

INCIDENTAL ENTRAPMENTS IN FISHING GEAR AND STRANDINGS
REPORTED TO THE WHALE RELEASE AND STRANDINGS GROUP IN
NEWFOUNDLAND AND LABRADOR AND A SUMMARY OF THE WHALE
RELEASE AND STRANDINGS PROGRAM DURING 2008

A Report to the Department of Fisheries and Oceans, Canada –
Newfoundland and Labrador Region

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The Canadian Coast Guard Marine Traffic Centres diligently report entrapped and stranded marine animals and sightings regularly to the hot line. Thanks for the service. To the fishermen of this Region who have continued to support this program throughout its long history, the success of our work would not be possible without your continued support and participation.

Introduction

Whale Release and Strandings Group

The Whale Release and Strandings Group (Tangly Whales Inc.) is a non-profit environmental organization responsible for the disentanglement and strandings of marine animals since 2000 and incorporated in July 2002. The organization has a board of directors. The Mission statement for the Whale Release and Strandings Group is:

- To conserve biodiversity
- To release whales from fishing gear
- To attempt to save fishing gear to the extent possible during a disentanglement
- To coordinate strandings on marine animals
- To conduct research work on marine animals
- To conduct all other work on marine animals as seen fit

From 1978 through 2008 both the Whale Release and Strandings Group and formerly, the Whale Research Group of Memorial University, have provided a disentanglement assistance program for marine animals incidently caught in fishing gear in Newfoundland and Labrador. During this time period information from fishermen regarding whale interactions has been recorded and monitored, included in this are the incidences of entrapments, strandings and sightings of leatherback sea turtles, sharks and 20 different species of cetaceans. The program and methods for disentangling large whales from fishing gear were pioneered by Dr. Jon Lien (Lien 1980) and with a few modifications remain those of choice today.

The disentanglement program in use today was designed and developed for the highly rural nature of over 800 fishing communities spread over the 17,000 km coastline of Newfoundland and Labrador. The disentanglement assistance program has benefited fishers, whales and the people of this country. It provides assistance to often financially-stretched fishermen, saving them thousands of dollars in what would be lost fishing gear and downtime if they did not have skilled support in releasing a large whale entrapped in their gear. It releases large and often endangered whales, leatherback sea turtles and basking shark from fishing gear and allows them to continue life processes. We have the largest feeding population of humpbacks in the northwest Atlantic, with about 5,000 individuals visiting NL waters during spring, summer and fall. These whales are the basis for a large tourism industry in the region.

The program also responds to all reported live and dead cetaceans and sea turtles, as well as pack ice entrapments.

The purpose of the assistance is: (1) to assist fishermen in releasing whales from fishing gear, thus decreasing downtime and damage to fishing gear. The length of time a large marine animal is entrapped in fishing gear is directly correlated to greater gear damage and loss of income due to the gear not fishing properly or at

all (Lien 1983), (2) to release entrapped marine animals as quickly and safely as possible, (3) to communicate with fishermen and communities about marine animals, including species at risk, habitat protection and (4) to add to the scientific knowledge of cetaceans, leatherback sea turtles and sharks that inhabit Newfoundland and Labrador waters.

Fish harvesters have come to realize that calling a government sponsored program offers them a faster and more efficient alternative to dealing with a gear entrapped animal than attempting a release on their own. Fishermen and lay people who take whales out of gear often leave large amounts of fishing gear on the animal. Whales caught in crab gear that are cut loose by fishermen and other members of the public are often released with vast amounts of rope and pots still attached (Ledwell and Huntington 2001, 2002, 2006). A timely response by experienced personnel results in the removal of most if not all gear from the animals, less gear damage and fishing downtime, particularly important to the economically marginalized inshore fishermen.

From 1979 to 2008, nine hundred ninety seven (997) humpback whales (*megaptera novaeangliae*), one hundred fifty six (156) minke whales (*balaenoptera acutorostrata*), thirteen (13) fin whales (*balaenoptera physalus*), one right whale (*eubalaena glacialis*), one bowhead whale (*balaena mysticetus*) and eighty seven (87) unknown large whales were reported entrapped in fishing gear in Newfoundland and Labrador. Entrapments and strandings of smaller cetaceans and marine animals such as leatherback sea turtles and sharks have also been reported. Entrapments, strandings and sightings of other cetaceans and marine animals such as sea turtles and sharks have also been documented (Lien 1994; Ledwell and Huntington 2000-2008). From 1992 to 2000 funding for a marine animal release program was varied and at times non-existent.

The most common types of fishing gear associated with entanglements in this region currently include gillnets (cod, herring, mackerel, lumpfish, flounder, monk, skate and turbot) snow crab pots, whelk pots, toad crab pots, box traps (caplin, cod, herring, mackerel and squid), unspecified and illegal gillnets, ropes/buoys and moorings. In other words, most types of fishing gear have the potential to incidentally catch whales and they do. In recent years fishing effort in Newfoundland and Labrador has shifted offshore, this shift in gear has lead to an increase in the number of offshore entrapments reported and offshore entanglements have primarily involved snow crab gear.

