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A possible ship collision with a Sowerby's beaked whale (*Mesoplodon bidens*) that stranded in Conception Bay, Newfoundland.

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On 15 June 2004 a female Sowerby's beaked whale (*Mesoplodon bidens*) stranded in Western Bay, Conception Bay, Newfoundland 47° 53.250 N, 53° 04.927 W. It was the 14th Sowerby's recorded in the province since 1979 including animals from two mass strandings (Lien and Barry 1990); Lien *et al.* 2001). It now must be regarded as a relatively common cetacean in Newfoundland waters, as evidence by comparative stranding percentages by species. It is the most common beaked whale species reported stranded here.

The animal had stranded the day prior to examination; however, it was clear from the amount of tissue decomposition that the animal had been dead for several weeks. Once the stranding was reported, two Fisheries and Oceans officers attended it until examination. Figure 1 shows the external view of the stranded animal. The examination took two days. Morphometrics are presented in Table 1. The animal had a tooth in the middle of each lower jaw, however they were not erupted teeth and were discovered when the jaws were macerated in water. External examination showed no wounds or scars that indicated evidence of fishing gear entrapment or other trauma.

Figure 1: Female Sowerby's beaked whale that stranded in Conception Bay, Newfoundland,



Table 1: Morphometrics of a stranded female Sowerby's beaked whale.

Measure	Measurement (in cm.)
From tip of jaw to:	
fluke (along side)	479
centre of blowhole	66
anterior insertion of dorsal	291
posterior insertion of dorsal	323
anterior insertion of pectoral	115
posterior insertion of pectoral	141
centre of genitalia	336
Half girths at:	
posterior pectoral insertion	112
anterior dorsal insertion	103
anus	78
Fluke width	112
Blubber depths at 50 cm intervals from skull:	
behind skull	3.5
	3.5
	4.0
	3.5
	3.7
	4.0
	2.5
	2.5

Ovary Data

	.Albicantia ovary	Luteal ovary
Length	41.5	43.5
Width	18	18.2
Weigth	9.5 g	7.8 g
Size lgst. Foll.	3.7	3.9
# C.A.	3	3
Size lgst C.A.	10.9	9.1
Size 2 nd C.A.	10.5	7.6
Size 3 rd C.A.	6.0	5.7

Samples were taken of all major tissue types. Additional samples of blubber, muscle, blood and bone were taken at 50 cm intervals along the animals back for hormonal analysis at Memorial University. The complete skeleton was collected by Tangly Whale.

The overall impression of the animal was that it was a healthy, well-fed individual that did have a calf this year. Necropsy revealed that it had suffered a fractured right jaw from mid-length to the point of linkage with the skull (Figure 2), and had five fractured ribs on the left side. The rostrum was also fractured at midpoint. It appeared, from clotted blood around wounds that the animal bled for some time before it died.

Figure 2: Lower jaw fracture of a Sowerby's beaked whale.



The nature and extent of the injuries this whale received most likely occurred during an impact with a moving object, probably a vessel. Prior to this event, we do not know of other documented cases of vessel collisions with beaked whales.

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References:

Lien, J., Barry, F. (1990) Status of Sowerby's beaked whale, *Mesoplodon bidens*, in Canada. *The Canadian Field-Naturalist* 104 (1) 125-130

Lien, J. Hood., C., Ledwell, W., Corbelli, C (2001) New Records of Sowerby's Beaked Whales (*Mesoplodon bidens*) in Newfoundland. *The Osprey*