

Humpback whale sightings off the Oregon and northern California coast, during summer 2002.

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Introduction

As part of a collaborative project with the 2002 GLOBEC study, OSU's Marine Mammal Program attempted to attach satellite-monitored radio tags to humpback whales off the Oregon coast. The purpose of the study was to track the movements of humpback whales during their summer feeding season and to compare these movements with the summer 2002 GLOBEC cruise data. Additionally we had hoped to identify humpback migration routes to their wintering grounds. It was hypothesized that humpback whale movements during the feeding season would coincide well with areas of high prey abundance and nearby high primary productivity.



Results

Four aerial surveys were flown between 29 July and 1 August 2002 to locate whales for tagging. All flights were flown at 1500 feet and 100 mph. Three flights departed from Newport, Oregon, concentrating sighting effort over Stonewall and Heceta Banks (up to 65 km offshore, Figure 1), areas of historically high whale concentration. The fourth flight departed from Coos Bay, Oregon, and covered an area between there and Crescent City, California up to 40 km offshore (Figure 2). A total of 10 whales were sighted during these surveys, but sighting conditions were poor during most flights due to high winds (Table 1), so whales were likely missed. Our 6.4 m rigid-hulled inflatable boat (RHIB) was launched when the weather permitted (Beaufort sea states ≤ 4). During the period of time between 22 July and 9 August (including attempts off Crescent City), this amounted to only 3 days on the water (4-6 Aug). Six humpback whales were sighted and approached for tagging during these trips (Figure 3). No whales were tagged, however.

