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Serious Injury Determinations for Baleen Whale Stocks along the Gulf of Mexico, United States East Coast, and Atlantic Canadian Provinces, 2007-2011

by Timothy V.N. Cole and Allison G. Henry

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Contents

INTRODUCTION 1	
METHODS 1	
RESULTS AND DISCUSSION	
ACKNOWLEDGEMENTS	
LITERATURE CITED	
Table 1. Large cetacean injury categories and criteria. 5	
Table 2. Baleen whale injury determinations for events along the Gulf of Mexico, United StatesEast Coast and Atlantic Canadian Provinces from 2007 through 2011	

INTRODUCTION

The Marine Mammal Protection Act (MMPA) requires NMFS to estimate annual levels of human-caused mortality and serious injury to marine mammal stocks (section 117), and to categorize commercial fisheries based on their level of incidental mortality and serious injury of marine mammals (section 118). Serious injury (SI) determinations were addressed at NMFS convened workshops in 1997 and 2007 (Angliss and DeMaster 1998; Andersen et al. 2008), and in January 2012, the agency published new national guidelines for distinguishing serious from non-serious injuries of marine mammals¹. A major goal of the new guidelines is to establish national consistency and transparency in SI determinations. As part of implementing the new guidelines, Science Center SI experts from each region reviewed all documented marine mammal injury events during the 5-year period of 2007–2011. Reports and images of injuries and the animals' condition were compared to injury categories described in the new guidelines' procedure manual, and each event was assigned an injury determination. The resulting SI values were combined with anthropogenic mortality values for comparison to each stock's Potential Biological Removal (PBR) in annual marine mammal stock assessment reports (SARs). This report summarizes the SI determinations for baleen whale stocks along the Gulf of Mexico, United States east coast and Atlantic Canadian Provinces for 2007 through 2011.

METHODS

Opportunistic baleen whale injury reports were provided by members of the US and Canadian regional stranding networks, whale survey and disentanglement teams, the US and Canadian Coast Guards, and the general public. With the exception of minke whales, the incidental take of whales recorded by fisheries observer programs are also included here because the numbers of observed takes were not sufficient to calculate bycatch rate estimates. These reports were therefore treated as opportunistic.

All available report information was collected by the NMFS Northeast Regional Office (NERO), Southeast Regional Office (SERO), and the Northeast Fisheries Science Center (NEFSC). Confirmed reports were designated "events," and for each event the species involved was verified, duplicate records identified, and relevant information from each source consolidated into a single record. Information from additional sightings of a previously documented event was added to the existing record. If an identified whale was involved in a second interaction, a new event record was assigned. Demographic and subsequent sighting information for injured whales were obtained, where available, from local population monitoring studies.

Two NEFSC staff independently reviewed each injury event and assigned each event to one of the injury categories listed in Table 1. Events were categorized according to the whales' condition at the time of the initial report. Each injury event was assigned to the appropriate

¹ see <u>http://www.nmfs.noaa.gov/pr/pdfs/serious_injury_procedure.pdf</u>

injury/information category using all available information and expert judgment, as described in the procedural directive. For a single injury event to which several categories applied, the injury determination with the highest level of severity was assigned. More detailed information or extended observation on an individual case/whale often justified a determination differing from the categorical guidance of Table 1. Any injury leading to apparent significant health decline (e.g., skin discoloration, lesions near the nares, fat loss, increased cyamid loads) was classified as a serious injury. Criteria L10-L12 accommodated events that lacked details necessary for assignment to a more specific category. Whales trapped by encircling fishing gear such as weirs and seines were not included in entanglement tallies unless gear was attached to a body part.

We assigned injuries to either the US or Canada if circumstances clearly indicated in whose waters the event occurred. Such circumstances included identification of entangling gear, entanglements that anchored a whale, witnessed vessel strikes, or if sighting histories indicated a whale was well within a country's waters around the time the injury was sustained. If there was a reasonable chance that the event may have occurred in either country's waters, the country assignment was listed as unknown. Events in this category were typically injuries first detected near the US/Canadian border or injuries whose progression (healing or deterioration) indicated that the event occurred a substantial time before the first detection, and therefore the whale may have traveled between jurisdictions since the injury was sustained.

