

INCIDENTAL ENTRAPMENTS IN FISHING GEAR AND STRANDINGS  
REPORTED TO AND RESPONDED TO BY THE WHALE RELEASE AND  
STRANDINGS GROUP IN NEWFOUNDLAND AND LABRADOR AND A  
SUMMARY OF THE WHALE RELEASE AND STRANDINGS PROGRAM  
DURING 2012

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

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Thanks to Shell and the people who voted for us in obtaining a grant for \$25,000 which allowed us to purchase a new disentanglement boat, trailer and safety equipment.

Thanks to the Canadian Wildlife Federation for their generous gift presented at their annual meeting in St. John's to our group. This gift allowed us to purchase a new engine for the above boat.

Thanks to the Navigator magazine for running many free ads advertising the toll-free number to fishers with details of whom to call when you have or see a marine animal entrapped or stranded.

The Canadian Coast Guard Marine Traffic Centers 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 in Newfoundland and Labrador 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 2012 assistance has been offered to fishers in the Newfoundland Region who incidentally have large whales, leatherback sea turtles and basking sharks entangled in their fishing gear and for live stranded marine animals. This service has been provided with cooperation from the Department of Fisheries and Oceans, Canada.

During this time period information from fishers 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 and have been recorded in continuous reports and summaries from 1978 -2012.

The program which has been run by the Whale Release and Strandings Group since 2001, plus providing one year mentorship with the Canadian Coast Guard in 2000, uses methods for disentangling large whales from fishing gear which 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 community's spread over the 17,000 km coastline of Newfoundland and Labrador. The disentanglement assistance program has benefited fishers, whales and the people of Canada. It provides assistance to often financially stretched fishers, 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 their 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 fishers 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. Fishers 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 fishers 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 fishers.

From 1979 to 2012, one thousand and six (1006) humpback whales (*Megaptera novaeangliae*), one hundred and fifty eight (158) 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 led to an increase in the number of offshore entrapments reported and offshore entanglements have primarily involved snow crab and whelk 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 2012 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 is 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 from the fishing gear and minimal or no damage to the fishing gear involved in the entanglement. 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 Centers, fishers, Royal Canadian Mounted Police (RCMP), Crime Stoppers and the general public. The program was funded by Fisheries and Oceans Canada in 2012. Additional funding was also secured through Shell Environmental Fund, the Canadian Wildlife Federation, the Federal Summer Career Placement Program (SCP), the Provincial Student Work and Services Program (SWASP) 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 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, 2008, 2009, Ledwell, Huntington and Nick Kelly 2010 and Ledwell and Huntington 2011).

## **Humpback Whales**

Nine (9) humpback whales were reported entangled in fishing gear in 2012 (Table 1). One of those animals released by the Whale Release and Strandings Group on the 3<sup>rd</sup> July had towed snow crab gear into gillnets. The crab gear had a commercial fishing license number on the balloon that we traced to Wedgeport Nova Scotia. The fisherman had cut the whale loose with crab gear attached and 2 balloons on the 26<sup>th</sup> May 2012 on the western end of Sable Island Bank. The whale was severely injured with necrotic flesh humped up all about the wound and was cut through to the bone of the peduncle. Its body condition looked thin. When we released the whale gear free (we had to reach into the wound to the bone to grasp and cut the ropes) the whale could not lift its tail and seemed to drag it, yet it managed to dive and oriented itself out the bay toward the open ocean when we left it.

Similar severe injuries to humpbacks entangled in snow crab and whelk pot gear have been documented in the reports to DFO (Ledwell and Huntington 2003, 2006).

This is the fourth humpback the Whale Release and Strandings Group has released from fishing gear from an entanglement originating in Maritime waters. The whales towed the gear (3 in snow crab and one lobster gear) to Newfoundland waters (Ledwell and Huntington 2003, 2009).

A second humpback we released had been seen on the 12<sup>th</sup> July off Petty Harbour on the southern shore on 12 July. After repeated attempts to relocate the whale we finally caught up with it and removed a large red poly buoy and 38 meters of 5/8" poly steel rope from the animal. It is likely that the gear came from either snow crab or whelk pot gear.

