

**NORTH PACIFIC RIGHT WHALE SURVEY 2002, NOAA SHIP
McARTHUR
WEEKLY REPORT**

29 August 2002
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SCIENCE SUMMARY: Thursday, 22 August - Wednesday, 28 August

22 Aug - Depart our anchorage at St. Paul Island first thing this morning. The low pressure system that forced us to hide here for three days is now some 150 nm to our east, moving slowly northeast at 5 knots. Seas are still sloppy, but coming down. We enter "the box" mid-afternoon.

23 Aug - Nice weather. One sighting of Dall's porpoise is all we get for the day... Though I was feeling pretty optimistic when I first came out here, now I'm not sure whether we'll find a right whale by the time we need to leave. It will be disappointing not to find one, but it will also be a grave omen. Only 30 or so of these eastern north Pacific right whales estimated to be left, maybe there are just too few of them

24 Aug - Nice weather - flat calm. No animals of any kind around - no whales, no porpoise, no birds. What the heck are we doing here? At 2000 comes the most unexpected call from Kerri on the flying bridge, the one that instantly turns the project around - "Bridge, page all observers to the flying bridge. I think we have ourselves a right whale." Shock, disbelief, then action. We launch the small boat with Hermie as coxswain, Pitman, Cotton, and Chivers for biopsy and photo-id. We record behavior and movements from the flying bridge. This turns out to be a pair of whales and much to our amazement, one is decidedly smaller than the other - and swims in a drafting-type position. We can't escape the impression that it is a dependent animal - calf-like. (!!!!) (This is BIG news - the last time an eastern Pacific right whale calf was reported was in whaling times and of all our biopsy samples from years past, none are from a female.) With heavy overcast and little more than an hour of daylight left it is way too dark for photos (though we try anyway). But the small boat comes through with a biopsy of the larger animal and a confirmation - the second animal is almost certainly a calf. We pull the small boat aboard well after 2200. It is 2300 before the boat and samples are stored; midnight before we all get to bed. It is our only sighting of the day.

25 Aug - Dawn finds us in the company of three right whales - they have been calling all night says a bleary-eyed Allan. None are the female-calf pair from yesterday. By mid-afternoon, we have obtained biopsies from all three. Photos are more difficult, though we do our best from both the launch and the ship - the best photos of these animals are head shots taken from an aerial view (callosity patterns on the head are used for identification and it's difficult to see those from a lateral view on either platform we have out here). Vocalizations continue throughout the day ... interesting.

27 Aug - We find our sixth right whale this morning, courtesy of the acousticians - Allan puts us right on it with bearings from two sonobuoys and sure enough, there it is. It is different from all the rest based on a couple of very distinctive round, white patches along the ridge of its back, about half-way between the head

and flukes. This one is friendly - in fact, it comes right over to the ship, swims slowly alongside our starboard forequarter, and right on under the bow, clearly visible in all its magnificent detail just below the water. Cameras clicking away and Bob is at the ready with his Larsen gun on the bow - but all he can do is hold it at his side, barrel down, with his jaw dropped - the animal is simply too close to shoot. We do get a biopsy sample a short while later - from the small boat, in a short period of time. Weather is absolutely beautiful - skies clear, sun shining, wind at about 10 knots, swell non-existent.