The two NEFSC staff compared their determinations, and differences were discussed to obtain agreement. These SI determinations were also reviewed by SI experts from the other regional science centers and differences reconciled. The determinations were also provided to the regional Scientific Review Groups (SRGs) for review prior to final reporting of determinations.

RESULTS AND DISCUSSION

Table 2 presents results of the new SI criteria as applied to baleen whale injury events along the Gulf of Mexico, United States east coast and Atlantic Canadian Provinces from 2007 through 2011. Each injury event is listed chronologically by species with location, individual identification (if known), an assessment of whether or not the injury occurred in US waters, a brief description of the event, the assigned SI category, reason for departure from the guidelines (if an injury was classified differently than the default classification suggested by the guidelines for an injury type), List of Fisheries (LOF) inclusion (if gear identified), and notes relating to the categorization of the injury. Also provided are the numbers of serious injuries resulting from the application of criteria described in Henry et al. (2012) used for past SARs. The top row for each species includes the total number of serious injuries following both the old and new criteria, a count of injury determinations that differed from the guideline defaults (i.e., departures from the new criteria), and a count of records to be considered when reviewing the List of Fisheries.

The total SI values went up substantially for fin, humpback, and minke whales with the new guideline procedures. For right whales, the SI value went up only 19%, or 2.25--the result of 3

events which were categorized as L10 and prorated at 0.75 each with the new process. Under the criteria of Henry et al. (2012), these events would have been assigned 'unknown fate' and would not have generated any SI value.

The procedural directive necessarily allows for departures from the new criteria, and Table 2 lists the reasons for departures. The reasons for a determination differing from the guidance defaults include: 1) an injury which the guidance suggests is non-SI (NSI) results in a visible health decline (and therefore is reported as SI); 2) a whale was disentangled; 3) a whale shed all entangling gear (and therefore likely NSI); 4) a whale was resighted healed or healthy some time after the injury; and 5) the animal was somehow rehabilitated and released back into the wild. Departures were most often due to the whale being disentangled or shedding gear. There were a few cases of a whale with a deep laceration, which would have been classified a serious injury, being sighted later in good health and/or with signs of healing. There were also a few cases that would have been assigned as NSI under the new criteria, but the whale was resighted later in a state of health decline. The rate of departure from the new criteria was 38% and 36% for the relatively well-monitored humpbacks and right whales, respectively. For minke whales, the departure rate was 27%, and for fin whales it was 25%.

The List of Fisheries column identifies entanglement events that were either assigned an SI value or would have been if the whale was not disentangled. The basic gear type (gillnet, hook, pot, seine, trawl, or weir) was identified in 44 of the 165 detected entanglement events.

There were five events involving whales trapped in encircling gear. Three were minke whales caught in weirs in Canadian waters. Two of these were successfully released from the weirs and deemed NSI. The third event did not have adequate information to determine if bodily entanglement and serious injury had occurred. The fourth and fifth events involved whales trapped in purse seines in US waters: one humpback and one whale identified as either a fin or sei whale. Both animals were successfully released from the seines in the course of fishing operations without serious injury.

The sums of SI values by stock presented in Table 2 are a combination of confirmed humancaused serious injury and a prorating of poorly documented injury events based on observed ratios of survival by injury type. Although this improves our understanding of the potential magnitude of human impacts, this process treats only detected events and does not provide an estimate of the actual level of anthropogenic serious injury to these stocks. The number of serious injuries not detected is unknown, and actual levels may be much higher (Kraus et al. 2005; Williams et al. 2011).