Fishing effort in Newfoundland and Labrador prior to 1990 has primarily been conducted with hook and line, box trap gear and inshore gillnets (Harris 1990). The greatest number of whale entanglements occurred in the latter two fisheries. During recent times however, some historically stable fisheries have been in decline and several have been placed under moratoria. Although there is still a significant inshore fishery in the Newfoundland Region, employing both traditional fishing methods, the focus of the industry has shifted offshore from

traditional inshore small boats using fixed fishing gear set near shore to larger boats fishing in nearshore and offshore waters employing pot gear to harvest snow crab (*Chionocetes opilio*). This shift towards the snow crab pot fishery has also led to a change in entanglement rates of large whales in Newfoundland and Labrador. From 1979 to 1999, 0.6% of reported entanglements of large whales occurred in offshore waters, but from 2000 to 2007, 67% of humpback entanglements occurred from 25 to beyond 200nm from land. Similarly, from 1979 to 1999, 0.3% of reported entanglements occurred in crab pot gear. From 2000 to 2007, 31% of reported humpback whale entanglements occurred in crab pot gear.

Methods

Whale, leatherback sea turtle and basking shark entanglements in fishing gear and strandings and sightings of marine animals were reported to the Whale Release and Strandings Program in 2008 by calling an advertised toll free number (1-888-895-3003) which can be accessed 24 hours a day seven days a week. A trained release team responds by providing suitable, safe advice or sending expert personnel to the site for needed assistance. The trained crew was equipped and ready to deploy immediately with an inflatable zodiac and necessary specialized tools for disentanglement of whales, leatherback sea turtles and basking sharks. The objective of each disentanglement is the safe, clean release of the whale or other marine animals fishing gear and minimal or no damage to the fishing gear involved in the entrapment. The disentanglement crew also responded to whale and leatherback sea turtle strandings. Calls concerning entanglements, strandings and dead floating animals were also forwarded to the group by DFO Conservation Officers, Coast Guard Centres, fishers, Royal Canadian Mounted Police (RCMP), Crime Stoppers and the general public. The program was funded by the Department of Fisheries and Oceans in 2008. Additional funding was also secured through Imperial Oil, Shell Environmental Fund, the Mountain Equipment Co-op, Service Canada Summer Career Placement, the Provincial Student Work and Services Program and the community of Portugal Cove-St. Philip's.

Results and Discussion

Results of the Entrapment Assistance Program from previous years have been summarized in annual reports to the Department of Fisheries and Oceans and the Newfoundland and Labrador Department of Fisheries (Lien 1980; Lien and Aldrich 1982; Lien et al. 1982; 1983; 1984; 1985; 1986; 1987; 1988; 1989; Lien 1990; 1991; 1992; 1993; 1994, 1995, 1996, Ledwell, Huntington and Lien 2000, Ledwell and Huntington 2001, 2002, 2003, 2004, 2005, 2006, 2007).

Humpback Whales

Twenty-five (25) gear entrapped humpback whales (Table 1) were reported to the Whale Release and Strandings program in 2008. Twenty-five of those entrapments were reported in inshore waters with one whale reported entangled in the offshore, on St. Pierre Bank. Six whales were caught in groundfish gillnets

for cod and seven were entrapped in caplin and mackerel traps. From 1979 to 1992, between 25 to 75 humpbacks were reported entrapped per year in Newfoundland waters with a peak in 1991 of 139 whales reported entrapped. This peak was most likely associated with large amounts of fishing gear used just prior to the cod moratoria in 1992. From the years 1993 to 2008 the number of humpbacks has dropped from 2 to 26 reported entrapped in fishing gears. This may be due to fewer box traps, nets and rope in the water, fewer whales traveling the region, fewer whales reported entrapped in gear or a combination of all. However the numbers indicate that we still have high numbers of large whales entrapped in fishing gear in this region

Entrapments of humpbacks in 2008 in Newfoundland and Labrador waters saw a shift back to traditional inshore fishing gears with gillnets and box traps accounting for 50% of reported entanglements. Although 12% of reported entanglements in 2008 were snow and whelk pot gear only one of those entanglements was reported in the offshore. 96% of all reported humpback entanglements in 2008 were reported in inshore waters. Response to entrapments in inshore waters generally means that the Whale Release and Strandings Group can attend to the entrapment either the same day or the next depending on driving distance, time of call and weather conditions.

Minke whales

Four (4) minke whales were reported gear entrapped in 2008 in Newfoundland and Labrador waters. All were reported entangled in inshore waters. Two of those animals were discovered dead, one with blackback flounder netting attached and the other dead onshore with 5/8" poly rope attached. A third whale near Hopeall Trinity Bay was released from blackback flounder gear but we are unsure of its survival. The animal had towed two nets into deep water and when the Whale Release and Strandings Group arrived the fisher who owned the gear had a longliner attached to the whale and gear and was winching this up on a crab pot hauler. When we arrived at the scene the whale tore the rope and netting from the hauler and went down. The gear was winched up again and had to be cut off the propeller first. When the whale was hauled back up we cut the rope and netting from the peduncle and mouth and it sank, bubbles came to the surface for a period of time but we saw no sign of the animal and are uncertain of its survival as it may have been too exhausted and left under for too long (about 15 minutes) before getting it back to the surface. This animal is listed as *uncertain* in Table 2.

Leatherback sea turtles

Six (6) leatherbacks were reported entrapped in fishing gear in 2008. All of those animals were released alive (Table 4). One of those animals and possibly two were caught off St. Pierre and one of these had a flipper tag. The animal had originated from a nesting beach in French Guiana. This is the second leatherback caught in our waters with a flipper tag that was put on in French Guiana. The first was found entangled in a gillnet in Fox Harbour, Placentia Bay

on September 17th 1987. This animal had traveled to Newfoundland in 128 days (Goff et al; 1994).

