WHALE, LEATHERBACK SEA TURTLES AND BASKING SHARKS ENTRAPPED IN FISHING GEAR IN NEWFOUNDLAND AND LABRADOR AND A SUMMARY OF THE STRANDINGS, SIGHTINGS AND EDUCATION WORK DURING 2009-2010 A PRELIMIMINARY REPORT TO FISHERIES AND OCEANS CANADA MARCH 31, 2010

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Acknowledgements

The Department of Fisheries and Oceans provided funding for work regarding entrapped and stranded marine animals. Shell Environmental Fund and Mountain Equipment Coop provided funding for Leatherback turtle education and awareness and preliminary work on setting up a strandings network for the region. The Navigator Magazine generously ran 6 months of 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 (and have done so for several years now), so thanks to Madonna Stewart and the staff. Thank you to the Community of Portugal Cove-St. Philip's for providing inkind support of the program through a reduction in taxes. We would like to acknowledge the cooperation of many management and research personnel in Fisheries and Oceans and in particular Larry Yetman who assisted us and especially the great work by fisheries conservation officers. We thank the Canadian Coast Guard Traffic centers for reporting entrapped and stranded animals and providing communication links to offshore vessels that have entrapped animals in their gear. Individuals who assisted us throughout the year were Nelson Pilgrim, Curtis Diamond, Frank Hyde, Laura Temple, Shawna and Chris Prince, Jon Joy, The NL provincial veterinarians Laura Rogers, Penny Power and Ann Drew for their knowledge and interest in conducting a necropsy on a pilot whale at Newman's Cove and for histology on tissue from a beluga whale

Finally appreciation is extended to the many fishermen we worked with. Without their help this work would not be possible

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 responses to strandings of marine animals To conduct research work on marine animals To conduct all other work on marine animals as seen fit.

From 1978 through 2009 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 incidentally 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 program was designed and developed to cater to the needs of over 800 fishing communities dotted along over 17,000 km of coastline (Lien,1980). Entrapments in fishing gear and strandings of marine animals are reported to the Whale Release and Strandings Program by calling an advertised toll free number. A trained release team responds by providing advice or sending expert personnel to the site to provide assistance. The goal of each such entrapment response is the safe, clean release of the animals while minimizing damage to the fishing gear. Over the years, the program has been successful in reducing whale mortality, gear loss and loss of fishing downtime (Lien, 1995). The program also responds to all reported live and dead cetaceans, sea turtles, and basking sharks as well as pack ice entrapped animals.

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, allowing the animal a greater chance of survival, less gear damage and fishing downtime, particularly important to the economically marginalized inshore fishermen.

Between 1979 and 2009, 1,221 large whale entrapments were recorded in Newfoundland and Labrador waters. Species involved include humpback whales (*Megaptera novaeangliae*; 80%) and minke whales (*Balaenoptera acutorostrata*; 15%), with other species being reported very occasionally. Approximately 4% of entrapments could not be identified to species, particularly when whales were spotted at sea towing fishing gear.

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.

Implementation of the cod moratorium in 1992 caused significant disruption to the fishing industry, leading to the accelerated development of fisheries for 'underutilised' species. In the continued absence of cod recovery, other fisheries which were prosecuted at a small scale before the moratorium have likewise assumed greater importance. The most important current fishery targets the snow crab (*Chionocetes opilio*) using stationary crab pots in deep water 90 to 450m. This fishery has expanded rapidly into offshore waters since 1999, and is now of considerable financial significance to the economy of Newfoundland and Labrador, especially in rural areas. Pots of a somewhat different design are also used to capture lobster (*Homarus americanus*) and whelks (*Buccinum undatum*); the latter representing another fishery that has expanded since the cod moratorium.