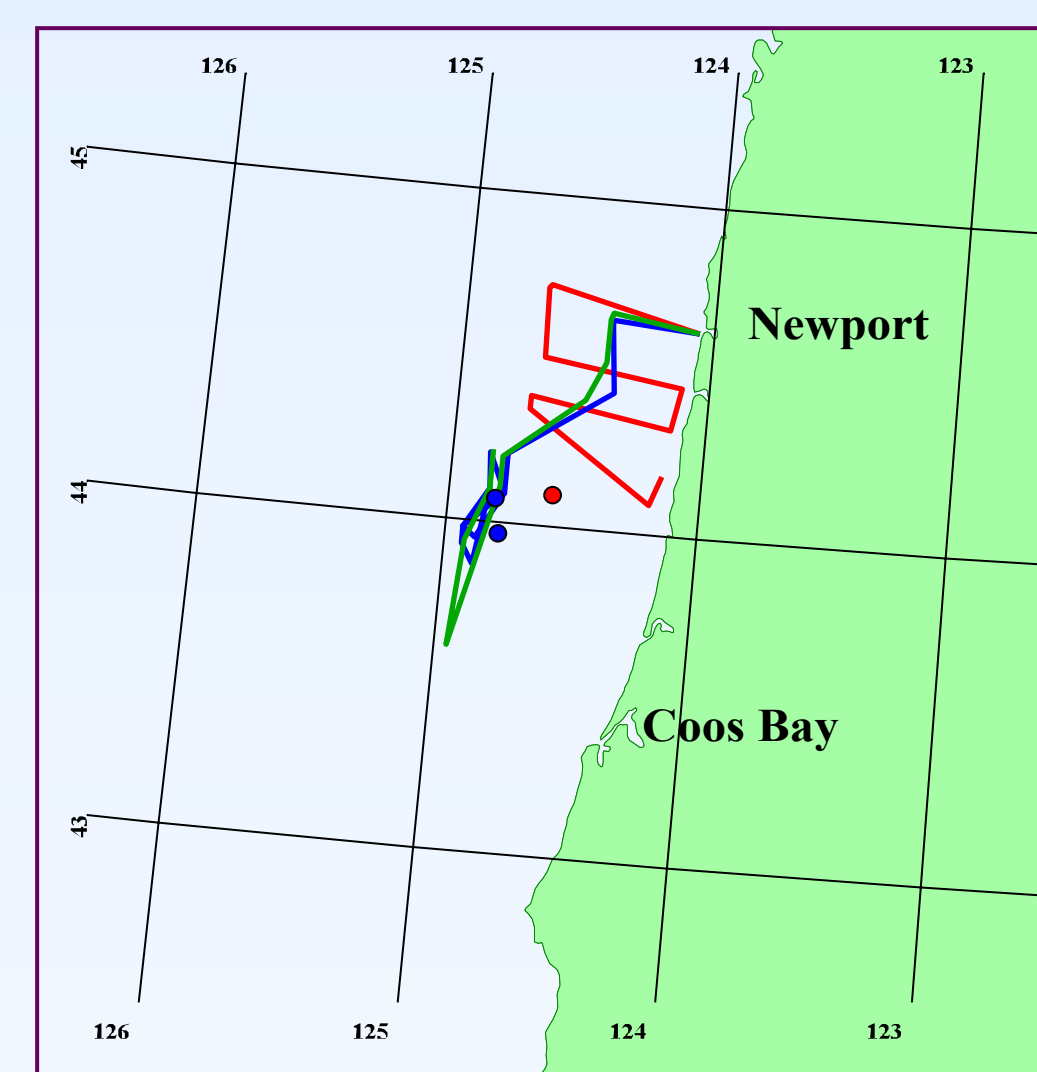


Figure 1: Aerial survey tracks (lines) and their associated humpback sightings (circles, matching color). Red = 7/29/02, Yellow = 7/30/02, Blue = 7/31/02.

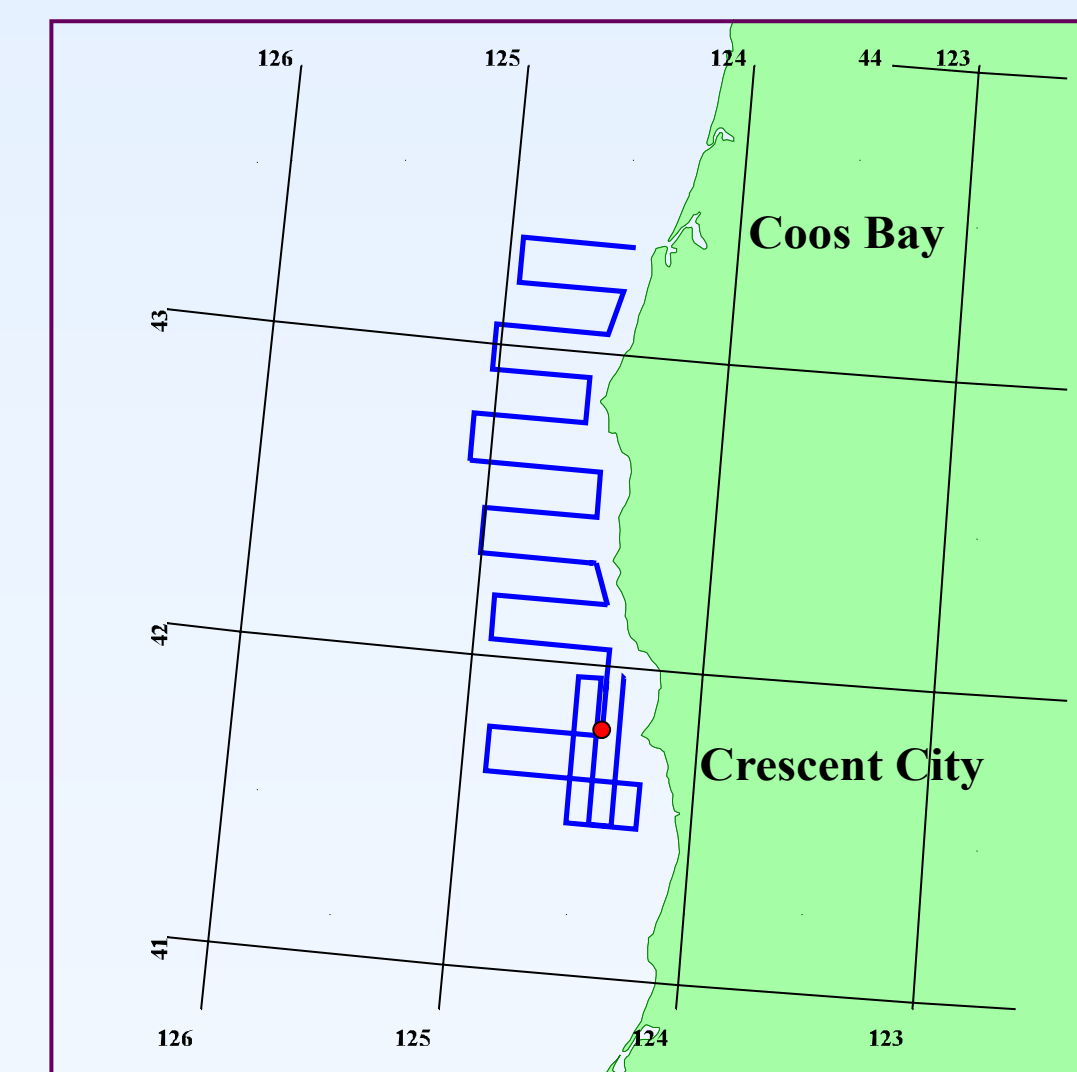


Figure 2: Aerial survey tracks (blue line) and humpback sightings (red circle) off southern OR and northern CA, 8/1/02.