There were twenty eight (28) reported sightings of free swimming leatherback turtles in Newfoundland and Labrador waters during 2008 (Table 4). This is the highest number of recorded sightings reported in our waters. We are not sure why this is but suspect an increase in the number of leatherbacks turtles in our waters. It may also be due to increased education leading to awareness and reporting.

There were multiple sightings of one or more leatherbacks in the Dildo/Normans Cove/Belleview area of Trinity bay during late September.

One leatherback was discovered dead in Sandyville Hermitage Bay. This animal was badly decomposed.

Other entrapped whales

A juvenile female bowhead was discovered dead in a boat mooring at Leading Ticks in Notre Dame Bay. The animal was found close to shore by a fishing stage and submerged. It had entangled itself through its mouth in the anchor rope for a speedboat. This was a very unusual entrapment and a note is being prepared on the entrapment. This is the third bowhead found dead in Newfoundland waters in 10 years, the other 2 were dead stranded juveniles (See: Ledwell et al; 2007).

Strandings

Thirty two (32) separate stranding incidents were reported during 2008 (Table 6). A Sowerby's beaked whale, *Mesoplodon bidens*, and a sperm whale, *Physeter macrocephalus*, were necropsied by members of the Whale Release and Strandings Group. A plastic oil jar was discovered in the gut of the sperm whale.

Two (2) Sei whales, *Balaenoptera borealis*, were discovered dead stranded. One of those animals live stranded repeatedly close to Green Island light in Trinity Bay and later died. The other drifted in dead into Isle aux Morts on the South West Coast. Those two strandings together and a live stranded Sei, that also died in Fortune Harbour in 2007 (Ledwell and Huntington 2007), represent the only recorded stranded Sei whales for this region. This however does not include those killed during the whale fisheries in Newfoundland and Labrador.

During one incident on 17-19 February (2009) five white beak dolphins were entrapped in harbour and pack ice in Seal Cove, White Bay. The event is summarized in Appendix I. The following week nine white beak dolphins were discovered dead in heavy pack ice in Landers Cove, Sweet Bay, Bonavista Bay. Attempts to necropsy were met negatively by local residents who wanted the animals removed. Owing to the isolation of the area and local cabin owners

feelings we would have been unable to remove the animals after necropsy and thus did not venture into the area.

A paper was presented to the European Cetacean Society on solitary social belugas and narwhals. This is a recurring phenomena and problem for managers in our waters during this past decade. See Appendix 11

Miscellaneous cetacean and other animal sightings

In our reports we do not include sightings of common whales such as humpbacks, fins, minke, harbour porpoise and white beak and white-sided dolphin species unless they have been in trouble.

A total of sixteen (16) separate encounters with orca whales were reported to the Whale Release and Strandings Group in 2008 (Table 7,8).

One basking shark was reported dead in gear in Hermitage, Hermitage Bay.

Workshops/Symposium/Conference/Papers/Talks

Talks

1. Ledwell, W., Benjamins, S., Huntington, J., and Hood, C. Incidental entrapments of large whales in Newfoundland and Labrador, 1979-2008. Poster presented at the Northwest Atlantic Fisheries Organization (NAFO) symposium "The Role of Marine Mammals in the 21st Century", Dartmouth, N.S., Canada September 2008
2. *Entanglements and Strandings of Marine Animals*. SARA Spotlight: Whales & Leatherback Turtles in Newfoundland & Labrador. Corner Brook Newfoundland 18 March 2009
3. *Leatherback sea turtle entrapments and strandings in Newfoundland and Labrador* Canadian Leatherback Turtle Scientists and Educators Meeting 24 March 2009. Halifax, Nova Scotia, Canada
4. *Entanglements and Strandings of Marine Animals*. SARA Spotlight: Whales & Leatherback Turtles in Newfoundland & Labrador. St. John's Newfoundland 30 March 2009
5. Benjamins, S., Ledwell, W., Huntington, J. and Hood, C. The Cost of Changing Gears: Large whale entanglements in Newfoundland and Labrador (Canada), 1979-2008. Poster presented at the 23rd Annual Conference of the European Cetacean Society, Istanbul, Turkey, March 2009

Benjamins, S., and Ledwell, W. Vagrant sociable monodontids in Newfoundland and Labrador, Canada. Oral presentation at the workshop 'Protection and

management of solitary sociable cetaceans' at the 22nd Annual Conference of the European Cetacean Society, Egmond aan Zee, the Netherlands, March 2008.

Education/Outreach

Five students were employed with the Whale Release and Strandings Group during 2008 under the Provincial Student Work and services Program (SWASP) and the Federal Service Canada Summer Career Placement Program (SCP) program. Students from the Southern Shore, Bay De Verde/Old Perlican/ Baie Verte and Clarenville were tasked to interview fishers on marine animal bycatch. 267 interviews were conducted with fishermen in Trinity, Conception, Placentia Bays and the southern Avalon.

Funding was obtained from Imperial Oil, Shell Environmental Fund and Mountain Equipment Co-op to provide presentations to schools in rural areas of Newfoundland on leatherback sea turtles. Twenty-two Kindergarten to Grade 12 school visits were made and there were 88 presentations given on the Connaigra, Bonavista and Conception Peninsulas and the southern Avalon.

