

SPLASH 2004: NOAA Ship McArthur Weekly Science Report

14 October, 2004

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SCIENCE SUMMARY: 07 - 13 October 2004

The week started with a great follow-up day at Portlock Bank, but operations came to a slow crawl after that, with only a steady trickle of fin whales to keep us entertained as we crossed the Gulf of Alaska. At the end of last week, we decided to head back to Portlock Bank to spend another day there, because the weather was still cooperative and so many of the whales there had not shown their flukes during our first two days. (Hermie: "Are we going back to Kodiak?"). We got very lucky indeed. Not only did we find the whales again mid-morning, but this time, they were fluking! The Mac II and the small boat worked the scattered aggregation all day, and at sunset we had obtained 34 catalog-quality whale tails. The most amazing thing was that none of the whales were the same as a few days earlier. This brings our total for Portlock Bank to about 50 new photos for the SPLASH catalog.

And it was a good thing we had a great day, because it would have to last us a while. Although the weather remained remarkably cooperative, the humpback whales became exceedingly sparse as we finished the zigzags along the Kenai Peninsula and crossed the Gulf of Alaska. Fin whales were widely scattered, but not terribly approachable. No blue whales were heard or seen in the areas where they have been reported this summer. Juan Carlos, in desperation, threw a cleaning fit in his stateroom, and the ship smelled like Pine Sol for hours. To cheer us up, on Monday a Beaufort 1-2 day brought two beaked whale sightings (Mesoplodons), and we tried to approach some killer whales in the RHIB (but they got away). At the end of the day, as we got close to the Fairweather Grounds, we finally found one lonely humpback whale, and we had high hopes for some more the following day. To round out our beautiful day, we had a fishing stop in shallow waters, caught a dozen or so fish, and enjoyed faint northern lights after dark.

But then, the weather finally turned on us. Within less than twelve hours, things changed from clear skies with 3 knots of wind, to Beaufort 7, 12-14 ft seas, and scattered rain showers on Tuesday morning. We tried looking for a few more whales on the Fairweather Grounds (not true to its name, this day), but conditions deteriorated and we decided to head for a sheltered bay north of Icy Strait, to wait out the rough seas. The mountains to our east could still be seen and were most impressive, with enormous snow-covered peaks rising out of the sea, and glaciers carving out the valleys, but by mid-afternoon, the clouds had swallowed all, and we just held station near shore, trying to find a reasonable ride. For a day or two, it felt (almost) like we were on the old Mac! Yesterday afternoon, after the winds died down, we started heading back into open water, where the swells were still considerable. Today (10/14) we are back on the Fairweather Grounds, with calmer seas, fluking whales and hazy sunshine. You'll have to wait until next week to hear how we do today, though! Wish us luck!

Sightings and Effort Summary for Marine Mammals

Date	Start/Stop Time	Position	Total Distance	Avg. Beaufort
100704	0723 1757	N58:06.89 W149:21.74 N59:17.43 W148:38.63	79.5 nmi	4.2
100804	0725 1559	N58:12.03 W150:01.77 N58:20.77 W151:08.30	19.8 nmi	3.4
100904	0733 1634	N59:17.48 W148:36.77 N58:33.66 W146:55.77	65.9 nmi	5.2
101004	0718 1648	N58:29.57 W145:26.84 N58:24.18 W143:13.84	49.3 nmi	4.3
101104	0704 1648	N58:26.30 W141:37.03 N58:25.19 W139:13.90	66.9 nmi	1.7
101204	0656 1618	N58:20.33 W138:31.10 N58:21.01 W137:00.09	70.0 nmi	6.9
101304	1243 1652	N58:14.32 W137:18.77 N58:11.85 W138:10.58	27.4 nmi	3.0

CODE	SPECIES	TOT#
037	Orcinus orca	1
049	ziphiid whale	1
051	Mesoplodon sp.	1
070	Balaenoptera sp.	7
071	Balaenoptera acutorostrata	1
074	Balaenoptera physalus	35
076	Megaptera novaeangliae	7
079	unid. large whale	1
096	unid. cetacean	1
	TOTAL	55

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

Biopsies (Juan Carlos Salinas)

Species	Weekly	Cumulative
Humpback whale	17	427
Fin whale	1	64
Northern Right Whale	0	22
Blue whale	0	4

Sperm whale	0	6
Killer whale	0	37
Baird's beaked whale	0	3
Dall's porpoise	0	2
Cuvier's beaked whale*	0	1
Grand Total	18	566

*dead when sampled

Photo-Project (Holly Fearnbach)

Species	Weekly #	Cumulative #
Humpback whale		
Catalog-quality flukes	34	725
Fin whale dorsal IDs	7	106
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	0	218 (232 – see note below)
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

KILLER WHALE PHOTO UPDATE: Michael has finished examining the killer whale photos from Legs 1-3 and reports a total of 232 individuals were photographed with catalog-quality shots. Of these, 153 were taken during Leg 2.

Oceanographic Operations (Lacey O'Neal)

Date	Number CTDs
10/07	1
10/08	0
10/09	1
10/10	1
10/11	1
10/12	0
10/13	1

Acoustics Squeakly Report (Shannon Rankin and Julie Oswald)

The acoustics team was busy with the array and sonobuoys for the transit across the Gulf of Alaska, but unfortunately both were relatively uneventful. Faint sperm whales were detected on the array, but we never seemed to pass close enough to chase. Sonobuoys were deployed during the evening as well as the morning in search of blue whale calls, but not a single blue peep was detected. There were some fin whale calls, but not as many as you might expect considering their sighting rate across the gulf.