

SPLASH 2004: NOAA Ship McArthur Weekly Science Report

28 October, 2004

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SCIENCE SUMMARY: 21 - 27 October 2004

The weather has definitely become more difficult to dodge this past week, because SE Alaska is the inevitable end point of many of the storms tracking across the North Pacific. But on the bright side, this area offers many places to hide in sheltered waters, often with beautiful scenery once the clouds clear. The week started with a bad weather day on Thursday, and the scientific party enjoyed some additional time (and beers!) in Sitka, as the Mac II was anchored in a sheltered cove nearby. The weather difference between offshore waters and the excellent anchorage selected by our able captain, Dan Morris, was striking – we enjoyed light winds, little wave action, and only light rain all day, while winds were 35-45 knots with 18-21ft stormy seas offshore. The following day, we found about 30 humpbacks inside Sitka Sound, where swells were manageable, and we obtained about 20 fluke photos and 7 biopsies.

On Saturday, a one-day weather window allowed us to continue our offshore zigzags southward. We encountered several groups of humpback whales and spent the day taking photos from the Mac II (swells were still too high to launch the small boat). That night, in anticipation of two more days of bad weather, we steamed up Chatham Strait to Frederick Sound, a spot recommended by Barb Taylor as a late-season humpback hangout (Thanks, Barb!). On Sunday, we found only a few uncooperative whales there in rainy weather. But on Monday, the weather cleared up to offer spectacular mountain scenery all around us, calm seas, and loosely scattered whales that kept us busy all day throughout Frederick Sound. It was amazing to see how close to shore the whales were there – in some cases only about 30 m separated whales from trees.

We also found killer whales both days in Frederick Sound. The first day (10/24), we encountered and photographed a group of three transients. One of the animals was matched by Michael to T85, a female estimated to be at least 27 years old, based on Ford and Ellis' 1999 book on transient killer whales. Our second killer whale encounter on 10/25 involved a group of about 25 residents. We obtained lots of photos and four biopsies. Although we don't have the SE Alaska resident killer whale catalog on board for matching, we hope to be able to identify these whales at a later date. A fun sighting!

The final two days of the week allowed us to finish two of the last three zigzags in offshore waters. Whales were more sparse, and our sampling limited, but combined with leg 1, we have now effectively covered the entire outer coast of SE Alaska. And just in the nick of time, too! Today another powerful storm (who keeps sending us these things?) is headed our way, promising a whopping 50-60kts of wind. So for our last week out, we plan to cruise down parts of the Inside Passage, enjoying beautiful scenery, calmer seas, and hopefully a few more whale spots along the way. We're into the home stretch! And everyone is starting to look forward to Seattle...

Sightings and Effort Summary for Marine Mammals

Date	Start/Stop Time	Position	Total Distance	Avg. Beaufort
102104	No effort - Hiding from bad weather			
102204	1002	N57:06.29 W135:31.32	2.5 nmi	4.0
	1017	N57:03.80 W135:31.90		
102304	0745	N56:33.78 W135:07.48	9.1 nmi	2.5
	1625	N56:17.53 W135:14.97		
102404	1403	N57:05.41 W134:09.47	4.2 nmi	5.9
	1437	N57:03.37 W134:16.11		
102504	0747	N57:01.68 W134:18.25	4.9 nmi	2.3
	1108	N57:02.79 W134:16.55		
102604	0748	N55:52.29 W134:58.28	18.9 nmi	2.2
	1057	N55:37.12 W134:18.93		
102704	0945	N54:34.16 W134:01.12	35.0 nmi	5.3
	1524	N54:23.23 W133:14.68		

CODE	SPECIES	TOT#
037	Orcinus orca	3
046	Physeter macrocephalus	1
070	Balaenoptera sp.	1
074	Balaenoptera physalus	2
076	Megaptera novaeangliae	15
	TOTAL	22

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

Biopsies (Juan Carlos Salinas)

Species	Weekly	Cumulative	
Humpback whale	22	506	- Twice the original SPLASH goal of 250!!
Fin whale	0	64	
Northern Right Whale	0	22	
Blue whale	0	4	
Sperm whale	0	8	
Killer whale	4	42	
Baird's beaked whale	0	6	
Dall's porpoise	0	2	
Cuvier's beaked whale*	0	1	
Grand Total	26	655	

*dead when sampled

Photo-Project (Holly Fearnbach)

Species	Weekly #	Cumulative #	
Humpback whale			
Catalog-quality flukes	52	893	(plus 41 'Quality 3' flukes)
Fin whale dorsal IDs	2	108	
N Right Whale head IDs	0	23	
Sperm whale fluke IDs	0	16	
Blue whale dorsal IDs	0	5	
Minke whale dorsal IDs	0	1	
Killer whale dorsal IDs	18	240	
Baird's beaked whales	0	21	
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

HUMPBACK PHOTO MATCHING UPDATE: Cornelia, Beth and Liz have been busy comparing flukes. Another whale seen off Kodiak on October 4 was matched to a photo taken in the Shumagins on September 12. And a few additional matches to Hawaii animals have been found for whales seen on earlier legs of SPLASH.

Oceanographic Operations (Lacey O'Neal)

Date	Number CTDs
10/21	1
10/22	1
10/23	1
10/24	1
10/25	0
10/26	1
10/27	1