With this funding we also created a poster for distribution around the island on The Leatherback Sea Turtle in Newfoundland and Labrador. A pdf is included under Appendix III.

Recommendations

All vessels in this region should have the toll free number stickers onboard alerting them whom to call when they have an entrapped whale or see an entrapped whale. By having the toll free number visible in the wheelhouse fishermen may decide to call for expert advice when they have or see a whale or leatherback entrapped and not attempt to cut animals free and leave them with large amounts of gear attached This situation can be at least partially avoided if boats have the entrapment assistance hot line number easily visible onboard and upon calling the owner could be advised on the proper release procedures or be advised that a release team is available to attend to the entanglement. This may lessen the number of whales each season swimming around with large amounts of snow crab and other gear attached. See Appendix IV for toll-free sticker.

Core funding needs to be set aside for this program to ensure its viability and allow for the training of other release personnel. The authors are the only ones qualified in Newfoundland and Labrador to do this work and others need to be trained and mentored into entrapment methodology for this region.

Table 1. Humpback whales reported entangled in fishing gear in Newfoundland and Labrador during 2008

Date	Area	Gear type	Description
16 May	Little Colinet Island, St. Mary's Bay	Crab pots	Checked the area on 17 th . Unable to relocate whale.
19 June	South East Bight, Placentia Bay	Cod gillnets	Released alive and gear free by members of the WRS. Multiple wraps around peduncle and double bridle.
20 June	New Ferolle, Northern Peninsula	Lobster pot fleets	Released alive and gear free by members of the WRS. Whale had 3 loops around peduncle and bridled.
8 July	South East Bight, Placentia Bay	Cod Gillnets	Released alive with some gear caught in severe cut in left fluke notch by members of the WRS. Whale had 6 fleets totaling 12 X 50 fathoms cod gillnets around tail, plus a lobster pot It had towed old gear into recent nets of various fishermen in area.
11 July	South East Bight, Placentia Bay	Cod Gillnets	Fisherman cut whale loose with gillnet and haul up rope/buoy attached.
12 July	South East Bight, Placentia Bay	Cod gillnets	Whale towed away fleet of 2 cod gillnets.
12 July	47 12.483N, 54 39.546W, Oderin Bank, Placentia Bay	Cod gillnets	Entangled and drifting. Members of WRS with Marystown fisheries officers checked the area unable to relocate. Darkness prohibited further searching.
12 July	Bay De Verde, Conception Bay	Caplin Trap	Whale released gear free from caplin trap by members of WRS. Whale had towed the leader into mouth of trap and had a tremendous amount of gear wrapped around tail, body and through mouth multiple times. Pictures and video taken by Abigail Ledwell.
13 July	Cape Spear	Rope and wooden buoy	Towing gear and reported by tour boat. Checked the area unable to relocate.
13 July	Bay De Verde, Conception Bay	Caplin trap	Self release through leader
13 July	Bay De Verde,	Caplin	Self release through leader

	Conception Bay	trap	
15 July	Coachmans Cove, White Bay	Caplin trap mooring	Self release with gear on whale
16 July	St. Pierre Bank	Whelk pots	Fisherman cut whale loose with 5 pots and 30 lb grapnel with haul up rope.
17 July	Coachmans Cove, Notre Dame Bay	Caplin trap	Whale seen with gear attached to caplin trap drifting and alive. Members of WRS and fishermen searched area unable to relocate.
17 July	Basket Cove, Motion Head	Rope	Small humpback reported by tour boat towing gear. Unable to relocate.
19 July	47 35.793N, 52 34.439W, 41/2nm off St. John's	Snow crab gear	Humpback calf released gear free from rope and balloon of crab gear by members of WRS. Rope around tail and through mouth. Difficult release with mother hovering around us.
20 July	South East Bight, Placentia Bay	Cod Gillnets	Humpback with deep cut on left fluke released from gillnets. Suspect same animal as 8 July.
24 July	North Head Cape Spear	Rope and wooden buoy	Towing with buoy wrapped behind dorsal. Calf with entangled animal. Unable to relocate.
25 July	Spillars Cove, Twillingate	Small red balloon and slight rope	Whale towing gear. Fisheries Officers took 8 fathoms of ¼ in rope from the whale but were unable to get the rest off.
27 July	Wild Cove, Notre Dame Bay	Small red balloon and rope	Towing gear suspect same as 25 July.
28 July	Tizzards Harbour, Notre Dame Bay	Small red balloon and rope	Red balloon and ¼ in rope removed from free swimming whale by members of WRS. The CFV numbers on the buoy did not match an industry enterprise. Suspect same whale as 25 th and 27 th .
8 August	Pouch Cove, Northeast Avalon	Red balloon	Whale towing a very large red balloon. Searched for by WRS but after initial sighting we lost it due to high winds and large swell.
13-14 August	Plate Cove West, Bonavista Bay	Rope	Free swimming whale with short amount of rope trailing. Tried for 2 days to catch the animal but were

			unsuccessful.
16 August	Witless Bay	Rope	Whale with tight wrap around body reported by tour boat. Unable to relocate.
13 September	North Head, Bay Bulls	Fishing gear	Sighted by hikers late evening. Unable to relocate.
25 September	49 50N, 56 33W Westport, White Bay	Mackerel trap	Released alive and gear free from Mackerel trap by members of WRS. Severely entangled around peduncle and flukes with several mouth bridles.

