

SPLASH 2004: NOAA Ship McArthur Weekly Science Report

16 September 2004

Lisa T. Ballance - Cruise Leader

SCIENCE SUMMARY: 9 - 15 September 2004

“This is a humpback cruise.” So say the Cruise Leader SPLASH Project Instructions. And from our right whale theme of last week, we return this week to humpbacks – with a vengeance! The transit from the “Right Whale Box” into Dutch Harbor (to pick up senior marine mammal observer extraordinaire, Richard Rowlett, Second Officer extraordinaire, Pat Patana, Third Engineer extraordinaire and first-time NOAA sailor Julie Penny, and myself, all latecomers for Leg 3) was peppered with humpbacks along the way, which slowed the ship’s progress as much as did the wind. By the end of the day, a big 0.2 nautical miles had been clocked on effort, and a dozen photos and biopsy samples had been collected.

We took a day’s respite in the calm of Captain’s Bay while a storm passed over us, then headed out once more, passing through Unimak Pass and leaving the Bering Sea behind for the last time this project. Since then, our path has taken us along the south side of Unimak Island to the east as far as Sanak Island, then back to the west some 20 nautical miles offshore, and finally, from just south of Krenitzin Island off the shelf break, over the Aleutian Trench, and beyond, into the big Pacific. All told, these plans laid out some 370 nautical miles of trackline before us. But the whales had other ideas. Each day we made progressively less and less forward progress from our start point to sundown, ending up with a grand total of about 60 nautical miles as the crow flies, collectively, for the first three days of work (and a *lot* more if you count the miles of circling, meandering, and doubling back as we followed the whales). Piles and piles of humpbacks kept the ship and the RHIB busy for hours and hours on end. The sky smiled on us with sunshine every day (the first in almost a month I’m told by the veteran SPLASHERs aboard) and the wind was kind to the RHIB crew on Monday with a Beaufort 1! (Tuesday’s RHIB crew didn’t complain, even with a high Beaufort 5 and a full 8 hours on the water – such are the perks of a day in the small boat.) The humpback coup de gras was a lone animal 70 nm offshore engaged in surface activity and aerial flamboyance for over an hour. You know the show is good when every scientist comes out on the bow, even after watching humpbacks for the past two months. Grand total of our humpback results for this week is an impressive 83 catalog-quality photos and 49 biopsy samples (see summary tables below). Also of note – two killer whales we photographed from a small group turned out to be featured in the Aleutian/Gulf of Alaska Transient Killer Whale Catalog. And a group of resident killer whales were sighted (and photographed) about 60 nm south of the Aleutians, on our run into the vast Pacific.

Yet, the right whales were not finished with us quite yet. On Tuesday evening, just as we were making our last approach on our last of the many humpbacks in a cluster of clusters that day, the whale we were following surfaced several times, moving away from us, then

dove, showing us “the most beautiful fluke in the whale world” (RLP). Our minds, numbed with humpback images during the past three days, for a moment glossed over the broad, smooth back and oddly-shaped blow. Then, amidst some growing awareness and questioning, Mark produced a perfect image of the fluke captured digitally. **HOLY SMOKES! A RIGHT WHALE!!! OUTSIDE OF THE RIGHT WHALE BOX!!!** In the orange sherbet sunset, we managed to obtain photos of the left and right sides of the head (nice callosity patterns!), and to shoot a couple of biopsy darts from the bow. Was one a hit? The Beaufort 5 and now steely gray water precluded our efforts to find the dart. We dropped a sonobuoy and the acousticians pulled an all-nighter – in vain. The animal was silent, and was not in the area the next morning. However, we have it forever aboard as the 23rd individual right whale in our SPLASH catalog. Wow!

P.S. Short-tailed Albatross and Peregrine Falcon top the birder’s choice list this week. Cornelia wins extra points by filling out Lisa’s sighting form.

Sightings and Effort Summary for Marine Mammals

Date	Start/Stop Time	Position	Total Distance	Avg. Beaufort
090904	1521	N55:52.00 W166:01.77	0.6 nmi	3.0
	1526	N55:52.02 W166:00.72		
091004	1457	N54:28.07 W166:32.09	0.2 nmi	2.9
	1458	N54:27.88 W166:32.09		
091204	0751	N54:17.15 W164:20.95	22.5 nmi	4.3
	1550	N54:27.60 W163:28.54		
091304	0744	N54:16.82 W163:15.47	33.2 nmi	2.8
	1859	N53:48.46 W164:29.83		
091404	0737	N53:39.86 W165:35.23	11.6 nmi	5.1
	1749	N53:21.52 W165:23.09		
091504	0849	N53:16.29 W165:33.22	59.1 nmi	5.7
	2003	N52:31.88 W164:00.69		

CODE	SPECIES	TOT#
037	Orcinus orca	4
066	Eubalaena glacialis	5
074	Balaenoptera physalus	5
076	Megaptera novaeangliae	22
079	unid. large whale	10

TOTAL 46

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

Biopsies (Juan Carlos Salinas)

Species	Weekly	Cumulative
Humpback whale	49	389
Fin whale	0	44
Northern Right Whale	11	22
Blue whale	0	4
Sperm whale	0	6
Killer whale	0	32
Baird's beaked whale	0	3
Dall's porpoise	0	1
Cuvier's beaked whale*	0	1
Grand Total	60	502

*dead when sampled

Photo-Project (Holly Fearnbach)

Species	Weekly #	Cumulative #
Humpback whale		
Catalog-quality flukes	83	652
Fin whale dorsal IDs	1	74
N Right Whale head IDs	1	23
Sperm whale fluke IDs	0	13
Blue whale dorsal IDs	0	5
Minke whale dorsal IDs	0	1
Killer whale dorsal IDs	16	183
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

Oceanographic Operations (Steven Barry)

Date	Number CTDs
9/09	1

9/10	0 (at anchor)
9/11	0 (departing Dutch Harbor)
9/12	1
9/13	1
9/14	1
9/15	1

Acoustics Squeakly Report (Shannon Rankin and Lisa Munger)

We spent the first half of the week negotiating humpbacks, keeping the array on deck and out of the way. This pause allowed us recovery time from our dizzying bout with right whales. As we meandered off into the land of sperm whales and silence, the observers surprised us with an offshore right whale sighting as the sun was setting. Needless to say, another loooong night awaited us. To be fair, the right whale obeyed the silence of the region; not a single call was heard all night. Negative data is important, too. Add a trickling of sperm whales and a pleasant encounter with orcas, and our week is complete.

Poet's Corner

Send your submissions!