### **Minke whales**

Two (2) minke whales were reported entangled in fishing gear in 2012. One of those was discovered dead in the haul-up rope of snow crab gear and caught around the tail. The other was cut free by fishermen aboard a longliner hauling snow crab gear. The animal was caught by the tail and cut through to the bone. The fishermen took 4 whelk pots off the animal and said it must have come from St. Pierre Bank as there was no whelk gear in any other area this time of the year that they knew of.

### **Other entrapped whales**

A white beak dolphin (Table 3) was reported swimming around the cove in Cook's Harbour on the Great Northern Peninsula. The animal was entangled through the mouth with the rope from a single whelk pot. Setting of single whelk pots is not uncommon in this area. The rope and pot were removed in the evening and the animal remained in the cove for the remainder of the evening and was gone the next morning.

### **Basking Sharks**

Basking sharks (Table 4) were reported to be plentiful in Hermitage Bay area with one fishermen reporting 5 or 6 entanglements.

### **Leatherback sea turtles**

No leatherback turtles (Table 5 and 6) were reported entangled in 2012 however a fisherman calling in to the Whale Release and Strandings Group to identify a shark caught on the Grand Banks reported releasing a leatherback alive from whelk pot gear on St. Pierre Bank in 2009. The turtle was entangled around the front flipper in the haul rope.

A leatherback live stranded at Lead Cove in Bonavista Bay on the 16 October. The animal was in the land wash on a heavy boulder beach when discovered. Attempts to help the animal out to deeper water caused the animal to become

more active and move off but still it remained in the cove. The turtle has not been reported seen since. This is the second live stranding of a leatherback In Newfoundland. The first occurring in 2001 at Lobster Head Cove on the Great Northern Peninsula in 2001 (Ledwell et al; 2003)

### **Strandings**

A minke whale (Table 7) live stranded on the 20<sup>th</sup> July at Point au Gaul on the Burin Peninsula in Placentia Bay. The animal was discovered in the early morning of the 20<sup>th</sup>. The animal survived the day of the 20<sup>th</sup> in hot weather on a busy beach. Locals had placed a blanket on the animal and were continually watering it down. The animal could not be moved as it was above the high water. After assessing the whales condition with the large animal Provincial vet from Clarenville we decided to euthanize the animal which was carried out by W. Ledwell by rifle shot with assistance from the provincial Department of Wildlife.

A sperm whale live stranded at Spread Eagle Trinity Bay on the 15<sup>th</sup> August. The animal had been spotted “acting strange” on several occasions that week in different areas of the bay. An attempt to locate the animal after it had stranded on a sand bar by the WRS was unsuccessful. The whale died shortly after stranding at Spread Eagle and was towed out to sea by the Whale Release and Strandings where it sank while trying to adjust its tether.

### **Miscellaneous cetacean and other animal sightings**

Miscellaneous sightings of whales have been reported since 1979 in similar reports by the Whale Research Group and The Whale Release and Strandings Group. The purpose is not to record **all** the common species reported but to record the rare animals and animals under study. A list is provided in (Table 8). A number of juvenile, solitary social belugas were reported and have been consistent with numbers over the past dozen years (Ledwell and Huntington 2001-2011, Benjamins and Ledwell 2008).

Two northern right whales were seen and photographed in late fall. Although the photographs could not identify the specific whale individual they provided clear enough images to identify species.

### **Education activities**

Stickers advertising the assistance program were sent to all Harbour Authorities, all DFO offices and Canadian Coast Guard offices throughout the region as well as to groups and fishers who requested them. An ad was also placed throughout the year in the fisheries trade magazine – The Navigator.

Funding was obtained from the Habitat Stewardship Program of Environment Canada for making presentations about the life history of leatherback sea turtles, whales and other at risk sea life that live in the Newfoundland region.

## Recommendation

All vessels in the Newfoundland region should have the toll free number stickers onboard alerting them who to call when they have an entrapped whale or see an entrapped whale or leatherback sea turtle. By having the toll free number visible in the wheelhouse fishers 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 can 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 or sea turtles each season swimming around with large amounts of snow crab and other gear attached. See Appendix I for toll-free sticker.