Table 2. Minke whales reported entangled in fishing gear in Newfoundland and Labrador during 2008

Date	Area	Gear type	Description
16 June	Plum Point	Lobster fleet	Released alive and gear free by members of WRS. Whale had tight turns around left flipper with bridle.
23 July	Kelligrews	Rope	7m animal with rope and gear scarring on peduncle dead on beach. Rope 5/8 in poly still attached.
26 July	Conception Harbour, Conception Bay	Blackback flounder net	Dead floating. WRS retrieved 8m of rope and netting that was through the whale's mouth.
28 July	Hopeall Point, Trinity Bay	Blackback flounder nets	Released from gear by WRS. Rope and netting wrapped around peduncle. Condition uncertain.

Table 3. Other whales reported entangled in fishing gear in Newfoundland and Labrador during 2008

Date	Area	Species	Gear	Description
2 September	Leading Tickles, Notre Dame Bay	Bowhead	Boat mooring	Juvenile 670cm female bowhead found dead in boat mooring in harbour. Visited by W.Ledwell & J.Lawson. Samples, measurements taken
18 September	Old Shop, Trinity Bay	White Sided dolphin		Released alive, gear free by members of WRS from mackerel net

Table 4. Leatherback sea turtles reported entrapped in fishing gear in Newfoundland and Labrador during 2008

Date	Area	Description
Mid May	46 03N, 55 20W	Caught around, head/flipper in buoy rope from snow crab gear.
28 July	St. Pierre	Tagged leatherback taken aboard fishing boat and released. Said to have been 2 animals caught.
15 September	47 42 11.6N, 55 2226.7W, Pools Cove	Released alive and gear free from cod gillnets.
21 September	47 28N, 50 08W, Harbour Main	Released alive and gear free from balloon, anchor and rope from hook-line trawl. Advice given over phone on how to release the animal by W. Ledwell.
8 October	South Dildo	Released from mackerel trap leader. Animal heavily entangled. Released gear free and later resighted free swimming (lots jelly fish present).
Summer	3PS	Entrapped and released alive by fishermen.

Table 5. Leatherback sea turtle sightings reported in Newfoundland and Labrador during 2008

Date	Area	Description
7 June	Northeast Downing Basin, 47 07N, 51 14W	Free swimming close to crab pot buoy
12 July	Squid Cove, Burnside, Bonavista Bay	Free swimming
14 July	Off Burnside, Eastport Peninsula	Free swimming 1/2km from land. About 2 m carapace
Mid July	Spaniards Bay	Free Swimming
July	Off Bonavista	Free Swimming
30 July	Francois, South Coast	Free swimming
July	Off Cape Broyle Head	Free Swimming
August 4	Trinity, Trinity Bay	Free swimming
26 August	47 19.9N, 54 04.9W, 3nm west Argentia	Free swimming. Fisherman thought there may be rope around animal head but it possible was red jellyfish
August	Fortune	Seen from St. Pierre ferry free swimming between St. Pierre and Fortune
3 September	46 55.15N, 54 44.98W 5-6 nm North of Smart Buoy Placentia Bay	~2.4m long, 1.5m wide
4 September	4 to 5 nm off Cape St. Mary's	Free swimming
8 September	51 2426.96N, 57 0215.12W, Lanse au Clair	Free swimming
16 September	47 14.705N, 52 44.199W, Backside Gull Island, Witless Bay	Free swimming
19 September	Chapel Head, Trinity Bay	Free swimming, 1.2m shell
21 September	Bellevue, Trinity Bay	Free swimming
21 September	Chapel Arm, Trinity Bay	Free swimming
Week 22 nd September	Bull Island, Chance Cove area Trinity Bay	Free swimming
26 September	Tickle Harbour Point, Bellevue area, Trinity Bay	Free swimming
27 September	North end Bell Island, Conception Bay	Free swimming
27 September	Cape English, St. Mary's Bay	Free swimming
27 September	48 00N, 53 30W	Free swimming

	Winterton, Trinity Bay	
28 September	Green's Harbour, Trinity Bay	Free swimming. Pictures sent
28 September	2 nm of Belleview beach, Trinity Bay	Free swimming (lots sunfish in area)
30 September	Upper Gullies, Conception Bay	Free swimming 1nm offshore. Pictures/video sent
Week 6 October	Dildo Island, Trinity Bay	3 separate turtles sighted by fishermen free swimming
19 October	Mansfield Point, King's Point, Green Bay	Free swimming
19 October	Rattling Brook, Green Bay	Free swimming
December	Sandyville, Connaigra Peninsula	Dead small carapace and bones washed in over the barasway. Inspected by W. Ledwell

Table 6. Stranded and dead floating cetaceans reported in Newfoundland and Labrador during 2008

