

WHALE ENTRAPMENTS IN FISHING GEAR, STRANDINGS AND SIGHTINGS OF
MARINE ANIMALS AND SUMMARY OF THE ENTRAPMENT PROGRAM
DURING 2001- NEWFOUNDLAND REGION

A REPORT TO THE HABITAT STEWARDSHIP PROGRAM OF
ENVIRONMENT CANADA

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Summary

Fishermen throughout the Newfoundland and Labrador requested assistance in removing large whales from their gear from a trained team of release personnel.

The Marine Animal Disentanglement Assistance Program (MADAP) received 77 reports of gear entrapped whales and strandings. Thirty-four large whales and one small whale – a beluga, were incidentally entrapped.

Twenty-two humpbacks were reported incidentally entrapped during 2001 (Table 1). This species represented 63% of entrapments. Five humpback whales died as a result of crab gear entrapment; mortality was 22.7% .

Nine minke whales were reported entrapped in 2001 (Table 2). Six of those were released alive. Mortality was 33%. Minkes were entrapped in various types of gillnets.

Three unknown large whales were reported by fishing crews to be towing gear that was not theirs (Table 3).

One beluga was reported entrapped in a boat mooring and one possibly a harbour porpoise was reported towing a rope (Table 4).

One basking shark was reported dead in fishing gear (Table 5).

Two leatherback turtles were observed free swimming (Table 6).

Nineteen dead and stranded whales animals were reported in 2001 (Table 7).

Other cetacean sightings are summarized in (Table 8).

An educational component was added to the entrapment program in 2001 and a curriculum based hands-on stewardship education program was developed for presentations for kindergarten to Grade 12 in 2002.

Acknowledgements

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Methods

The Marine Animal Disentanglement Assistance Program is a continuance of a program put in place in 1979 by Dr. Jon Lien of the Whale Research Group of Memorial University. It operates as a service to fishers who have large whales and other marine animals entrapped in their fishing gear. In 2001 the programme was funded by the Habitat Stewardship Program of Environment Canada. An established reporting network forwards toll-free calls to a trained team which operates on 24 hour, 7 day a week, year round standby with specialized equipment. Fishers assist with disentanglements providing manpower, boats and equipment. The object of each disentanglement is the safe, clean release of the whale or other marine animals that may be COSEWIC listed and minimal or no damage to the fishing gear involved in the entrapment.

Discussion

More humpbacks (n=9) were entrapped in crab pot gear this year than other types of fishing gear. Mortality was high (n=5; 22.7%) which may have been due to the animal getting entrapped at depth and drowning, unable to raise the gear. Crab gear is typically set in depths of greater than 300 meters. The humpbacks that died this year in crab gear did so in depths of approximately 450 meters. Distances between pots is usually 60 meters. When the fleet of gear is set, there is often slack rope between pots which floats and can act as a snare for a whale. Some of the dead whales released were bridled through the mouth perhaps indicating foraging in the areas of the pots.

From discussions with crab fishers there is reason to believe that live whales caught at the surface are typically cut free with some gear remaining on the animal. This is a highly lucrative fishery where the loss of a few pots, ropes and buoys is minor when compared to shelf life of the crab product on board. There is also reason to believe under-reporting of entrapments may be prevalent in the offshore crab fleet. There is a serious need to develop greater working relations with this fleet to determine the full extent of the problem, the species involved and to arrange clean releases of entrapped animals.

Minke whales caught in fishing gear can quickly and efficiently be released. In 2001 six minke whales were released alive. This is the largest number of minkes released in the 22 years the program has been in existence in Newfoundland and Labrador. The three minkes that died were discovered dead by fishers when they checked their nets. Fishers sometimes release this species without consultation with MADAP personnel, although it is not recommended. Persons unfamiliar with releasing large whales often cut the ropes and netting holding the animal when the animal starts moving around. This results in whales swimming around still carrying some gear. Ideally, all species of whales should only be released when 100% of fishing gear is removed.

Two free swimming leatherback turtles, *Dermochelys coriacea*, were reported to MADAP in 2001. This is probably not representative of all turtles seen as sightings are

often dismissed as seals, and most sightings are not reported by fishers. A planned programme will increase sighting reports in future years.