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Category	Injury/ Information	Injury Determination	Criteria
L1	Ingested gear ² or hook(s)	SI ³	Swallowed, not simply draped through mouth.
L2	Constricting wrap	SI	Tightly wrapped line anywhere on body that indents the skin or does not shift with whale's movement, or line that is likely to become constricting as the whale grows. Indication that a whale that is heavily weighted, anchored or has a discolored appendage is sufficient evidence of constricting gear.
L3	Loose wrap, bridled or draped gear	NSI^4	Loosely wrapped gear that moves or shifts freely with whale's movement. Absence of constricting gear must be confirmed.
L4	External hook	NSI	Fishing hook of any size on any part of the body (i.e., not ingested).
L5a	Deep laceration ⁵	SI	Laceration with the potential to affect major artery (e.g., laceration or severing at insertion of flipper/fluke), penetrating body cavity, or cutting bone.
L5b	Superficial laceration	NSI	Laceration not deeper than blubber layer, does not affect major artery, or cut bone.
L6a	Vessel ≥65' and >10 knots	SI	Struck by vessel equal or greater than 65' and traveling greater than 10 knots.
L6b	Vessel <65' and >10 knots	Prorate: 0.20	Struck by vessel smaller than 65' and traveling greater than 10 knots.
L6c	Vessel any size ≤10 knots	NSI	Struck by vessel of any size traveling at equal or less than 10 knots.
L7a	Vessel ≥65' and speed unknown	Prorate: 0.56	Struck by vessel equal or greater than 65' and traveling at unknown speed.
L7b	Vessel <65' and speed unknown	Prorate: 0.14	Struck by vessel smaller than 65' and traveling at unknown speed.
L8	Dependent ⁶	SI	Dependent calf of a dead or seriously injured mother.
L9	Brought on deck	SI	Whale removed from water and brought on deck.
L10	Evidence of entanglement	Prorate: 0.75	Confirmed entanglement but insufficient information available to place in any of the L1-L4 criteria with a high degree of certainty.
L11	Ship strike laceration	Prorate: 0.52	Whale confirmed with non-entanglement related laceration but lacking details to place in either criteria L5a or L5b with a high degree of certainty. Includes observation of blood in water.
L12	Ship strike observed	Prorate: 0.36	Confirmed ship strike report where there is insufficient detail to assign event to criteriaL6a – L7b with a high degree of certainty.

Table 1. Large cetacean injury categories and criteria.

² For the purposes of this table, "gear" is defined as any portion of fishing gear excluding the hook, which is considered separately.
³ SI = Serious Injury.
⁴ NSI = Non-Serious Injury.

⁵ For the purposes of this table, "laceration" is defined as a ragged incision or a tearing of the skin. Lacerations are caused by trauma that results in stretching, tearing, crushing, shearing, or avulsion of the tissue. Trauma, including blunt and sharp force trauma, includes a wound or bodily

harm caused by an extrinsic agent. ⁶ "Dependent" for a large cetacean means a non-weaned calf. Weaned calves and juvenile large cetaceans are no longer dependent on their mothers.

Table 2. Baleen whale injury determinations for events along the Gulf of Mexico, United States East Coast and Atlantic Canadian Provinces from 2007 through 2011.

This table presents the results of the new Serious Injury criteria applied to live large whale events reported to both the NMFS Northeast and Southeast Regions from 2007-2011. Events from the Canadian Maritime provinces are included for transboundary stocks. The table fulfills the NMFS Policy Directive and Instruction on the process of injury determinations, made effective in January 2012. In addition to the reporting requirements of Instruction 02-038-01, we have included the Serious Injury values assigned to these events using criteria from previous Stock Assessment Reports.