Date	Area	Species	Description
19 March	Burin	Harbour Porpoise	Dead floating. Found by Turr hunter and brought to DFO Marine Mammals
20 March	Chapel Arm, Trinity Bay	Unknown whale species	Pushed in with pack ice. Freed with offshore winds
28 March	Mount Carmel, St. Mary's Bay	Harbour porpoise	Injured, pushed into deeper water and later died
22 May	Harcourt, Trinity Bay	Sowerby's beaked whale	440 cm male necropsied by W. Ledwell and Jon Joy. Skull retained
25 May	St. Pierre	Humpback	Dead floating. Pictures
26 May	3 nm inside of Green Island, Placentia Bay	Humpback	About 13m dead floating. Suspect same as 25 May
17 June	48 56.07N, 51 51.43W. Off Cape Bonavista	Humpback	Dead Floating
24 June	49 06.576N, 51 50.384W	Unknown whale species	Dead floating. Possibly same as 17 June
29 June	53 24.984N, 55 52.678W, Isle of Ponds, Black Tickle	Orca	6m orca in advanced decomposition. No samples taken due to

	area		isolation
12 July	49 19.1N, 53 00W. 4nm N.E. Trinity	Unknown whale species	Dead drifting
12 July	48 58.4N, 51 00W	Unknown whale species	Dead drifting
22 July	Northern Bay Sands, Conception Bay	Unknown whale species	2.5 m whale dead on beach
24 July	Trepassey	Harbour porpoise	Dead on beach
26 July	Old Bonaventure, Trinity Bay	Minke	Dead drifting
27 July	Harry's Harbour, Green Bay	Beluga	Small 2 m juvenile around wharf and boats
4 August	Trinity, Trinity Bay	Minke	Dead drifting. Possibly same as 26 July
6 August	Sandy Point, North West Arm	Unknown Dolphin species	Dead on beach
7 August	Renews	Pilot	Live stranded repeatedly and pushed back out by fishermen on advice from W. Ledwell. Animal disappeared
10 August	47 44.13N, 52 59.48W, off Bell Island, Conception Bay	Humpback	Dead drifting
11 August	Green Isle off Catalina, Trinity Bay	Sei	15m animal live stranded and died. Whale was visited by W. Ledwell and samples taken
16 August	Bryants Cove, Conception Bay	Humpback	Large humpback in advanced state of decomposition in gulch. Visited by W. Ledwell. Possible same as 10 August
18 August	Chapel Arm	Pilot	Live stranded and died. Was seen in the area 2 days prior to stranding
30 August	Isle aux Morts, South West Coast	Sei	Dead floating in harbour
27 September	Famine Point Beach, Fortune Bay	Sperm	14m male. Stomach removed by W. Ledwell

			and Jon Joy. Plastic bottle found in gut. Samples and measurements taken
4 November	Eastport, Bonavista Bay	White sided dolphin	Necropsy, skeleton retained
12 January	Lawn, Placentia Bay	Unknown whale species	Large dead whale in community
13 February	47 18N, 59 30.06W	Unknown whale species	Large dead floating
17-19 February	Seal Cove White Bay	5 White beaked dolphins	Ice entrapped. Response by locals. 4 dead. One possibly survived
22 February	Sweet Bay, Bonavista Bay	9 white beaked dolphins	Pack ice entrapped and dead when discovered
10 March	Grand Beach, Fortune Bay	Unknown whale species	7m badly decomposed inside Barrasway
11 March	Langlade St. Pierre	17m male fin	Freshly dead on beach
1 April	Little Bay, Placentia Bay	Harbour porpoise	Freshly dead

Table 7. Miscellaneous cetaceans reported in Newfoundland and Labrador during 2008

Date	Area	Species	Description
May	Summerford, New World Island	Beluga	Adult beluga. Pictures taken by DFO
Last week May	80nm Northeast Bay De Verde	Orca	Lone male
22 June	Snook's Arm, Baie Verte Peninsula	Beluga	Juvenile social beluga interacting with boats and close to wharves
July	Leading Ticks, Notre Dame Bay	Orcas	"Old fellas never saw them there before"
13 July	Cottlesville, Notre Dame Bay	Humpback	Whale appears distressed close to shore
16 July	Upper Amherst Cove, Bonavista Bay	Orcas	Group of orcas sighted close to shore
20 July	South East Bight	Minke	Highly decomposed drifting

19 July	Cape Spear	Orcas	2 different sightings of from 15 to 25 orcas
26 July	Trinity Bight	Orcas	About 12 orcas. Pictures sent
26 July	Glovertown, Bonavista Bay	Orcas	3 orcas, One large male between Back and Flat islands
28 July	Duck Island, Salvage	Orcas	4 orcas, Video taken
8 August	Back Island, Twillingate	Orcas	Group of orcas on west side of island
9 August	Bonavista	Orcas	Group in area of sailboat off Bonavista
25 November	Baccalieu Tickle, Conception Bay	5 Orcas	Free swimming. Pictures taken
Summer 2007	Bay De Verde, Conception Bay	Orcas	Group of orcas in area Bay De Verde Bight
Summer 2007	Coachman's Cove, Notre Dame Bay	Orcas	In area
July 2007	Port Hope Simpson, Labrador	Orcas	Video taken of about 20 orcas by F/O DFO Trent Parr
August 2007	Coachman's Cove	Orcas	Group in vicinity
August 2006	Coachman's Cove	Orcas	Group in bay
Summer 2005	Cape Charles, Labrador	Orcas	Video taken by Trent Parr F/O DFO

Table 8. Other animals reported in Newfoundland and Labrador during 2008

Date	Area	Description
7 June	Clarenville	Seal being harassed/clubbed by young people. RCMP/DFO responded
July	Hermitage, Hermitage Bay	Basking shark dead in gillnets
30 September	Norris Arm, New World Island	Sunfish dead on beach
Week 1 st October	Dildo Island, Trinity Bay	2 sunfish released alive from mackerel trap
22 October	Fermeuse, Southern Shore	Seal caught in net

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Appendix I

Ice entrapped white beaked dolphins February 17-19 2009 Seal Cove White Bay Newfoundland

On Wednesday afternoon the 17th of February 2009 the Whale Release and Strandings Group was notified of five “porpoises” entrapped in the ice-covered harbour of Seal Cove in the White Bay in northeastern Newfoundland. Species identification confirmed the animals were white-beaked dolphins. Arrangements were made immediately to visit the area but a severe snowstorm on February 18th prevented the team driving the 8 hours to reach the area. I left on the morning of February 19th and arrived in Baie Verte to check with a DFO Fisheries Officer there, who had been monitoring the entrapment and giving us regular updates on the condition of the dolphins and the state of the ice. I picked up a fisherman in Baie Verte, whose longliner we were planning to use for getting into the area, and the four of us proceeded to Seal Cove.

