspective, imagine two school buses loaded with scientists (the MAC and the DSJ) setting out to census all the large land mammals on the continent of Africa, chugging along at 11 miles per hr for 2 months. We're not asked if it is possible to do, we're just told to do it. The oceanography is going well - Val's replacement, Amy Hays, is an old hand at this stuff and meshes well with our group. She's also been helping us process sea turtles brought onboard which has been a boon because we caught quite a few our first couple days out. As expected they have all been olive ridleys but mainly youngsters, including several TSTs (too small to tag: < ca. 25 cm). We are also lavaging turtles for the first time. We slip a well-lubricated Tygon tube down their throat and pump in a liter or two of salt water. After some gargling and gurgling we usually get just our water back, but sometimes recently ingested prey comes out in the wash. It turns out they are eating mainly jellyfish - gelativores (a word is born!). Imagine dining on water-flavored Jello sprinkled with nematocysts (stinging cells) to spice it up a bit. This is definitely some low octane fare and it's difficult to imagine how even a rather lethargic sea turtle manages to balance its energy budget on a diet of coagulated seawater. Helo has been up, flying around, taking advantage of the good weather. When the helo is down John Brandon has been adding depth to his CV by wrassling (my spell checker suggests "weaseling") with the turtles, collecting biopsies, editing data and helping out any way he can. Mammal observations have been business as usual - everyone is definitely happier with the 6-Person Rotation versus the 5-Person-with-Mexican-ObsERVER option. Our biopsy take has, predictably, slowed down to a trickle as we penetrate the Dolphin Thin Zone of the ETP; we did get a couple of offshore Tursiops, However, and we remain ever vigilant for any opportunities. Our first few days of excellent weather brought the deck force out brandishing those infernal needle guns - banging off the rust and slathering on new paint. The shrieks of metal attacking metal is of course the price we pay for keeping the DSJ looking young and beautiful, but it also makes it a very noisy venue up on the flying bridge and the observers say they all look forward to the peace and quiet of the more rust tolerant MAC. From The Mex Files: The highlight of the week undoubtedly was the presentation of the Department of Commerce Bronze Medal to our Chief Bosun Chico Gomez for his outstanding contributions to shipboard operations on the DSJ. Captain Scott Hill thoroughly embarrassed him in front of the whole crew and scientific party with a recitation Chico's numerous accomplishments and heroics both as a crew member and honorary Bug Hunter. He is a tremendous personal and professional asset aboard the DSJ, and we're all glad to see him get the recognition he deserves. Congratulations Chico!

SUMMARY OF MARINE MAMMAL EFFORT AND SIGHTINGS

Date Time Latitude Longitude Effort Beauf

081900 1159 N19:00.49 W104:22.08 47.9 nmi 2.5
1921 N18:21.19 W105:10.23

082000 0704 N17:29.28 W106:03.05 59.8 nmi 1.4
1839 N17:02.20 W107:36.22

082100 0705 N16:38.90 W108:52.83 72.9 nmi 2.4
1856 N16:12.16 W110:15.73

082200 0725 N15:56.11 W111:24.77 60.5 nmi 2.8
1908 N15:39.85 W112:44.15

082300 0728 N15:12.66 W113:57.06 86.0 nmi 4.3
1933 N14:38.65 W115:42.25

Code	Species	Total Number
002	<i>Stenella attenuata</i> (offshore)	12
010	<i>Stenella longirostris orientalis</i>	6
013	<i>Stenella coeruleoalba</i>	11
015	<i>Steno bredanensis</i>	6
018	<i>Tursiops truncatus</i>	5
021	<i>Grampus griseus</i>	2
048	<i>Kogia sima</i>	7
049	ziphiid whale	2
051	<i>Mesoplodon</i> sp.	1
061	<i>Ziphius cavirostris</i>	1
077	unid. dolphin	9
083	<i>Mesoplodon</i> sp. A	1
090	<i>Stenella attenuata</i> (unid. subsp.)	5
096	unid. cetacean	1
099	<i>Balaenoptera borealis/edeni</i>	1
Total		70

AERIAL PHOTOGRAMMETRY: 10.9 hrs flight time yielded photographs of *S. attenuata* (4 schools), *S. attenuata/S. longirostris* mixed (1), *S. coeruleoalba* (6), *Grampus* (1), *Steno* (2), and 3 calibration schools.

BIOPSY:

Species	This Week	Total
<i>Balaenoptera edeni</i>	0	2
<i>Balaenoptera musculus</i>	0	10
<i>Berardius bairdii</i>	0	2
<i>Delphinus capensis</i>	0	3
<i>Delphinus delphis</i>	0	4
<i>Globicephala macrorhynchus</i>	0	13
<i>Lagenorhynchus obliquidens</i>	0	4
<i>Orcinus orca</i>	0	3
<i>Stenella attenuata</i>	8	34
<i>Stenella attenuata</i> subsp.	0	28
<i>Stenella coeruleoalba</i>	1	2
<i>S. longirostris orientalis</i>	2	38
<i>Steno bredanensis</i>	2	4
<i>Tursiops truncatus</i>	4	28
Total	17	175

35 mm PHOTO-ID:

Species	Schools/Individuals
<i>S. attenuata</i> (unid. subsp.)	2
<i>S. longirostris orientalis</i>	1
<i>Steno bredanensis</i>	2

TURTLE CAPTURES:

Species	This Week	Total
Loggerhead	0	9
Olive Ridley	27	56
Green	0	5
Total	27	70