Date	Species	Individual	Catalog #	General Location	Cause of Fate	Country of Origin ^a	Country Conf Code ^b	Gear Type ^c	Description and Comments	Old SI value	New SI Category	New SI value	Departure from new criteria ^d	LOF ^e
Fin Whale	opecies	Inutrianat	Cutulog "	General Location	I utt	orongin	Coue	Type	Description and Comments	1	Cutegory	6.5	3	8
25-Jun-07	FIWH	U	-	Great South Channel, 33 nm ESE of Chatham, MA; 67 nm from Provincetown, MA	EN	XU	CE	NR	Constricting wrap on tail; flippers & mouth involved, too. Extremely emaciated & lethargic.	1	L2	1	-	1
14-Jul-07	FIWH	U	-	~5 mi offshore from Rye, NH	VS	US	AE	-	Vessel strike witnessed and documented (vessel 24 ft travelling @ 25 kts). Superficial lacerations. Subsequent 2008 sightings indicate propeller scars had healed.	0	L6b	0	4	-
21-Jul-07	FIWH	U	-	16 nm E of Cape Neddick, ME	EN	XU	CE	NR	Unable to determine extent of injury from photos & description.	0	L10	0.75	-	1
25-Aug-07	FIWH	U	-	Stellwagen Bank, 6 nm NW of Race Point, Cape Cod, MA	EN	XU	CE	H/MF	Fishing hook in back with short section of line. Subsequent photo analysis showed same whale with entanglement on 8/23. Sighted gear free in Mass Bay on 1/30/09.	0	L4	0	-	-
23-Sep-07	FIWH	-	-	3.5 nm S of Boone Island, ME; 8 nm SE of York, ME	EN	XU	CE	NR	No photos. Unable to determine extent of injury from description.	0	L10	0.75	-	1
08-Jun-08	FIWH	U	-	12 nm ENE Mount Desert Rock, ME	EN	XU	CE	NR	Extent of entanglement unknown. Cannot confirm if bridle only and/or if cutting into mouth.	0	L10	0.75	-	1
27-Apr-09	FIWH	U	-	24 nm E of Cape Neddick, ME	EN	XU	CE	NR	Entanglement configuration unknown. No photos.	0	L10	0.75	-	1
09-Sep-09	FIWH	U	-	Between Campobello and Wolves Island, CAN	EN	XC	CE	NR	Some gear removed, but final entanglement configuration unknown.	0	L10	0.75	-	1
09-Oct-09	FIWH	U	-	N of Long Island, Nova Scotia, BOF	EN	XC	CE	GU	No photos or clear description of entanglement. Cannot confirm gear free. Indication of poor health, but incomplete description and no photos.	0	L10	0.75	-	1
17-Jul-10	FIWH	-	-	Montauk, Long Island, NY	VS	XU	CE	-	Calf of the year with two sets of healed prop lacerations; unable to determine if they penetrated deeper than blubber layer.	0	L11	0	4	-
02-Jul-11	FIWH	-	F100	Between Anticosti Island and the North Shore, Gulf of St. Lawrence	EN	CN	AE	NR	Deep lacerations at peduncle. Unconfirmed if gear free. No resights.	0	L5a	1	-	1
09-Jul-11	FIWH	-	1028	Jeffreys Ledge	EN	XU	CE	NR	Entanglement configuration unknown but shed gear. Resights indicate healthy.	0	L10	0	3	-
Humpback Wl			1	I	1	1				21		39.75	37	60
27-Jan-07	HUWH	U	-	4 nm E of Beach Haven, NJ	EN	XU	CE	NR	Body wrap likely to become constricting. Probable flipper wraps. Thin body condition and cyamid patches.	1	L2	1	-	1
12-Mar-07	HUWH	U	-	False Cape, VA	EN	US	GI	GN	Disentangled from all gear. Would have been SI due to being anchored.	0	L2	0	2	1
29-Apr-07	HUWH	-	-	50 yards offshore of Gallery Row Rd. Nags Head. N.C.	EN	XU	CE	NR	Unable to determine extent of injury from description. No photos.	0	L10	0.75	-	1
12-May-07	HUWH	Banjo	0601	~2 nm NW of Race Point, MA	EN	US	GI	PT	Whale dragging heavy gear. Extensive bruising on peduncle and flukes. Would have become constricting as whale grew. Disentangled. Resights indicate healthy.	0	L2	0	2	1
02-Jun-07	HUWH	U	-	Nashawena Island, MA; Vineyard Sound	EN	XU	CE	NR	Original Entanglement configuration unknown, but description of entanglement indicates that it was not life-threatening. Freed of gear.	0	L10	0	2	1
23-Jun-07	HUWH	Egg Toss	-	Wildcat Knoll, ~24 nm NNE of Race Point, MA	EN	XU	CE	NR	Embedded wrap on body.	1	L2	1	-	1