When we arrived we witnessed the rescue attempt by five local people in a fiberglass speedboat. The open-water area where the dolphins had been swimming had collapsed due to the intervention of the speedboat and three of the dolphins were seen in this jumbled ice. The intervention had frightened the animals and they had scattered from the original hole. To my dismay, I watched as two men walked about the ice trying to capture the dolphins when they appeared in small holes. This continued until only one of the dolphins remained at the surface. This dolphin was tied to the boat and pulled through the ice, often circling close to the propeller. When untied in a larger lead of water the dolphin began circling in a manner I have often seen when beach-stranded whales are brought to deeper water - and those animals often strand again as a result of extreme stress.

Our response has been criticised for being too late. What was our plan for a rescue? As I always do in every ice entrapment, I had planned to assess the ice in the harbour and nearby, study the area ice charts, consult the marine weather forecast and plan with the DFO officers in the area and local people who could help with logistics. We had secured the services of a longliner who could possibly break the animals out to open water. It appeared that the incoming weather was likely to open leads in the ice of the harbour and White Bay. To avoid stressing the animals, and seeing that the hole the four dolphins were occupying appeared to be stable, I would have waited until the weather caused such ice changes. The dolphins probably would have been fine in the hole they were in as their body movement was keeping it open enough for them to reach the surface to breathe and they are well suited to survive for lengthy periods of time in those breathing holes surrounded by ice. As predicted, the warming air temperature with east and southwest winds opened up the ice in White bay and on February 20th the situation would have been conducive to using the longliner to break the animals

out. That in my opinion would have been the best use of resources to get those animals to ice-free waters with minimal stress to them.

Could we definitely have saved all of the dolphins? No one can say for sure. My experience with those situations, which happen quite regularly in our waters, is not very positive. This is a harsh environment during spring when the pack ice moves around our coasts and marine mammals ranging from blue whales to harbour porpoises have been entrapped in similar sorts of events. It is unfortunate that these animals become entrapped, and often it is better to leave the animals in their groups rather than scaring them into the surrounding pack ice. Those are wild animals; they determine interactions with us by bow riding. But when humans think they can determine the level of interaction by whatever means - whether it be by good intent or lack of knowledge or experience - those animals can become stressed and we can do irreparable damage to them.

Some times people take it upon themselves to try and rescue animals as an act of good intent. This more often than not has the adverse result as happened in Seal Cove. The well-intentioned actions of these individuals, which put themselves at great risk, did not result in the rescue of these dolphins. It appeared to my experienced eyes, and those watching near me, that these dolphins were not "saved". From these events I think it would have been more humane to wait from the impending weather change than to intervene in the way that happened. Inexperienced people do not understand the behaviour and responses of such animals and can get themselves hurt in the process.

Over the course of this event many people contributed to misinformation and some called for immediate response as did an open line radio show in St. John's. Some people in Seal Cove reacted and when I arrived on the scene a dangerous situation had evolved with people out in a small boat with no life preserving equipment on some. This was a very risky approach, and given the many deaths by accidents at sea, this behaviour should not be encouraged or condoned.

Why did I not leave this as a "happy ending" such as some have reported to the media? This certainly would have been much easier to do considering the backlash we received. But I deal in facts, and I don't want to see such incidents happen again. I don't want to risk having a well-intentioned young man die while trying to rescue an animal with which he is totally unfamiliar. It was extremely unfortunate that a blizzard interfered with our plans to respond to this entrapment, but a single day of patience might have changed the outcome of this event, and put fewer human and animal lives at risk.

Appendix II

VAGRANT SOCIABLE MONODONTIDS IN NEWFOUNDLAND AND LABRADOR, CANADA

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SOLITARY MONODONTIDS Although the province of Newfoundland and Labrador (Atlantic Canada) is not considered to be part of the regular range of the beluga (*Delphinapterus leucas*; COSEWIC 2004), solitary individuals are reported in this area in the summer months of almost every year. Within the last decade, more than ten belugas and one narwhal (*Monodon monoceros*) have been reported in nearshore waters throughout the province (Fig.1). These rates are comparable to those reported by Curren and Lien (1998).