28 Aug, 2000 - We are an hour south of the box and headed for Unimak Pass. A low pressure system is headed right for that same spot and we have to get through before it does. Mid-afternoon, acoustics puts us on another right whale sighting. If we hadn't seen the cow-calf pair I'd say this was the sighting of the project well heck, I'll say it anyway - this was the sighting of the project. Slowly - like the launch of a rocket - in front of the ship and at a distance of about half a mile, this guy launches half-way out of the water three times; we can clearly see its immense head, its fat body, both of its huge, paddle-like flippers, well out of the water. Then it swims a hundred meters or so and stands on its head with the posterior third of its body sticking straight out of the water. Massive caudal peduncle and massive tail waving in the air and dwarfing the tiny figures standing on the bow. Lots of crew, officers, and of course, the entire scientific party scattered all around the deck on various levels - absolutely speechless with awe. Small boat goes in the water and returns just before dinner with a biopsy (no need to spend more time on photos!). We are just packing up to head to the pass (now some 30 minutes past our drop dead time for leaving for Unimak), when the captain offers us another hour if we need it (he's obviously a scientist at heart) - well, turns out there were an estimated 4 whales in the sighting - not just one. So we turn the ship around and find another pair - small boat is in the water again at 1745 - we have until 1830 - then we've GOT to leave to beat the storm. At 1810 the bridge calls out to the small boat "just a reminder, you have 20 minutes left" - no answer. The minutes are ticking by and we're all sweating bullets when at 1823 Hermie calls up from the small boat and says "We've got a biopsy from one of the pair and we're real close to the second" - no word from the bridge. (We later learn this was a "hail Mary" shot from James - loong drop shot with the crossbow - dart landed squarely in the middle of a tiny circle of whale back just disappearing below the surface.) Just as 1830 rolls around the whales surface, Hermie makes a last run with the launch, and we hear the Larsen gun go off. A minute later "launch to McArthur - we're coming home - two samples" - what a way to end the trip.

General Notes from the Cruise Leader: As noted by the Chief Scientist "&*@(\$&! - you guys have good karma!" Actually, that's just it - luck has been with us (weather and whales). But we also owe our success to a great many people aboard who worked long and hard hours for the project. In particular, huge thanks to the deck department for skillfully and untiringly launching the small boat on whales time and time again (three times on our "best" day, late into the night), to Dave Hermanson for his coxswain skills (and his patience at taking barked orders...), to the officers and watchstanders for their fine ship-handling abilities, to the steward's department for late night doughnuts and allowing late meals ("Galley - could you set aside 10 scientific meals?"). Acoustics deserves a pat on the back - Allan's prowess gained us two sightings - they were in the

opposite direction from my planned search track. And let's not forget the net tow crew (Jan, Lacey, winch operators) - who unceasingly brought up tow after tow of jellies as the right whale sightings kept piling up (that's right, jellies....). We saved the best until last - week's total: minimum of 6 different individual right whales (as many as 7 more) including a cow-calf pair, 8 biopsy samples from 5-8 different individuals, and many photographs.

SIGHTINGS AND EFFORT SUMMARY FOR MARINE MAMMALS:

Date Start/Stop Time Lat Long Total NM Av. Beaufort

082202 0847 N57:08.16 W170:27.74 138.1nmi 5.4
 2151 N57:06.85 W166:37.01
 082302 1600 N56:58.78 W164:56.84 63.3nmi 4.9
 2154 N56:32.17 W163:12.11
 082402 1027 N56:49.85 W163:00.02 91.8nmi 1.9
 1951 N57:01.80 W164:25.40
 082502 1527 N57:08.06 W164:34.71 48.2nmi 3.0
 2159 N57:01.80 W164:38.40
 082602 0815 N57:01.92 W164:41.11 116.8nmi 4.6
 0841 N57:01.95 W164:49.11
 082702 0805 N57:19.17 W164:26.47 101.2nmi 4.1
 2156 N57:02.99 W164:25.80
 082802 0805 N57:02.72 W164:27.18 89.1nmi 4.5
 2130 N56:08.53 W164:12.96

Code	Species	Tot#
37	killer whale	2
40	harbor porpoise	2
44	Dall's porpoise	2
66	northern right whale	6
70	unidentified rorqual	1
74	fin whale	5
76	humpback whale	5
79	unidentified large whale	5
	OTHER	1
	TOTAL	29

BIOPSY REPORT:

Eubalaena japonica 8 samples (5-8 individuals)
Orcinus orca 1 sample