					Cause of	Country	Country Conf	Gear		Old SI	New SI	New SI	Departure from new	
Date	Species	Individual	Catalog #	General Location	Fate	of Origin ^a	Code ^b	Type ^c	Description and Comments	value	Category	value	criteria ^d	LOF ^e
16-Jul-07	HUWH	Springboard	-	9 nm NE of Race Point, Cape Cod, MA	EN	XU	CE	H/MF	Fishing hook in mouth, shoulder & side with line. Deemed non- life threatening. Subsequent sightings in 2008 saw no gear.	0	L4	0	-	-
23-Aug-07	HUWH	Sigma	0609	Grand Manan Banks, 25 nm W of Brier Island, NS (nearest land)	EN	XC	CE	NR	Loose loop through mouth. All gear removed. Slightly emaciated with light cyamid load. Subsequent sightings indicate healthy.	0	L3	0	-	-
01-Sep-07	HUWH	Broomball	-	NW corner of Stellwagen Bank	VS	US	AE	-	Deep lacerations to peduncle, potentially to bone. Subsequent resights indicate wounds have healed.	0	L5a	0	4	-
07-Sep-07	HUWH	U	-	48 nm S of Block Island, RI	EN	XU	CE	NR	No photos. Unable to determine extent of injury from description.	0	L10	0.75	-	1
30-Sep-07	HUWH	Music	8836	Northern tip of Stellwagen Bank	EN	XU	CE	MF	Monofilament draped over fluke, point of attachement unknown. Subsequent resights indicate free of gear & healthy	0	L10	0	3	-
18-Nov-07	HUWH	U	-	Less than 1/2 mi from shore; off Weekapaug Beach, RI.	EN	US	AE	NR	Anchored. Partially freed of gear. Unable to determine if gear free.	0	L10	0.75	-	1
18-Dec-07	HUWH	Campobello	-	Near the southern tip of Grand Manan Is., NB	EN	CN	GI	PT	Anchored. Successfully disentangled. Resighted 10/08 wounds still healing, but healthy.	0	L2	0	2	1
06-Jan-08	HUWH	U	-	20 nm S of Cape Lookout, NC	EN	XU	CE	NR	Line cutting into right pectoral flipper in several places. Moderate cyamid load and appears emaciated.	1	L2	1	-	1
10-Jan-08	HUWH	U	No ID	~ 80 mi NE of Wilmington, NC	EN	US	AE	H/MF	Animal surfaced near boat, after it dove, port side rod went off & line broke. Approx 50 yd of trolling line missing, no description of gear configuration and point of attachement unknown. No ID or resights.	0	L10	0.75	-	1
07-May-08	HUWH	Brillo	-	southwest corner of Stellwagen Bank	EN	XU	CE	NR	Extent of entanglement unclearpreviously embedded wrap on body appears to have shifted aft. Thin and has some cyamids. Moving around actively in a feeding group during last sighting.	0	L10	0.75	-	1
May-08	HUWH	U	-	Offshore of Block Island, RI	EN	US	GI	GN	Entangled by left pectoral in actively fished gear. Crew cut gear and hauled from other end; majority of gear recovered, but animal not observed post attempt and likely swam off with an unknown amount	0	L10	0.75	-	1
20-May-08	HUWH	Reaper	0616	Stellwagen Bank	EN	US	AE	H/MF	Hook on right upper jaw; monofilament line at least to flank. Confirmed gear free.	0	L4	0	-	-
01-Jun-08	HUWH	2008 Calf of Tongs	-	northwest corner of Stellwagen Bank	EN	XU	CE	GU	Disentangled. SI was warranted due to it being calf of the year gear would've likely become constricting as animal grew. Subsequent sightings indicate healthy.	0	L2	0	2	1
11-Jun-08	HUWH	Radiator	-	mid Stellwagen Bank	VS	US	AE	-	Series of superficial propeller and skeg lacerations down right side. Subsequent sightings indicate wounds healing and animal healthy.	0	L5b	0	-	-
27-Jun-08	HUWH	Ebony	0313	southern part of Stellwagen Bank	EN	XU	CE	NR	Line comes out both sides of mouth and then together to form a loose bridle, then extends back to peduncle area. Disentangled. Confirmed gear free on $8/24/08$; still thin, but in better condition than on $7/15/08$.	0	L3	0	-	-
05-Jul-08	HUWH	Trident	0323	Stellwagen Bank	EN	XU	CE	H/MF	Monofilament on left, forward body; lures near flukes. Confirmed gear free on 7/15/08. Subsequent sightings indicate healthy.	0	L4	0	-	-
08-Jul-08	HUWH	Estuary	8835	.5 mi outside of Nauset Inlet, Cape Cod, MA	EN	US	AE	GU	Anchored. Cuts were made, but no gear was removed. Animal was emaciated and had moderate cyamid coverage. Deep wounds in fluke blades from gear. Hunched over position maintained after cuts were made to the gear.	1	L2	1	-	1
Jul-08	HUWH	U	-	Offshore of Chatham, MA	EN	US	GI	GN	Entangled in actively fished gear. Left pectoral pinned to body. Cuts made to gear and animal swam off with at least 25' of gear still attached. No observation post-attempt to determine if pectoral still pinned or not. SI was warranted - constricting gear pinned pectoral	0	L10	0.75	-	1
13-Jul-08	HUWH	-	-	off Monomoy Point, Cape Cod, MA	EN	XU	CE	NR	Entanglement configuration unknown.	0	L10	0.75	-	1