Table 1: Date, departure point, total time, total distance, sea state and number of whales sighted during 4 aerial surveys conducted by OSU during July/August 2002.

Flight #	Date	Departure Point	Total Time (h)	Total Distance (km)	Mean Sea State (mode)	# Whales
1	7/29/02	Newport	1.7	238	4.4 (4)	2
2	7/30/02	Newport	1.3	225	--	0
3	7/31/02	Newport	1.8	208	4.2 (4)	3
4	8/1/02	Coos Bay	--	557	4.2 (5)	5

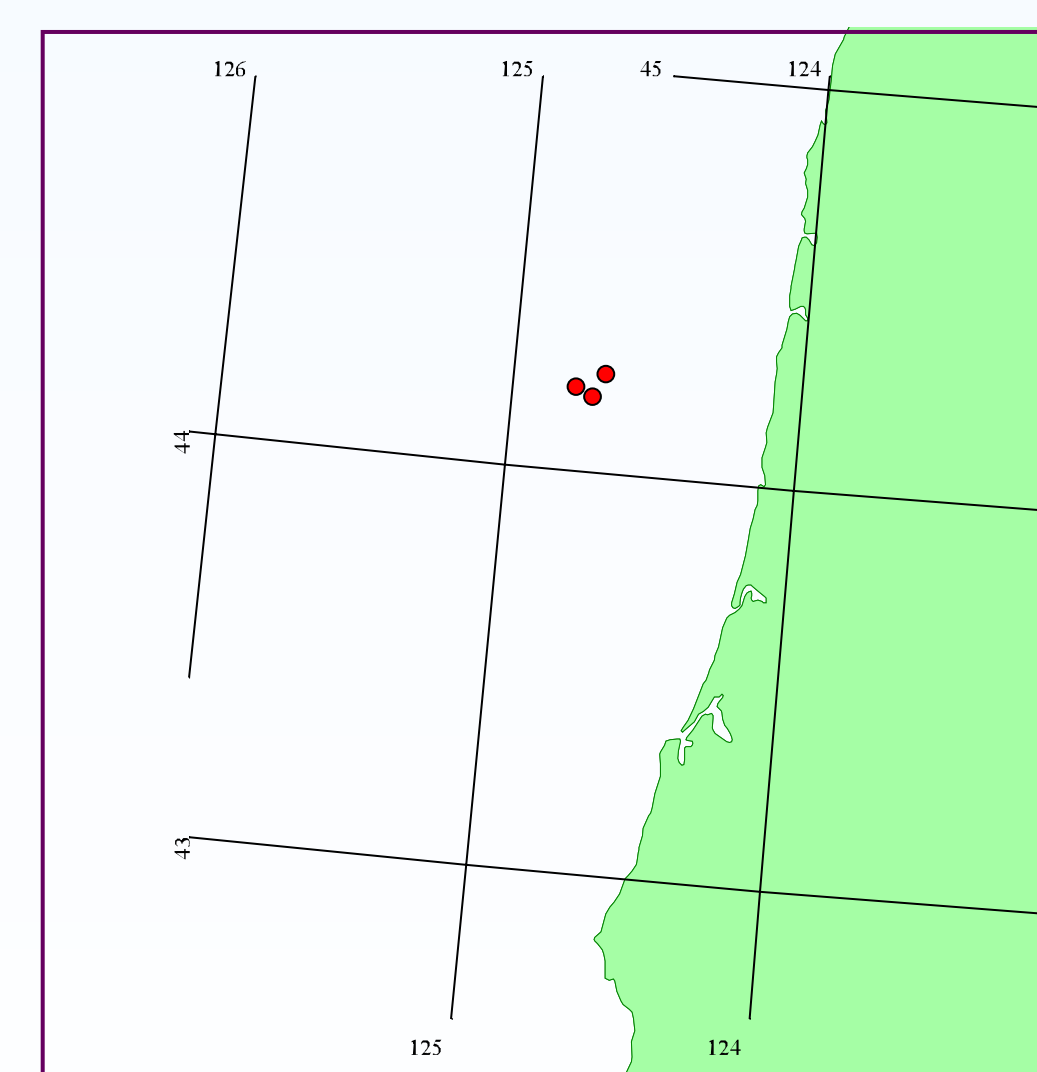


Figure 3: Humpback sightings from the 6.4 m RHIB, 4-6 Aug '02.

Future work

Additional tagging efforts will be made in 2003 with wintering populations in Mexico. These animals will likely migrate to or through Oregon during the spring/summer feeding season.