STAR 2000: DAVID STARR JORDAN WEEKLY REPORT
9 November 2000
Lisa T. Ballance

SCIENCE SUMMARY: 2 - 8 November

Past weeks' reports have noted details of unexpected and intriguing differences from classic eastern tropical Pacific patterns - in weather, oceanographic features, species distribution and abundance, in regions throughout our large study area. Not so this week; the Jordan has been sailing through the heart of the eastern tropical Pacific in what can be described as textbook conditions. Our location has us in the countercurrent, in true blue water. Unfortunately, it also has us in a spot where weather is not conducive to many of our science operation requirements. For 6 of the 7 days covered in this report, we have been at 6 degrees, 20 minutes north and headed due west, covering some 1000 nm of ocean from 100 to 114.5 degrees west. The ITCZ, classically lying anywhere between 6 and 10 degrees north, depending upon season and more localized weather, has been well-developed right along the 6.5 degree north axis. Accordingly, we have had day after day after day of heavy overcast with rain all around (but fairly low winds). Ever westward, we have experienced yet heavier clouds and more frequent rains until on 5 November, heavy and unrelenting rain shut us down for the entire day. Think of it: a band of clouds producing pouring rain that stretches unbroken for hundreds of nautical miles - such a global phenomenon can be the ITCZ. Moving farther west, the rain has let up and the trades have moved in. Day seven of this report found us sailing, finally to the northeast, in heavy overcast with little rain and 20 knots of wind.

When the mammal and seabird observers have been able to survey, we have recorded quintessential fauna for this area: spotted and spinner dolphins, striped dolphins, seabird flocks dominated by Juan Fernandez Petrels, Wedge-tailed Shearwaters, and Sooty Terns, with a smattering of other Pterodroma thrown in. Our helicopter pilot and mechanic defied the weather by working on the helo engine, running a bit hot recently, and confirmed it fixed with a short test flight performed during a brief weather break. But in general, there has been a lot of down time for all except the oceanographers, who have remained our sole, steadfast science team that has missed no work. The rest of us...well, what does a weathered-out science team do? A lot of reading material has been floating around: journals (Science, Nature, GQ), textbooks (Conservation Biology, Ecological Geography of the Sea, Genome, Spanish in three easy weeks), novels. Some have been working on papers (differences in skull morphology of Orcaella from Australia and Asia, geographical distribution of remoras as measured by their presence on blue whales, a review of the biology of the ziphiid whales). More movies than we care to admit have been watched. We eat; we go to the exercise room; we visit the bridge, chat with each other, and hope for the weather to break. We acquired a pet Cattle Egret this week, Boudreaux, who is now living on the flying bridge next to his small pond of water in a pail. It is always a dilemma to decide whether to intervene upon nature and save a doomed land bird lost on the ocean; but Boudreaux's appearance inside the back oceo lab endeared him to us so he will be set free in Manzanillo considerably healthier than when he found us.

It is worth noting that, despite the weather, at least half of the ship's complement continues to work: officers and crew get no weather breaks. It is also worth noting that, despite the weather, spirits are good aboard the David Starr Jordan; such is the nature of this group of people out here. Tomorrow we look forward to Clipperton Island, followed shortly by two days of survey along the coast of Mexico.

P.S. It has not escaped our attention that the closest presidential election in history occurred this week. Any definitive news out here would be much appreciated!

SIGHTINGS AND EFFORT SUMMARY FOR MARINE MAMMALS: 2 - 8 November

Date Start/Stop Time Lat Long Total NM Av. Beaufort

110200 0625 N07:12.34 W098:24.47 53.0 nmi 2.4
1813 N06:33.34 W099:32.80

110300 0636 N06:23.79 W100:48.66 65.3 nmi 4.5
1820 N06:19.40 W102:16.16

110400 0647 N06:20.61 W103:34.65 31.5 nmi 3.7
1821 N06:25.20 W105:09.47

110600 1617 N06:13.11 W110:50.05 23.9 nmi 5.1
1854 N06:13.96 W111:14.11

110700 0748 N06:14.42 W112:38.46 100.8 nmi 5.0
1911 N06:13.64 W114:21.79

110800 0736 N07:07.35 W114:24.66 107.2 nmi 5.0
1904 N08:13.49 W112:48.99

CODE	SPECIES	TOT#
002	Stenella attenuata (offshore)	3
010	Stenella longirostris orientalis	1
013	Stenella coeruleoalba	9
015	Steno bredanensis	3
034	Globicephala sp.	3
049	ziphiid whale	1
059	Mesoplodon densirostris	1
061	Ziphius cavirostris	2
077	unid. dolphin	1

TOTAL		24

COMMON DOLPHINS 0
SPOTTED/SPINNER 4
BLUE/HUMPBACK WH. 0
OTHER DELPHINIDS 16
OTHER CETACEANS 4

AERIAL PHOTOGRAMMETRY SUMMARY: 2 - 8 November

No flight hours this week....

BIOPSY SUMMARY: 2 - 8 November

Species	ThisWeek	Cruise Total
Balaenoptera musculus	-	16
Balaenoptera edeni	-	3
Megaptera novaeangliae	-	2
Berardius bairdii	-	2
Orcinus orca	-	11
Pseudorca crassidens	-	3
Globicephala macrorhynchus	-	37
Feresa attenuata	-	6
Delphinus capensis	-	3
Delphinus delphis	-	7
Lagenorhynchus obliquidens	-	4
Stenella attenuata	-	88
S. attenuata graffmani	-	70
Stenella attenuata subsp.	-	64
Stenella coeruleoalba	-	6
S. longirostris orientalis	-	71
Steno bredanensis	2	7
Tursiops truncatus	-	77
Rhincodon typus (whale shark)	-	(1)
Totals	2	477

35 mm PHOTO SUMMARY: 2 - 8 November

Species	No. Schools/Individuals
Steno bredanensis	1 school
Balaenoptera musculus	2 individuals

TURTLE CAPTURES: 2 - 8 November

Species	This Week	Cruise Total
Loggerhead (Caretta caretta)	-	9
Olive Ridley (Lepidochelys olivacea)	-	185
Green (Chelonia mydas)	-	6
Totals	0	200