					Cause of	-	Country Conf	Gear		Old SI	New SI	New SI	Departure from new	
Date	Species	Individual	Catalog #	General Location	Fate	of Origin ^a	Code ^b	Type ^c	Description and Comments	value	Category	value	criteria ^d	LOF ^e
23-Jul-08	HUWH	U	-	Stellwagen Bank - midbank around BE buoy	VS	US	AE	-	Audible "thunk" heard by witnesses. Contact likely made to head area since animals had just come up through a feeding cloud. Animals moved away from the vessel, then immediately resumed feeding. No injuries seen by any whale watch vessels present. Two of three whales ID'd, both seen multiple times since with no reported injuries	0	L6c	0	-	-
26-Jul-08	HUWH	Underline	-	Stellwagen Bank	VS	US	AE	-	Small lacerations on dorsal that did not penetrate blubber layer. Subsequent sightings indicate wounds have healed and animal is healthy.	0	L5b	0	-	-
03-Aug-08	HUWH	Backgammon	-	Stellwagen Bank	EN	US	AE	H/MF	Spreader rig on left head (hooks, monofilament, pink lures), hook in left mouthline. Confirmed gear free on 8/13/08.	0	L4	0	-	-
13-Aug-08	HUWH	U	-	~125 mi due E of NJ coast	EN	XU	CE	NR	Wraps around tail, polyball attached, but full entanglement configuration unknown. Some gear removed, but not all. Whale emaciated, lethargic and with heavy cyamid load.	1	L10	1	1	1
21-Aug-08	HUWH	U	No ID	13 nm E of Chatham, MA	EN	XU	CE	NR	Line through mouth like a bridle, comes together aft of flukes; no wraps or weighted gear. Sloughing skin & extensive scuffing taken as indication of health decline. SI due to health decline. No ID or resignts.	1	L3	1	1	1
20-Sep-08	HUWH	Cranny	3798	4.75 nm WNW Brier Island, NS	EN	XC	CE	NR	Extent of entanglement unclearat least 4 non-constricting body wraps around midsection and peduncle.	0	L10	0.75	-	1
13-Oct-08	HUWH	Cajun	8506	Stellwagen	EN	US	AE	MF	Monofilament around fluke and trailing; point of attachment unknown. Confirmed gear free on 10/17/08. Subsequent sightings indicate healthy.	0	L10	0	3	-
13-Oct-08	HUWH	Tectonic	-	Stellwagen	EN	US	AE	MF	Monofilament over fluke, perhaps from left body, but point of attachment unknown. Confirmed gear free on 10/14/08. Subsequent resignts indicate healthy.	0	L10	0	3	-