Other currently important fisheries (both in terms of volume landed and profitability) include bottom trawl fisheries for northern shrimp (*Pandalus* sp.), as well as trawl, longline and bottom-set gillnet fisheries for Greenland halibut (*Reinhardtius hippoglossoides*). In addition, numerous bottom-set gillnet

fisheries target other species including lumpfish (*Cyclopterus lumpus*), monkfish (*Lophius americanus*), winter flounder (*Pseudopleuronectes americanus*) and redfish (*Sebastes* sp.). Pelagic species such as herring (*Clupea harengus*), capelin (*Mallotus villosus*), mackerel (*Scomber scombrus*) and squid (*Gonatus* sp.) are caught using pelagic gillnets, trawls, stationary fish traps and seines. There are also local dredge fisheries for scallops (*Pecten maximus*) and surf clams (*Spisula* sp.).

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 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 (Ledwell et al 2007).

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 Group in 2009 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 from 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 2009. Additional funding was also secured through Imperial Oil, Shell Environmental Fund, the Mountain Equipment Co-op, the NL 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. Results of reported entrapments from 1979 to 2008 are summarised by Lien (1994), Lien et al (1991, 1992, 1993, 1995, 1996; unsubmitted reports 1997, 1998, 1999, Ledwell et al: (2000, 2001), Ledwell and Huntington (2002, 2003, 2004, 2005, 2006, 2007, 2008)

Humpback Whales

Eleven (11) humpback whales were entrapped in fishing gear in 2009 (Table 1). One of those animals was caught in four separate instances from the 31st May to 1st June on St. Pierre Bank. The animal was cut free by fishermen from whelk pot gear with a minimum of 21 whelk pots, 475 meters of 5/8" poly rope, a 50lb anchor and a large mussel farm balloon. Efforts to locate the animal by vessels in the area were unsuccessful including a fly over by Provincial Aerospace. A humpback found dead and drifting on the 15 July with a mass of whelk pot gear on it could have been the same animal although the distance from its entrapments was over 120 miles. No gear was taken from the animal to identify it. Two humpbacks were entangled in gear from the Maritimes. One humpback was towing lobster gear from Wedgeport, Nova Scotia and the other snow crab gear from northern Gulf of St. Lawrence. A humpback entangled in multiple lobster pot strings survived for 3 days close to shore in shoal water with strong winds and heavy breaking seas died. The Whale Release and Strandings team stood by but were unable to get out to the animal, neither were any fishermen from the area able to tend their gear.

Minke whales

Three (3) minke whales were reported to the Whale Release and Strandings Group in 2009 (Table 2). One of those was from Tadoussac in the Gulf of St. Lawrence. The group GREMM reported the animal free swimming and were seeking advice in removing the rostrum wrap of rope. One minke was released alive and gear free from lump nets off Quirpoon on the Great Northern Peninsula. The other was cut free by fishermen off Grand Le Pierre in Fortune Bay. When released this animal was still towing 5-6 lobster pots and rope.

Other entrapped whales

A solitary social beluga was entrapped multiple times in the Plate Cove West area of Bonavista Bay and released unharmed from caplin seines. The whale followed the fishermen to the area and subsequently became surrounded by the seine. This animal was in the area for most of the summer and early fall. A harbour porpoise was caught in a caplin trap mooring and was discovered dead. A small whale approximately 11 ft. swam into the Community of Grand Le Pierre with netting in its mouth and stranded. Locals removed the netting and pushed the animal back out. It was not seen again. There were three reports of large whales towing gear and we were unable to relocate them (Table 3)

Leatherback sea turtles

Five (5) leatherback sea turtles were reported entrapped in fishing gear in 2009 (Table 4). Two of those animals were released alive and gear free from groundfish gillnets and a third released alive and gear free from whelk pot gear. One leatherback turtle self released from cod gillnets and is assumed to be alive as none of the gear was missing. One leatherback was discovered dead in mussel farm gear and was necropsied by W. Ledwell. See report Appendix 1. From 2000 to present thirty-two (32) leatherback sea turtles have been reported gear entrapped in NL waters to the Whale Release and Strandings Group.

Six (6) leatherbacks were reported free swimming to the program in 2009 (Table 5). Seventy-eight (78) leatherback sightings have been reported to the Whale Release and Strandings Group from 2000 to the present.

Blue whale sightings

A blue whale and accompanying smaller blue whale presumably a calf were sighted between Trinity and Horse Chops 48 21N, 53 15W in August (Table 7). This is an important sighting as in the past 31 years only 20 blue whale cow and calf sightings have been reported (Richard Sears pers. comm.). We received a blue sighting and video from 2008 off Exploits Island in Notre Dame Bay in position 49 31N, 55 06.5W.