The toll-free whale line offered assistance to fishers with entrapped animals is frequently used to report strandings and sightings. Many calls are from people frustrated over to whom to contact for removal of dead whales and what they should do if they see a live stranding. Since the responsibility for releasing large entrapped marine animals has shifted from the Whale Research Group of Memorial University, who started and ran it for 20 years, to the Canadian Coast Guard, and now to the Marine Animal Disentanglement Assistance Programme, there has been some confusion over the line of contact and phone numbers for release assistance. This problem will be corrected with continued advertising of the Entrapment Assistance Programme.

In 2001 two Sowerby's beaked whales (*Mesoplodon bidens*) stranded within 10 nm of each other in a space of two months on New World Island in Notre Dame Bay. The October 7 whale was observed close to the beach where it had stranded and was refloated. It died and then stranded in the same place on the next day. The only multiple strandings of Sowerby's beaked whale have occurred in Notre Dame Bay (Lien *et al* 1990). Both whales were necropsied and skeletons collected. A full report of these strandings has been submitted and accepted by The Osprey (Lien, Ledwell and Hood 2003).

Table 1. Humpback whale entrapments in fishing gear in the Newfoundland region during 2001

Date	Area	Gear type	Description
15 June	Harbour Main (3Lf)	Crab pots	Whale observed towing gear. Could not relocate
19 June	Trinity Bay (3Lb)	Crab pots	Self release
2 July	Chapel Arm, Trinity Bay (3Lf)	Caplin trap	Self release
4 July	Salvage, Bonavista Bay (3La)	Crab pots	Released alive
4 July	Baccalieu Tickle Conception Bay (3La)	Herring nets	Observed towing gear. Could not relocate
6 July	Funks (3Kf)	Crab pots	Died at depth
9 July	Fleur-de-Lys, White Bay (3Kh)	Caplin trap	Self release from leader
10 July	Fleur-de-Lys (3Kh)	Caplin trap	Self release from leader
11 July	Dildo, Trinity Bay (3Lb)	Caplin trap	Self release
12 July	Chapel Arm, Trinity Bay (3Lf)	Caplin trap	Released alive
mid July	25nm N Joe Batts Arm (3Ki)	Crab pots	Died at depth
mid July	45nm NE Fogo (3Ki)	Crab pots	Died at depth
mid July	45nm NE Fogo	Crab pots	Died at depth*
17 July	Bacon Cove, Conception Bay (3Lf)	Cod gillnets	Released alive
30 July	Bauline South (3Lj)	Gillnets	Towing gear wrapped tight around body
31 July	Conception Bay (3Lc)	Unknown	Whale observed towing two red fishing balloons. Could not relocate
8 August	Cape Broyle (3Lj)	Cod gillnets	Released alive
16 August	Little Fogo Island (3Ki)	Cod gillnets	Self release
18 August	Fogo Head (3Ki)	Gillnets	Self release
30 August	Crow Head, Twillingate (3Ki)	Gillnets	Self release
24 September	42nm N Cobbs Arm (3Ki)	Crab pots	Released alive
24 September	42nm N Cobbs Arm, (3Ki)	Crab pots	Died at depth, two whales entangled in same fleet of pots, above whale released alive, one released dead

Table 2. Minke whale entrapments in fishing gear in the Newfoundland region during 2001

Date	Area	Gear type	Description
24 May	Rocky Harbour, Northern Peninsula (4Rc)	Gillnets	Released alive
8 June	Sandy Cove, Northern Peninsula	Lump gillnets	Dead
17 June	Raleigh, Northern Peninsula (4Rc)	Lump gillnets	Released alive
5 July	Burgeo (3PN)	Flounder gillnets	Released alive
mid July	Pacquet, White Bay (3Kh)	Lump gillnets	Released alive
20 July	Triton, Notre Dame Bay (3Ki)	Gillnets	Released alive
2 August	Southern Head, Twillingate (3Ki)	Gillnets	Released alive
8 August	Cape Broyle, (3Lj)	Gillnets	Dead
29 August	Moreton's Harbour (3KI)	Gillnets	Released dead

Table 3. Unknown whales entrapped in fishing gear in the Newfoundland region during 2001

Date	Area	Gear type	Description
5 July	Baccalieu Tickle, Conception Bay (3Lf)	Unknown	Whale observed by fishing boat towing gear. Could not relocate
4 August	Leading Ticks, Notre Dame Bay (3Kh)	Fishing net floats	Reported by ferry boat crew. Could not relocate
29 October	St. Anthony Bight, (3Ka)	Whelk pots	Whale was not relocated

