

**STAR 2006: NOAA Ship *McArthur II*  
Weekly Science Report**

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**Science Summary: 24 - 30 August 2006**

The final two days of Leg 1 passed this week. At long last, the winds moderated, dropping to a remarkable (compared with the past week ... or more) Beaufort three on the last day of survey in the lee of the big island of Hawaii. Despite the excellent conditions however, we failed to find any of the usual suspects (assorted blackfish, bottlenose dolphins), and had to settle for one handful of spotted dolphins. They were the first friendly ones of the entire leg and gave us our single biopsy sample and single school photographed for the week. The ship arrived into Honolulu on Saturday morning, front and center at Aloha Tower with an audience of intrigued tourists, and a pile of mail (yes, even with e-mail, there still is such a thing) and small crew of reinforcement personnel for Leg 2 waiting. All except the reinforcements were in need of a vacation and dispersed to areas throughout the main Hawaiians for some R&R. Take five everyone (days, that is).

**Sightings and Effort Summary for Marine Mammals**

<b>Date</b>	<b>Start/ Stop Time</b>	<b>Position</b>	<b>Total nm</b>	<b>Average Beaufort</b>
082406	0626	N17:32.46 W151:44.43	92.4	4.0
	1815	N18:14.06 W153:39.27		
082506	0605	N18:54.11 W155:51.53	106.8	3.1
	1834	N20:28.72 W1156:25.81		
082606	-	-	In port	-
	-	-		
082706	-	-	In port	-
	-	-		
082806	-	-	In port	-
	-	-		
082906	-	-	In port	-
	-	-		
083006	-	-	In port	-
	-	-		

<b>Code</b>	<b>Species</b>	<b>Number of Sightings</b>
002	<i>Stenella attenuata</i> (offshore)	1
<b>Total</b>		1

### Biopsies (Susanne Yin and Erin LaBrecque)

Species	Common Name	Weekly		Total	
		Samples	Takes	Samples	Takes
<i>Delphinus delphis</i>	Short-beaked common dolphin	0	0	2	3
<i>Stenella attenuate</i>	Pantropical spotted dolphin	1	1	1	1
<i>Turisops truncatus</i>	Bottlenose dolphin	0	0	6	9
<b>Total</b>		1	1	9	13

### Photo Project (Isabel Beasley and Jim Cotton)

Species	Weekly Photographs		Total	
	Individuals	Schools	Individuals	Schools
<i>Stenella coeruleoalba</i>				2
<i>Delphinus delphis</i>				4
<i>Tursiops truncatus</i>				3
<i>Physeter macrocephalus</i>				1
<i>Balaenoptera musculus</i>			1	1
<i>Globicephala macrorhynchus</i>				2
<i>Orcinus orca</i>			6	1
<i>Stenella longirostris</i> (whitebelly)				2
<i>Stenella attenuata</i> (offshore)		1		1
<b>Total</b>	0	1	7	17

### Seabirds and Marine Debris (Michael Force and Sophie Webb)

In this report period we found 19 species of seabirds, 17 of which were seen on a single day. First for the cruise was a moulting adult Pacific Golden-Plover. This tundra-nesting shorebird winters on islands throughout the central tropical Pacific and is frequently seen at sea during migration. We found many feeding flocks, consisting primarily of Sooty Terns and dark morph Wedge-tailed Shearwaters. Faithful readers will notice the change in feeding flocks from previous weeks: as we worked westward, Sooty Tern basically replaced Juan Fernandez Petrel. Also of note was the abundance of dark morph Wedge-tailed Shearwaters; normally light morphs outnumber dark morphs as we approach the Hawaiian Islands. A couple of highlights this “week” come from feeding flocks: our first Newell’s Shearwater and a Pink-footed Shearwater, the latter species unexpected this far west. We had our first sighting of land since leaving San Diego a month ago. Not surprising then was the noticeable increase in marine debris on our final two days.

### Oceanographic Operations (Melinda Kelley)

All oceanographic operations came to a close on Thursday with a final morning CTD and several XBT casts throughout the day. On Friday, the remaining surface chlorophyll samples were analyzed as we moved forward conducting the end of leg procedures.

Date	CTD	XBT	Bongo tow	Manta tow
24 Aug**	1	3	0	0
25 Aug	0	0	0	0

<b>Date</b>	<b>CTD</b>	<b>XBT</b>	<b>Bongo tow</b>	<b>Manta tow</b>
26 Aug	In port	In port	In port	In port
27 Aug	In port	In port	In port	In port
28 Aug	In port	In port	In port	In port
29 Aug	In port	In port	In port	In port
<b>Total</b>	1	3	0	0

\*\* End of operations for Leg 1.

### **Squeakly Report (Shannon Rankin and Liz Zele)**

Acoustics was out of commission – stay tuned next week for more aural fun and excitement.

### **Flyingfish News (Jim Cotton)**

Prior to docking in Honolulu, we had our only dipping station of the week, in the lee of Maui, where numerous juvenile fish and one seahorse were live-captured for the Waikiki Aquarium. No lantern fish or flyingfish were seen but several needlefish were added to our collection.