Killer whale sightings

Multiple sightings of killer whales were recorded (Table 7) including one attack on a minke whale off St. Johns, NL. Sightings and pictures of killer whales obtained by the Whale Release and Strandings Group over the past 10 years have been forwarded to the Marine Mammal Section of DFO for a PhD study related to cataloguing and distribution analysis of killer whales in our Region. Forty-one (41) separate instances of single and multiple groups to greater than 20 animals in one sighting have been reported to the group mainly from fishermen and also recreational boaters. Those sightings together with pictures obtained both from fishermen, the Whale Release and Strandings Group and recreational boaters have been entered into this research project.

Teeth from 2 separate killer whale strandings, were sent by the Whale Release and Strandings Group to Steve Ferguson of DFO Winnipeg for a PhD study on microchemistry on killer whale diet and movement

Belugas

An unusual sighting in the St. Anthony area of the Great Northern Peninsula in April with reports of possibly 1000 belugas occurred close to shore in the Griquet/St. Anthony Bight area (Table 7) The animals stayed for part of a day and moved on, not to be sighted again. This is the first sighting of a large group of belugas this far south in our waters. Regular sightings for belugas are generally individuals and the majority of those are juveniles (Benjamins and Ledwell 2008).

There were eight sightings of solitary and social belugas reported to the Whale Release and Strandings Group in 2009 (Table 7). All except two of those sightings occurred in the Princeton, Plate Cove West area of Bonavista Bay.

Strandings

Eighteen stranding events of cetaceans and one basking shark were reported to the Whale Release and Standings Group in 2009 (Table 6). A small killer whale was pushed back out to sea from the beach in Torbay on the N.E. Avalon. The animal was not seen again. A basking shark spent as day swimming around the harbour in Port aux Basques (Table 8). The animal was towed into port by fishermen who caught it in their groundfish gillnets. It disappeared later in the evening. Five humpback whales were reported dead this year. One event on 30 January was unusual when a humpback was reported on the beach in Belleview Trinity Bay. It appeared the animal was alive. Before we got to check on it, strong seas washed it out. A dead humpback appeared on the same beach in March and we think it may have been the same animal as the January beached whale.

Workshops/Symposium/Conference/Papers/Talks

- Benjamins, S., and W. Ledwell. 30 Years of Changing Gears: Assessing Changes in Numbers and Distribution of Large Whale Entrapments in Newfoundland and Labrador, Canada. Talk presented at the the18th Biennial Conference in Quebec, Canada 12-16 October 2009.
- 2. Entanglements and Strandings of Marine Animals. SARA Spotlight: Whales & Leatherback Turtles in Newfoundland & Labrador. Lawn Newfoundland 28 October 2009.

3. Common Marine Animals in Newfoundland and Labrador Waters. Crows Nest Cruising Club on identifying marine animals and proper boating behaviour around large whales. 17 March 2010.

Education/Outreach

One student was employed with the Whale Release and Strandings Group during 2009 under the NL Provincial Student Work and Services Program (SWASP). In addition funding was secured for a nine month YMCA Environmental Internship placement under which we hired a strandings coordinator, produced a brochure (Appendix 11) on how to properly handle live and ice entrapped cetaceans. With this position the strandings coordinator will begin the process of initiating a strandings network for the Newfoundland Region. Funding was obtained from the Shell Environmental Fund and Mountain Equipment Co-op to develop this network and purchase initial equipment as stranding stretchers. Leatherback sea turtle school presentations that focused on leatherback life history, occurrence in Newfoundland and Labrador waters and need for protection were carried out to thousands of children from K-12 at south, east, southeastern and Avalon peninsula schools during 2009.

Canadian Museum of Nature

Blue whale baleen from Whale Release and Strandings was donated to the Canadian Museum of Nature for their skeletal display of a blue whale. This whale came ashore dead at Codroy in the 1960s and was collected by museum personnel. This baleen which we use for educational presentations was given as the Museum of Nature could not obtain baleen for this species.