Table 4. Small cetacean entrapments in fishing gear in the Newfoundland region during 2001

Date	Area	Gear type	Species-Description
28 August	Holyrood, Conception Bay (3Lf)	Rope	Small whale towing rope. Checked area but could not relocate
4 October	St. Anthony (3Ka)	Boat mooring	Beluga released alive

Table 5. Basking sharks reported entrapped in the Newfoundland region during 2001

Date	Area	Gear type	Description
30 July	Twillingate (3Ki)	Gillnets	Dead

Table 6. Leatherback turtle sightings reported in the Newfoundland region during 2001

Date	Area	Sighting
9 September	Terra Nova National Park (4Rb)	Free swimming
17 September	Baccalieu Island, Conception Bay (3Lb)	Free swimming

Table 7. Strandings of marine mammals in the Newfoundland region during 2001

Date	Area	Species	Description
23 May	Bay Bulls (3Lj)	Humpback	Drifting dead
25 May	Freshwater Bay, St.John's (3Lj)	Dolphin spp	Dead stranded
26 May	Chalkers Cove, Conception Bay (3Lf)	Hooded seal	Dead stranded
29 May	Fair Island, Bonavista (3Lb)	Minke	Dead on beach
10 June	Grand Banks, W. Hibernia (3Lt)	30 foot whale	Drifting dead
26 June	Grand Banks (3Oa)	50 foot whale	Drifting dead
4 July	Musgravetown Bonavista Bay (3La)	Humpback	Dead stranded
5 July	Port Albert, Notre Dame Bay (3Ki)	Sowerbys beaked whale	Dead stranded, examined by Dr. Jon Lien Whale Research Group
12 July	Pilly's Island, Notre Dame Bay (3Kh)	Dolphin spp	Dead stranded
14 July	Ladle Cove, Notre Dame Bay (3Ki)	Humpback	Dead stranded
26 July	Point Verde, Placentia Bay (3PSc)	Minke	Dead stranded

1 August	St. Bernards, Fortune Bay (3PSb)	Sperm	Described as 'globster', examined and identified by DNA analysis
2 August	Crow Head, Notre Dame Bay (3Ki)	Harbour porpoise	Dead stranded, examined
3 August	St. Paul's Inlet (4Rb)	2 Beluga	Dead stranded
7 August	Romaine's Bridge, Port au Port (4Rc)	Harbour porpoise	Dead stranded
27 August	Flat Bay, Port au Port (4Rc)	Large whale	Dead stranded
30 August	Lamaline Burin Peninsula (3PSc)	Dolphin spp	Dead stranded
13 September	Burgeo (3Pn)	Minke	Drifting dead
6 October	Boyds Cove, Notre Dame Bay (3Ki)	Sowerbys beaked whale	Live stranding
7 October	Boyds Cove (3Ki)	Sowerbys beaked	Dead, examined by Jon Lien, Wayne Ledwell. Same as 6 October
20 October	Lewisporte Notre Dame Bay (3Ki)	Long-finned pilot	Stranded alive, brought to deep water, swam on
31 October	Lewisporte (3Ki)	Long-finned pilot	Dead stranded. Same animal as 20 October Examined by W. Ledwell. Samples to DFO and Whale Research Group

Table 8. Other cetacean sightings in the Newfoundland during 2001

Date	Area	Species	Description
3 July	Main Brook, Northern Peninsula (3Kd)	Beluga	Free swimming
August	Hamden, White Bay (3Kh)	Beluga	Free swimming
August	Goose Cove, Northern Peninsula Northern Peninsula (3Kd)	Beluga	Free Swimming
9 October	Brighton, Notre Dame Bay (3Ki)	Dolphin spp	Curious behaviour, swimming around the harbour
2 November	Griquet, Northern Peninsula (3Ka)	Beluga	Free swimming. Took biopsy from this animal

References

Lien, Jon, Francis Barry, Karen Breeck, and Ulrike Zutschlag 1990. Multiple strandings of Sowerby's Beaked Whale, *Mesoplodon bidens*, in Newfoundland, Canadian Field-Naturalist 104(3): 414-420.

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