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

Date	Area	Gear type	Description
16 June	Hodderville , Bonavista Bay	Fishing balloons and net	Whale reported at 1545 towing possible herring net with floats
16 June	Blackhead Bay	Fishing balloons and net	Possible same whale as above
17 June	Bellevue Beach Trinity Bay 47 40.116N, 53 43.87W	Rope and fishing float	Whale reported at 1930 towing small (1 ft diameter) green/white float
28 June	Logy Bay	Rope and fishing float	Towing red fishing balloon. WRS could not relocate
3 July	Hermitage Bay 47 35.864N, 55 55.871W	Snow crab and cod gillnets	Released alive by WRS group. Condition very poor with tail stock cut to the bone. Necrotic skin all bunched up. Whale unable to lift flukes after release. Had towed snow crab gear from Sable Island Bank which was lost on 26 May by Wedgeport Nova Scotia fisherman
6 July	St. Pierre Bank 45 26.2N, 55 48.29W	Snow Crab/whelk	Cut loose from snow crab gear with gear attached. Whale went in over bank and became entangled in whelk gear
6 July	St. Pierre Bank	Snow crab/whelk	Whale removed alive from whelk gear with snow crab gear entangled

			by longliner crew. Animal had been caught through mouth and appeared gear free when released
6 July	8nm off Cape Bonavista 48 42.318N 53 16.456W	Snow crab	Whale cut free while caught at surface in rope, staff and balloon. Fisherman called saying animal drifting still entangled around flipper and possible mouth. We searched area for 5 hours and didn't relocate the whale
11 July	Off Renew's	Nets	Whale towing nets. Could not relocate
12 July	Off Bay Bulls	Towing large red fishing balloon and long length rope	Too late in evening for response
13 July	Bay De Verde, Conception Bay	Towing small red fishing balloon and rope	Self release from caplin trap mooring. Late in evening
13 July	Petty Harbour	Towing large red fishing balloon and long length rope	WRS searched area from St. Johns to Bay Bulls head for 5 hours beginning early morning 14 <sup>th</sup> Unable to locate whale
25 July	Bay Bulls	Whale from 12 <sup>th</sup> and 13 <sup>th</sup>	WRS cleared gear off free swimming whale removing large red fishing balloon and 38 meters of 5/8" poly steel rope

Table 2. Minke whales reported entangled in fishing gear in Newfoundland and Labrador during 2012

Date	Area	Gear type	Description
26 June	1.5nm north Renew's Rock 46 53.27N, 52 63.03W	Snow crab	Dead ~5m haul up rope caught around tail stock
15 May	Sable Island Bank	Snow crab/Whelk pots	~7m animal cut free from snow crab gear. 4 Whelk pots removed from animal. Gear believed by fisherman to have come from St. Pierre bank. Tail stock cut to the bone

Table 3. Other whales reported entangled in fishing gear in Newfoundland and Labrador during 2012

Date	Area	Species	Description
21 September	Cooks Harbour, Great Northern Peninsula	White beak dolphin	Released alive from mouth entanglement and towing 1 whelk pot. Wayne Ledwell advised on how to slow the dolphin and remove the rope/gear

Table 4. Basking sharks reported entangled in fishing gear in Newfoundland and Labrador during 2012

Date	Area	Gear	Description
25 June	Hermitage Bay	Cod gillnets	5 or 6 caught in area. Dead in nets

Table 5. Leatherback sea turtles reported entrapped in fishing gear in Newfoundland and Labrador during 2012

Date	Area	Description
Summer 2009	St. Pierre Bank	Released alive and gear free from whelk pot gear. Turtle caught around side flipper in haul rope tight to the marker balloon

Table 6. Leatherback sea turtle sightings reported in Newfoundland and Labrador during 2012

Date	Area	Description
30 July	Point Rosie, Garnish Fortune Bay	Free swimming
14 September	Off Foxtrap Conception Bay 47 31N, 53 02W	Free swimming eating Lion's mane jellies
29 September	15 nm from La Scie to Horse Islands 50 21N, 55 75W	Free swimming
16 October	Lead Cove Bonavista Bay	Large leatherback in land wash on large boulder beach. Turtle managed to swim back off when it was pushed off. Strong winds in area prior to

		discovery. Not resighted. Second live stranding of leatherback turtles reported in 10 years to WRS
16 October	Bay of Islands West Coast NL	Free swimming and tagged by Canadian Sea Turtle group. They were concerned it may strand. Animal moved out of Gulf St. Lawrence couple days later

Table 7. Stranded and dead floating cetaceans reported in Newfoundland and Labrador during 2012