Work with fishers on the Burin Peninsula (Hats/talks/posters)

Members of the Whale Release and Strandings Group visited communities and wharves throughout the Burin Peninsula including Southern Harbour, discussing entanglements of cetaceans and leatherback sea turtles with fishers. Ball caps with a leatherback turtle image and the toll-free number to call for entanglements and sightings were distributed as well as posters detailing the life history of leatherbacks in our waters. Toll-free number stickers were distributed to fishers to place onboard their vessels.

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 fisher 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.

Date	Area	Gear type	Description
28 May	Hampden White Bay	High flyer, balloon	Towing gear, unable to relocate
31 May	St. Pierre Bank 46 18.296N, 56 58.427W	Whelk pots	Fisherman cut it free still towing 14 pots
31 May	St. Pierre Bank Big seal area	Whelk pots	Same whale. 2 nd fisherman cut it free with 7 pots, 125 FM. 5/8"poly, 50 lb. anchor w/mussel farm float
I June	Wild Cove, White Bay 49 56N, 56 27W	Lobster	50 fm. Rope and 80" balloon removed from animal. Gear from Wedgeport, Nova Scotia
1 June	St. Pierre Bank	Whelk pots	Same as 31 ^{st.} Fisherman cut it free with 12 fm rope attached
15 June	St. Pierre Bank 46 28.57N, 56 56.686W	Whelk pots	~45 ft. Same whale from 31 st May. Towing gear 34 nm from the Bank
15 June	Spirity Cove, Northern Peninsula 50 36.4N, 57 22.3W	Lobster gear	Entangled in various fleets of lobster gear. Heavy N.E. winds. Weather was too rough to attempt disentanglement for 3 days. Whale died
25 June	Renews Rock 46 54.76N, 52 54.60W	Snow crab	6 pots and 120fm. Rope removed from swimming animal. Some gear left on the whale
5July	Eddies Cove East. Northern Peninsula	Caplin trap	Heavy N.E. winds in area. Whale self released taking anchor buoy and rope
15 July	46 38N, 53 28W	Whelk pots	Dead. Assume same as 31 st May. No pictures taken-No gear retrieved
29 July	Englee, Northern Peninsula	Snow crab	Towing gear from New Brunswick. Fisherman removed float and rope from animal. Unable to relocate the whale
3 Aug	Bay Bulls, 47 2006N, 52 4236W	Groundfish gillnet	Rostrum wrap with small float and rope attached. Unable to relocate. Heavy fog set in
6 Aug	Port Rexton	Large red balloon	Towing gear. Unable to relocate

Table 1. Humpback whales reported entangled in fishing gear in Newfoundland and Labrador during 2009

4 Sept	Off Ferryland	Gillnet	Whale towing gillnet w/plastic bottle
	Head, 46 59.7N,		float attached. Unable to relocate
	52 45.3W		due to strong winds

Table 2. Minke whales reported entangled in fishing gear in Newfoundland and Labrador during 2009

Date	Area	Gear type	Description
19 April	Grand Le Pierre	Lobster	Cut loose by fisherman towing 5-6
	Fortune Bay	pot string	pots. Unable to relocate
3 June	Tadoussac Northern Gulf St. Lawrence	Rope	Tight rostrum wrap, free swimming. GREMM requested advice on how to disentangle the animal
17 June	Quirpoon, Northern Peninsula	Lump nets	Entangled through mouth and around tail. Totally freed from gear by WRS

Table 3. Other whales reported entangled in fishing gear in Newfoundland and Labrador during 2009

Date	Area	Species	Gear	Description
19 June	Kelligrews, Conception Bay		white buoy	Towing towards Bell Island. Unable to relocate
3 July	Fischels Cove, Flat Bay		Entrapped in crab gear	Checked area and unable to relocate whale
30 July	Plate Cove Bonavista Bay	beluga	Caplin Seine	Caught multiple times and released by fishermen
7 Aug	Grand Le Pierre	unknown	netting	Whale~10-12 ft brownish in colour with netting in mouth stranded in community. Locals removed netting and pushed it back out
12 Aug	Lanse au Loup, Labrador	Harbour porpoise	Caplin trap mooring	Dead
13 Aug	Bonavista	unknown		Reported by recreational fishers. Checked area and no

