

ORCAWALE 2001: Weekly Report for 10/18/01 to 10/24/01

Sarah Mesnick

At this writing we have (for the most part) successfully escaped the ravages of the Pineapple Express, the series of storms that move across the Pacific from Hawaii to the Pacific Northwest during the winter months. To evade these storms we rely heavily upon the time and attention captain Scott Hill, and the entire command, devote to this project, as well as the keen forecasting skills of Jim Carretta, sage advice of Jay Barlow, local knowledge of augmenter Pat (home town, Astoria), and ship wisdom of Richard Rowlett. It took all of us to stay one step ahead of Mother Nature. She caught up with us only a couple of times, once dwarfing us in 18' high, undulating, seas.

This report covers our transit along the northwestern portion of the study area between northern CA and central Oregon. Many of the species we encounter here require special attention, time and small boat ops: sperm whales, blue whales and killer whales, reflecting the extra effort that goes into these sighting. We have been successful in getting 10, 60, and one 90 minute estimate from asynchronously diving groups of sperm whales, along with photos and biopsy; good photos from two blue whales, and a biopsy; and photos, biopsy and recordings from the pod of killer whales. *Delphinus*, *Lissodelphis*, and Dall's porpoise were also encountered often but they make it easy by coming to us, riding the bow and leaving behind small pieces of tissue and photos for future study. Digitally equipped, the photographers now add action shots to the sighting forms. Juan Carlos, tired of seeing his bolts aimed at sperm whales come back broken, now sends out his *Physeter* designer bolts. At sunset tonight, the last sighting of the week was a dead, floating Cuvier's beaked whale, a feast for several species of birds and numerous sharks.

The week was not without it's mechanical adventures. There was the day we woke to hear of a cracked head on the port engine. In a flurry of ear protection gear, greasy hands, pulleys and chains, a new one was hauled out of the dark recesses of the ship, and installed. Joe Shuster, chief engineer, predicted mid-afternoon the following day for the completion of the job and at 3pm sharp, that port engine was fired up and humming. Our hats off to the engineering department. Our other hero of the week was ET, Jim Anthony. A virus struck our link to the outside world – the email computer. Jim toiled for days to destroy the infestation and put virus protection on all of our computers.

We continue to look northward, then turn eastward, on our final days into port in Astoria, dodging pineapples as we go.

Date	Time	Lat	Long	Trackline Miles	Avg Beauf
101801	1456	N42:18.01	W130:25.16	28.1nmi	4.3
	1821	N42:30.40	W130:59.79		
101901	0808	N43:16.92	W130:59.56	50.6nmi	4.0
	1840	N43:51.75	W130:18.94		
102001	0807	N43:42.31	W129:31.13	55.7nmi	4.0
	1835	N43:27.17	W128:10.04		

102101 0808 N41:57.07 W128:12.33 47.7nmi 4.5
 1832 N42:16.40 W129:25.64
 102201 0806 N40:53.10 W130:07.09 57.1nmi 5.4
 1830 N40:22.92 W128:07.14
 102301 off due to weather
 102401 0805 N41:44.45 W128:15.21 39.7nmi 3.4
 1747 N42:34.17 W127:57.06

Code	Species	Tot#
17	shortbeak common dolphin	7
21	Risso's dolphin	1
27	northern right whale dolphin	5
37	killer whale	1
44	Dall's porpoise	4
46	sperm whale	4
49	unidentified beaked whale	2
61	Cuvier's beaked whale	1
70	unidentified rorqual	1
74	fin whale	4
75	blue whale	2
79	unidentified large whale	2
TOTAL		34

**Biopsy (Juan Carlos Salinas and Erin LaBrecque)
 Photo-ID (Todd Chander, Leigh Torres and Laura Morse)**

Species	#Biopsies (this week)	Biopsy Cumulative Total	#ID-Photos (this week)	Photo Cumulative Total
Physeter macrocephalus	1	10	6	22
Balaenoptera musculus	0	10	2	16
Balaenoptera physalus	1	11	3	18
Megaptera novaeangliae	0	15	0	22
Delphinus delphis	14	70	3	16
Grampus griseus	0	1	0	1
Lagenorhynchus obliquidens	0	8	0	0
Lissodelphis borealis	2	16	0	0
Phocoenoides dalli	1	9	0	0
Orcinus orca	1	3	grp	19
Eschrichtius robustus	0	3	0	7
Stenella coeruleoalba	0	0	0	1
Tursiops truncatus	0	3	0	0
Ziphius cavirostris	1	1	1	1
Total	21	160	2	122

Oceanography (Candice Hall)

Day	#CTDs	#XBTs	#Bongos	Notes
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18 October	0	4	1	weather
19 October	1	4	0	engine trouble
20 October	1	4	1	
21 October	1	4	1	
22 October	1	4	1	
23 October	0	4	0	weather
24 October	1	4	1	

Seabirds (Michael Force and Cornelia Oedekoven)

From high latitudes to low latitudes in a single day: Mottled Petrels, Laysan Albatrosses and the Baja California subspecies of Xantus' Murrelets, covers a wide latitudinal range in the avian biogeographic spectrum. Clearly the season is progressing as winter species such as Northern Fulmars and Black-legged Kittiwakes, in addition to the first 2 already mentioned, begin to appear on the scene. However, these provide welcome relief from the day to day repetition of Black-footed Albatrosses, Red Phalaropes and Leach's Storm-Petrels. The Mottled Petrel, on its way to New Zealand breeding colonies, and the Laysan Albatross, were both firsts for this year's ORCAWALE cruise. Our beloved Ringed Turtle-Dove that came on board 180 NM southwest of Point Conception remained happy and well fed for 9 days, then mysteriously disappeared well over 200 NM off Oregon. With such a dubious survival strategy, it's no wonder this Asian "species" has failed to colonize North America! A dead Ziphius provided a veritable smorgasbord of the finest rotting flesh for scavengers far and wide, including 80 Black-footed Albatrosses, 4 Laysan Albatrosses, 80 storm-petrels (Leach's and Fork-tailed), about 65 Northern Fulmars, 5 Sooty Shearwaters, and a couple of Parasitic Jaegers.

Acoustics (Shannon Rankin and Tony Martinez)

The few days we were able to get up and running were busy busy busy with sperm whales, common dolphins, and even a few orca vocalizations. We started the week slow, but with an interesting acoustic detection of possible killer whales... The visual team did not see the orcas, but instead had a small group of fast swimming (9 knots!?) common dolphins - could these speedsters be possibly hearing the same killer whales? Two days later brought a confirmed killer whale sighting, and our sonobuoy was long and quiet until near the end of small boat operations when a little squeak was heard (and possibly a few more faint vocalizations). Word has it that the one biopsy sample was taken right about this time...The rest of the week brought a combined 8 sperm whale detections, 6 common dolphin schools, and another possible killer whale detection.

Time and Attendance

Standard sea pay for all scientists.