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A new record of a Pigmy Sperm Whale (*Kogia breviceps*) from Newfoundland.

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A small whale stranded at Little St. Lawrence, Burin Peninsula, Newfoundland (46° 56' N; 55° 23' W) on 7 August 2002. It had been reported swimming in the harbour that has a bowl shape and a funnel entrance for several weeks. During this period it stranded several times but was pushed off by local residents who reported it to Department of Fisheries and Oceans. The animal finally stranded and was found dead on 8 August 2002. It was identified as a Pigmy Sperm Whale (*Kogia breviceps*) and collected (WL) on that day.

A necropsy was performed on the animal on 9 August 2002 at the Pathology Laboratory, Provincial Agriculture Building, St. John's, Newfoundland (HW,JL,WL,BS).

The skin surface of the animal had many abrasions apparently from previous strandings. There was no evidence of gunshots, net entrapments or ship strikes. Both lower jaws were broken, however there was no evidence of bleeding and the fractures must have occurred post mortem.

The animal was a male with an intact weight of 206 kg., and an overall length of 270 cm. It appeared thin. Additional body measurements are presented in Table 1.

On opening the animal, numerous cysts were found at the junction of

blubber and muscle mass. This finding is also common in white-sided dolphins and pilot whales from the area. They are plerocercoid cysts of the cestode Phyllobothrium (PYD).

Measure	
N Teeth	13 R; 13 L
Length	270 cm
Centre of eye to end of nose	34.5
Gape of mouth to end of nose	30.0
Length of jaw	13.5
Anterior insertion of pectoral fin to end of nose	53.0
Posterior insertion of pectoral fin to end of nose	65.5
Pectoral fin length	39.0.
Pectoral fin width	15.0
Tip of nose to center of genital slit	115.0
Tip of nose to anus	183.0
Fluke width	67.0
Tip of nose to anterior insertion of dorsal fin	136.0
Tip of nose to posterior insertion of dorsal fin	160.0
Girths:	
At eye	119.0
At anterior insertion of pectoral fin	118.5
At genital slit	145.0
At posterior insertion of dorsal fin	130,0
At anus	102.0
Blubber thickness sampled at .2 m intervals on side along length of the animal (ventral to anterior): 2.0; 2.9; 2.5; 2.4; 2.6; 2.6; 2.5	
Blubber thickness sampled on belly: 1.8; 2.8	

Table 1: Morphometric measurements of a stranded male pigmy sperm whale (*Kogia breviceps*) in Newfoundland.

Tissue samples collected from all organs, frozen and archived at the Whale Research Group, Memorial University. The entire skeleton was collected and deposited with the Newfoundland Museum.

All organs appeared normal although evidenced some dehydration. The lungs and bronchial tube was filled with bloody froth indicating respiratory distress at the time of death. There was evidence of a previous blood clot in one lung. The gut was filled with black- dark brown substance. It was dark in the first stomach but as it passed through the gut it became more viscous and darker. In last portion of intestines it was very impacted and solid, about the viscosity of

potters clay, indicating serious dehydration. The fecal material was composed of very fine, water-soluble particles.

Examination of the testes showed sperm indicating that the animal was mature. Pigmy sperm whale males generally mature between 2.7-3.0 m (Baird *et al.* 1996). Teeth were collected and sectioned (BS) **Need Beckys info here**

Genus	Lower Rostral Length (mm)	Estimated Mantle Length (mm)
Histioteuthis (2 lower beaks)	5.27	103
	3.26	59
Chiroteuthis (3 lower beaks)	4.51	122
	4.39	119
	4.39	119
Gonatus (19 lower beaks)	6.47	234
	3.60	111
	4.90	167
	5.90	209
	6.27	225
	6.78	247
	4.94	168
	6.12	219
	5.57	195
	5.67	200
	6.75	246
	5.32	185
	4.13	134
	5.13	176
	5.67	200
	4.91	167

	3.99	128
	4.76	161
	6.06	216

Table 2 Length of lower rostrals, and estimated mantle lengths of squid species (Clarke 1962; 1988) found in a pigmy sperm whale (*Kogia breviceps*) that stranded in Newfoundland.

The first stomach contained one squid beak, a small twig (2 cm) and a bird feather. There were 21 upper beaks and 24 lower beaks in the second stomach. The lower beaks were used to identify the squid species (JJ) and estimated mantle lengths (in mm) were calculated using regression formulae from Clarke (1962; 1988). Estimated mantle lengths of squid ranged from 59.0 –247.0 mm, mean 166.3 mm. Lengths of lower rostrals and estimated mantel lengths by species are shown in Table 2. The second stomach also contained numerous nematodes.

It is possible that dehydration was serious enough that in may have been involved as a final cause in the death of the animal. The respiratory distress evident during the death was likely due to the animals weakened condition and difficulty in surfacing, or breathing difficulties during the final stranding event. Clear evidence of injury, disease or abnormalities that may have led to the animal's death were not found.

This record is the first for pygmy sperm whale in Newfoundland. They are known to occur in waters adjacent to Newfoundland from an earlier stranding on the French island of Miquelon (Nelson *et al.* 1991) and several other records in Atlantic Canadian waters (Piers 1923; Sergeant; *et al.* 1970; McAlpine *et al.*1997*)* including two animals in Nova Scotia and two in New Brunswick. Pygmy sperm whales occur world wide in warmer, temperate and tropical waters of the Atlantic, Pacific and Indian Oceans. Distribution at sea is not known and most knowledge of the species is based on stranded specimens (Caldwell and Caldwell 1989). The species is regarded as a rare visitor to Canadian waters and at the northern extent of its normal range. It has been assigned a "not at risk" status by COSEWIC (Baird *et al.* 1994).

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