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Table 4. Leatherback sea turtles reported entrapped in fishing gear in Newfoundland and Labrador during 2009

Date	Area	Description
7 July	Merasheen Bank 47 12N, 54 24W	Entangled in cod gillnets. Gave advice on how to disentangle it. Turtle had self released by early morning of 8 July
29 July	Lamaline, Placentia Bay. 46 4204N, 55 4207W	Released alive. Rope and balloon wrapped tight around neck. Released gear free
Lat week July	St. Pierre Bank, 45 33N, 56 02W	~1000 lb released gear free from whelk gear. Animal had multiple scarring on shell
14 Sept	Stormy Point. Codroy area. 47 49N, 59 22.5W	Release alive gear free from flounder net
29 Sept	Pleasantview Notre Dame Bay. 49 24.5N, 55 19W	Dead in mussel farm rope. Necropsied by W. Ledwell. Sample sent to CSTN in Nova Scotia

Table 5. Leatherback sea turtle sightings reported in Newfoundland and Labrador during 2009

Date	Area	Description
17 June	45 20N, 55 55W	Free swimming
July	46 4204, 55 4207W	Free swimming
15 August	Calvert	Free swimming
	47 01.75N, 52 51.5W	
21 August	Green Island, Witless	Free swimming
	Bay 47 13.47W,	
	52 45.66W	
25 August	Witless Bay,	Free swimming-eating jellyfish
	47 15.51N, 52 45.87W	
3 October	St. Pierre 46 51.05N,	Free swimming
	56 12W	

	-		
Date	Area	Species	Description
31 May	Pines Cove Northern Peninsula	Sperm	9m dead stranded
12 June	Davidsville, Notre Dame Bay	Pilot	5m dead stranded
16 June	Lark Harbour	Harbour	Live stranded and pushed
		porpoise	back out again
19 June	46 23N, 52 34W	Unknown	~ 40 ft. Dead floating
25 June	Cape Neddick, 47 07.42N, 52 49.32W	Humpback	~30ft. dead drifting
14 July	Cape Ray	Humpback	Dead stranded. Skeleton retained by Royal Ontario Museum
3 Aug	Witless Bay	White sided dolphin	Dead stranded. Necropsied and skeleton retained by W. Ledwell
17 Aug	Gambo River	Pilot	Whale swam up the river and would not go back out. We made noise with the boat and engine eventually driving it out the narrow opening
21 August	Stephenville Crossing	5 white- beaked dolphins	Live stranded and pushed back to sea by locals. Swam on
7 Sept	Elliston Bonavista Bay	White-sided dolphin	Dead stranded. Necropsied by J.Joy
7 October	Calvert, Southern Shore	White-sided dolphin	Dead stranded. Necropsied by W. Ledwell
8 October	Torbay	Orca	Small orca pushed back off beach. Animal swam away
9 October	Terra Nova Oil Field. Grand Banks	Humpback	Dead drifting
31 October	Bear Cove Rocky Harbour	Minke	Dead stranded. Locals want it removed
19 Nov	Connaigra Bay, South Coast	Sei?	Large whale dead on beach. Possible Sei
30 Nov	46 49N, 56 10W	Humpback	Dead drifting
6 Jan.	Reefs Harbour. Northern Peninsula 51 02N, 57 09W	Beluga	Female washed ashore dead. Necropsied by W. Ledwell

Table 6. Stranded and dead floating cetaceans reported in Newfoundland and Labrador during 2009

30 January	Belleview Beach, Trinity Bay	Humpback	30 ft dead stranded. Animal appeared to have live stranded and died.
	Newmans Cove	Pilot	
	Bonavista Bay		
6 March	Belleview Beach Trinity	Humpback	Dead. May be same as
	Bay		30 January

Table 7. Miscellaneous cetaceans reported in Newfoundland and Labrador during 2009