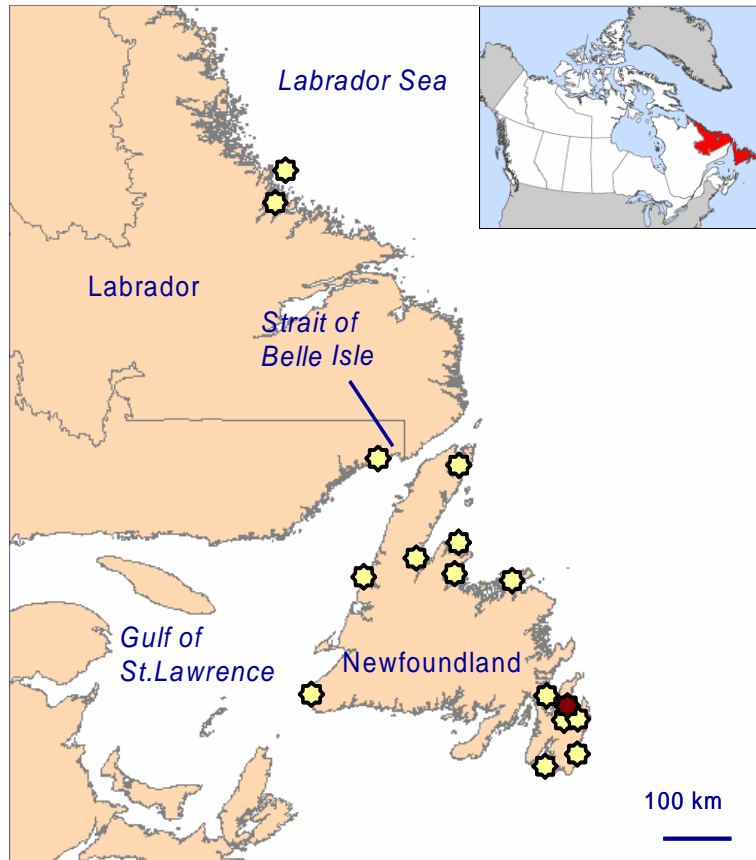


Fig. 1: Distribution of sightings of solitary belugas (yellow stars) and the single solitary narwhal (brown star) in Newfoundland and Labrador between 1998 and 2007.

These animals were all juveniles or subadults and almost always solitary, suggesting that they had lost their natal pods (one case involved three animals found several miles upriver in southern Labrador, one of which returned to the southwest coast of Newfoundland the following year). The stock identity of these whales is presently unknown, but historical assessments of contaminant loads in similar cases identified the various populations in the High Arctic as the most likely source (Béland *et al.*, 1992). The present pattern of sightings is comparable to that described by Curren and Lien (1998), indicating that most belugas are likely to be Arctic in origin, although some may have originated from the small resident population in the gulf of St. Lawrence (Kingsley, 2002). Scar pattern analysis has allowed the identification of individuals, and has shown that some belugas have returned to Newfoundland waters for up to three consecutive years.

Most animals appeared to remain in comparatively shallow, nearshore waters during their visit to Newfoundland. Residency patterns varied, with some animals remaining in an area for weeks or months, while others repeatedly moved along the coast. In 2003, a juvenile male narwhal was reported resident in a bay in

southeastern Newfoundland near a grounded iceberg, where it remained until the iceberg had mostly melted.



Fig. 2: Solitary juvenile beluga foraging around a harbour entrance in southeastern Newfoundland. Copyright DFO, 2002.

BEHAVIOUR AND INTERACTIONS Most of these animals exhibited an interest in interacting with humans to varying degrees. This included foraging around docks and inside harbours, following and interacting with vessels, allowing people to swim with them and/or interacting with local scuba divers (Fig. 2). Interactions with boats often took the form of rubbing parts of the body against the keel of stationary boats, as well as following boats out of or in to the harbour. Some individuals remained resident near a community for weeks on end, becoming well known among the local population.

Several individuals appeared fixated on ship engines, closely inspecting them and mimicking bubbles produced through cavitation when engines were running. Some whales were accidentally injured (in one case, killed) after being struck by propeller blades, despite typically widespread awareness amongst vessel operators of the whales' presence near their communities.

PUBLICITY Where historically the presence of a sociable beluga in a small fishing community might not become widely known, modern communication methods and an increased interest in marine mammals among the general public, often ensure that the animal becomes an unexpected tourist attraction to the community soon after its discovery. In fact, this may in some cases be actively encouraged by local tourism operators and media outlets (Hempsall, 2003). Generally speaking, the current public perception is that these animals are tame and approachable. This, together with the enormous geographic scale (29,000 km of coastline) and thinly spread human population of Newfoundland

and Labrador, as well as a lack of resources within the Department of Fisheries and Oceans (the responsible authority), provide a considerable challenge to formulating a successful policy to ensure both the survival and well-being of these animals and public safety.

PROTECTION Although harassment of marine mammals is illegal in Canada under the Marine Mammal Regulations of the Fisheries Act (Anonymous, 1993), a lack of resources and manpower among Fisheries Officers (the responsible enforcement agency operating under the Department of Fisheries and Oceans) may prevent adequate enforcement of these regulations.

In addition, there appears to be a general lack of appreciation for the risks that may be involved in interacting with these animals, particularly in the water. To date, no personal injuries among people are known to have occurred as a result of these interactions, although several belugas have been injured or killed as a result of their interacting with ship engines (see above). There are presently no requirements to fit outboard engines with propeller guards to prevent such injuries, and introducing such a measure would be expensive (and would likely generate opposition as a consequence) given the large number of small vessels operating in the province.

The situation in Newfoundland and Labrador highlights the difficulties encountered in trying to manage interactions between sociable cetaceans and members of the public in a rural setting. There is a need for improved public awareness about the hazards of interaction to both humans and whales. This could be achieved through expanding existing education programmes together with improving enforcement of existing regulations.

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Appendix III

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

Appendix IV

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.