Date	Area	Species	Description
20 July	Point au Gaul	minke	444 cm female minke stranded alive at high tide. Whale alive for 2 days before being euthanized by W. Ledwell on 22 <sup>nd</sup> July by rifle
1 August	Cape Freels Bonavista Bay	Large whale spp?	Dead on beach. Drifted back out before identified
15 August	Spread Eagle Trinity Bay	Sperm	940 cm live stranded sperm. Animal in area since the 10 <sup>th</sup> with various reports of it stranding and refloating itself and attempts for WRS to locate it. Whale died and WRS attended and towed the carcass out into the bay where it sank
9 September	Osmond's Cove, Leading Tickles area	Sei	~15 m whale identified by W. Ledwell from pictures. Whale drifted away before we could see carcass
23 September	Oderin Island Placentia Bay 47 15.6N, 54 54.4W	Humpback	Large dead humpback reported by helicopter ashore
10 October	Squid Cove, Great Northern Peninsula	Humpback	Small humpback freshly dead on beach
20 November	Middle Amherst Cove, Bonavista Bay	Sperm	Small dead sperm whale minus lower jaw. Animal was very decomposed
19 December	Aspen Cove, Gander Bay	4 Pilot whales	4 small pilot ~ 3-4 m whales found dead stranded

19 December	Horwood Gander Bay	2 Pilot whales	One whale dead and the other pushed back out. Animal seemed to be weak. Both animals small ~3-4m
26 December	Point au Gaul	3 White sided dolphins	Dead stranded
29 December	Fortune Harbour, Notre Dame Bay	whale spp?	~10 m dead drifting in slob ice. Unable to identify from picture sent

Table 8. Miscellaneous cetaceans reported in Newfoundland and Labrador during 2012

Date	Area	Species	Description
25 May	Port aux Choix	Killer whale	Lone, large male seen in area
31 May	Embree, Bay of Islands	Beluga	Solitary, social, chasing boats. Same whale seen in Little Burnt Bay, Bay of Islands
5 June	10nm off Port Saunders	8 killer whales	Seen in fishing area. Lots of humpbacks and caplin in same area
17 June	Botwood	Beluga	Solitary, social
16-17 June	Rigolet, Labrador	Beluga	Solitary, social
19 June	Labrador Straits – between Blanc Sablon and St. Anthony	3 or more killer whales	Free Swimming
22 June	Long Island Tickle, Green Bay	Sperm	Reported by fishermen as entangled. They didn't know species. Had DFO check out and confirmed through radio as sperm and not entangled
26 June	Goose Cove	9-10 killer whales with one large male and one calf	Free swimming
28 June	Leading Tickles, Notre Dame Bay	Humpback	Extremely scarred animal with skin patches missing all over

			and necrotic skin. Haven't seen anything like it up here but similar conditions seen on Australian and Brazil humpbacks
2 July	Leading Tickles Notre Dame Bay	Beluga	Solitary social
28 July	Flemish Pass, Grand Banks	2 northern bottlenose	Free swimming
31 July	Flemish Pass, Grand Banks	6 northern bottlenose	Free swimming
20 August	80nm east St. Anthony	2 killer whales	One large dorsal fin animal and smaller animal free swimming
21 September	Goose Cove. Great Northern Peninsula	Beluga	Small 2-3m juvenile
20 October	70 NE Fogo Island 50 36.65N, 52 40.55W	Right	Free swimming. Pictures taken
5 November	4-5 nm off Cape Bauld, Great Northern Peninsula 5141.13N, 5527.32W	Right	Free swimming. Pictures taken

Table 9. Other marine animals reported in Newfoundland and Labrador during 2012

Date	Area	Description
25 June	Hermitage Bay	"Area infested with porbeagle sharks. Everyone is catching them" fisherman McCallum, Hermitage Bay
25 June	Hermitage Bay	Basking sharks plenty in area
2 November	Springdale/Botwood	3 dead blue sharks. 2 live stranded

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Appendix 1

## WHALE AND TURTLE NOTICE

**1-888-895-3003**

If you have a WHALE or TURTLE or basking shark (live or dead) caught in your fishing gear, call this toll-free number and a trained crew will respond to assist you. If you see any whales, turtles or dolphins (live or dead) on a beach, please call. Should you see any leatherback sea turtles please call.