Date	Area	Species	Description
11 April	St. Anthony Bight, Northern Peninsula	belugas	Hundreds of belugas reported sighted from Griquet to St. Anthony Bight. Sighted one day only
9 May	Happy Adventure/Newman Sound	beluga	Solitary in same place
9 May	Middle Arm, Green Bay	beluga	Solitary, social
13 May	Arnolds Cove, Placentia Bay	unknown	Large whale logging in same place. Searched area with out success
29 May	Princeton, Bonavista Bay	beluga	Solitary-social
22 June	Sweet Bay, Bonavista Bay	beluga	Solitary-social
26 June	Foxtrap	humpback	Acting curious, staying in one place. Checked area no sign of whale
8 July	Summerville, Bonavista Bay	beluga	Solitary social
30 June	S.E. Red Bay, Labrador	Orcas	Two groups 7 and 4 around seals
15 July	50nm N.E. Fermuese	Orcas	Large groups
July	Kings Cove Bonavista Bay	beluga	Solitary, social
1 Aug	Kings Cove Bonavista Bay	Orcas	Free swimming
Mid August	Trinity	Blue whale and calf	Blue whale and calf free swimming off Trinity

26 August	Lords Cove, 49 49.99N, 55 38.25W	12-15 Orcas	First time seen large group. Has seen single males in the past
29 August	Cape Spear	6 Orcas	Seen killing a small minke
May 2008	Exploits Island 49 31N, 55 6.5W	Blue	Video sent for identification
August	Codroy area	Orcas	Fishermen seeing orcas which is new to them
1 Nov	Belle Island, Conception Bay	Beluga	Juvenile swimming around boats and ropes in small boat pound.
6 Nov	Plate Cove West	Beluga	Solitary social juvenile
13 Nov	47 47.2N, 49 45.9W	3 Orcas	One large male in group
23 Nov	Happy Adventure	Beluga	Solitary social
24 Nov	Lewins Cove Burin Peninsula	3 Pilots	Very close to shore, believed to be stranding. Animals disappeared over night

Table 8. Other animals reported in Newfoundland and Labrador during 2009

Date	Area	Description
8 August	Random Island	Possible whale caught dead in caplin trap. Fisherman called it a monster
20 August	Port aux Basques	Basking shark alive in harbour. Fisherman towed it in after it was caught in groundfish gillnets Stayed for a day and left (disorientated)
22 Sept	Crabbes River	30 ft. basking shark dead and locals want it removed

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Appendix 1

Leatherback Sea Turtle *Dermochelys coriacea* gear entrapped at Pleasantville Notre Dame Bay September 29 2009

A male leatherback sea turtle was discovered dead entrapped in the lines of the Thimble Bay mussel farm at depth of 42 meters on September 29 in position 49 24.5N, 55 19W. Terry Mills, the owner reported the entrapment to the Department of Fisheries and Oceans. Wayne Ledwell of the Whale Release and Strandings Group visited the site on the morning of the 1st October 2009.

Wayne Ledwell of WRS performed a gross autopsy of the animal. Morphometrics, sample and pictures were taken. The head was given to Mr. Mills upon request and the carcass transported to an isolated site and placed in the woods above high water so as to have no possible contamination through body fluid leakage into the waters of the mussel farm

The animal was in fair condition or a Code 3 (Geraci and Lounsberry 2005). The turtle had been entrapped around the neck and right shoulder with scarring visible from the entrapment. The animal was found rolled into the mussel lines.

A check for a passive transponder using an AVID Power Tracker V proved negative. A semi circular hole in the leading edge of the right rear flipper indicates it may have been flipper tagged. The left flipper had a similar less defined hole. It is possible an animal as a cookie shark may have resulted in those cuts. The gut was checked and found empty. Remnants of jellyfish were present in throughout the papilla indicating it was feeding prior to the entanglement.

Mr. Mills and the farm workers said they occasionally see a leatherback in the area of the mussel farm during this time of the year. Sightings are infrequent but when they do see one it seems to stay in the area with multiple sightings of the animal

Morphometrics cm

Carapace L	Straight	146
	Curved	153
Carapace W	Straight	89
	Curved	112
Head	Width	82
	Length	30
Tail	Length	72
Flipper R	Length	113

FlipperWidth33LOA210

Appendix II

Appendix IV

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