

## **SPLASH 2004: NOAA Ship McArthur Weekly Science Report**

30 September, 2004

Lisa T. Ballance - Cruise Leader

### **SCIENCE SUMMARY: 23 - 29 September 2004**

September is virtually over, and up here winter feels just around the corner. This, the last weekly report of Leg 3, is being written from the calm waters of Women's Bay, Kodiak, Alaska, where we are tied to the Coast Guard pier. Heaving seas and screaming winds just outside, as well as a restriction on docking here in anything above 35 knots, encouraged us to come in a day early. Of the seven days covered by this narrative, four have been full blown weather days – winds, seas, and rain drove us into hiding, behind Chirikof Island, into the blown out center of Mitrofanina (2 days in that other-worldly ancient volcano remnant), and now this protected bay alongside Coast Guard search and rescue vessels. We've marveled at williwaws (winds, for the non-local readers), spiraling off of sheer cliffsides at 50 knots picking water droplets off the sea surface and whipping them into twisters, periodically checked the status of our equipment on the flying bridge (a 50-knot gust blew the lid right off our fish box one morning; fortunately, a RHIB rescue expedition found it later that day), and spent hours catching up on data processing and looking through photographs of humpback whale flukes to see if any look familiar. (Our photo catalog is now up to 509 individuals – the results of Legs 1 and 2 and countless hours spent by Holly and her colleagues in front of computers and photo printouts.)

For a while there, it looked as if we would send a record-breaking zero humpback flukes photographed in with this report. And indeed, everywhere along the south side of the Alaskan Peninsula, we found plenty of fin whales, mostly piled up along the 100 fathom isobath, but nary a humpback to be found amongst the tall, columnar-like blows, at times scattered above the rolling seas as far as the eye could see. Then, on Sunday evening, as we were pulling out of the lee of Mitrofanina and into 30 knots of wind to make a break for Kodiak Island, we found a pair of humpbacks, one of which gave us a good look (and photo) of its fluke. During our run over Albatross Bank, we confirmed that the hundreds of humpbacks we saw there some 60 days ago are still there (see "Photo Matching News Flash" below), and we managed to capture another 16 fluke photos, despite the 25 knots of wind and rolling of the ship. But the biggest news in the whale world of SPLASH this week is brought to you courtesy of our acousticians, who reported a right whale vocalizing in a spot very near to a confirmed sighting earlier this summer. Try as we may, we could not pick it out amongst the hundreds of humpback blows we scrutinized that afternoon. We will have to be content with the knowledge that there is at least one of these rare animals still here. Thanks acousticians!

With the end of this leg, comes the departure of a number of our scientific party. We sincerely thank and wish safe travels to acoustician Lisa Munger, mammal observer Leigh Torres, and jack of all trades Robert Pitman. Departing scientific coxswain Todd

Chandler has made Herculean contributions to the SPLASH project. He (and biopsy specialist Juan Carlos Salinas, who will, thank goodness, remain with us to the end of the project), has gone out on every RHIB operation to date, spending an hour to an entire day in sun, rain, glassy calm, and rough seas, setting a new standard of excellence for us all. Todd – sincere thanks from the SPLASH crew.

**Sightings and Effort Summary for Marine Mammals**

Date	Start/Stop Time	Position	Total Distance	Avg. Beaufort
092304		----- Hiding in the lee of Chirikof Island -----		
092404	0727 1925	N55:25.01 W155:43.57 N56:05.87 W157:09.21	87.6 nmi	4.0
092504		----- Hiding in the lee of Mitrofanina Island -----		
092604		----- Hiding in the lee of Mitrofanina Island -----		
092704	0724 1345	N56:27.29 W155:26.50 N56:14.08 W154:04.73	52.1 nmi	6.2
092804	0819 1022	N56:35.52 W152:39.73 N56:49.37 W152:31.01	11.7 nmi	5.8
092904		----- Pierside in Women’s Bay, Kodiak -----		

CODE	SPECIES	TOT#
037	Orcinus orca	2
070	Balaenoptera sp.	2
074	Balaenoptera physalus	12
076	Megaptera novaeangliae	5
079	unid. large whale	5
	TOTAL	26

Note: Dall’s & harbor porpoises and pinnipeds are not included.

### **Biopsies (Juan Carlos Salinas)**

Species	Weekly	Cumulative
Humpback whale	5	400
Fin whale	2	58
Northern Right Whale	0	22
Blue whale	0	4
Sperm whale	0	6
Killer whale	2	37
Baird's beaked whale	0	3
Dall's porpoise	0	2
Cuvier's beaked whale*	0	1
Grand Total	9	533

\*dead when sampled

### **Photo-Project (Holly Fearnbach)**

Species	Weekly #	Cumulative #
Humpback whale		
Catalog-quality flukes	17	676
Fin whale dorsal IDs	3	92
N Right Whale head IDs	0	23
Sperm whale fluke IDs	0	13
Blue whale dorsal IDs	0	5
Minke whale dorsal IDs	0	1
Killer whale dorsal IDs	8	218
Baird's beaked whales	0	15
Northern right whale dolphins*	0	1
Pacific white-sided dolphins*	0	3
Cuvier's beaked whale (dead)	0	1
Steller sea lion	0	1

\*number of groups photographed

\*PHOTO MATCHING NEWS FLASH\* - This week (9/28) we resighted an animal originally photographed on 23 July off of Kodiak Island. When we photographed it the second time, it was within a mile of its location in July.

### **Oceanographic Operations (Steven Barry)**

Date	Number CTDs
9/23	0 – cancelled due to weather
9/24	1
9/25	0 – cancelled due to weather
9/26	0 – cancelled due to weather
9/27	1
9/28	1
9/29	0 – Pierside in Woman’s Bay, Kodiak

### **Acoustics Squeakly Report (Shannon Rankin and Lisa Munger)**

We started the week with a final morning sonobuoy, which provided us with more fin whale calls, second only to sperm whales in their chattiness. Fin whales might be more enjoyable if we could hear their sounds, but they are typically below our hearing range. The mid-week was spent mostly catching up on work and sleep, with some effort on the array and a few mediocre recordings of killer whales. We were to end the leg on Albatross Banks, and rumor has it that an occasional right whale has been detected hiding out in the mass chaos of lunge-feeding fins and humpbacks. We decided to see if our luck would continue, and we deployed a sonobuoy in the midst of whales. The whales were thick-- and so were their calls. Humpback moans and thumps. The fin whales were so incredibly loud that for the first time, we could actually hear their calls! And yes, in very short order we detected a faint right whale call. The winds were high, and the seas thick with whales. For a time we detected loud calls, but to no avail. Three traces through the area produced a multitude of whales, none of them the right one. Ah, well, next time?

### **Overtime Report for SWFSC and Aquatic Farms Employees**

In port pay beginning Wednesday, 29 October (instead of Thursday, 30 October. Otherwise, normal, planned OT for all.