08-Nov-08	HUWH	-	-	Nova Scotia	EN	XC	CE	NR	Disentangled by fishermen. No photos or description of entanglement. Unknown if all gear removed.	0	L10	0.75	-	1
25-Feb-09	HUWH	U	-	10 mi N of the tip of NJ	EN	US	AE	NR	Anchored. Disentangled but SI due to deformed body position that did not substantially improve after disentanglement.	1	L2	1	-	1
17-Mar-09	HUWH	U	-	Treasure Bay, Abaco, Bahamas	EN	XB	CE	NR	Constricting wrap at fluke insertion. Disentangled and will likely shed remaining gear. SI warranted - constricting wrap, cvamid patches & listless behavior.	0	L2	0	2	1
09-Apr-09	HUWH	U	-	Stellwagen Bank	EN	XU	CE	NR	Line through mouth with trailing line along both sides of body. No left flipper involvement, but unknown if right flipper is wrapped or not.	0	L10	0.75	-	1
11-Apr-09	HUWH	U	-	off Northern Stellwagen Bank	EN	XU	CE	NR	Configuration unclearunknown if body wrap is loose or constricting. No photos.	0	L10	0.75	-	1
20-Apr-09	HUWH	U	-	2.7 mi WSW of Provincetown, MA	EN	XU	CE	GU	Wrap of line around fluke insertion. Disentangled. SI was warrantedwraps constricting or would have become so as animal grew.	0	L2	0	2	1
04-May-09	HUWH	Thumbprint	-	40 mi ESE of Chatham, MA	EN	US	GI	PT	Disentangled. SI was warrantedconstricting body & flipper wraps.	0	L2	0	2	1
23-May-09	HUWH	U	wr-2009- 12: Fern/Calf/ Entropy	Stellwagen near BE Buoy	EN	XU	CE	NR	Entanglement configuration unknown. Unclear which individual was entangled, but all seen subsequently with no gear and healthy.	0	L10	0	3	-
23-May-09	HUWH	U		SW Stellwagen	EN	XU	CE	NR	Entanglement configuration unknown. No photos.	0	L10	0.75	-	1
29-May-09	HUWH	U	-	Off Pt. Pleasant NJ	VS	US	AE	-	Unknown whale came up on transom of 19' private vessel while vessel stopped. Small piece of tissue left on engine collected for DNA testing. Identified as male humpback.	0	L6c	0	-	-
06-Jun-09	HUWH	Pepper	0074	SW Stellwagen Bank	EN	US	AE	NR	Entanglement configuration unknown. Shed gear. Confirmed 5/13/10. Subsequent sightings indicate healthy.	0	L10	0	3	-
09-Jun-09	HUWH	Inukshuk	-	Southern Stellwagen Bank	EN	US	AE	NR	Constricting body wrap. Animal never resighted.	1	L2	1	-	1
17-Jun-09	HUWH	2009 Calf of Rapier	-	SW corner of Stellwagen Bank	VS	US	AE	-	Lacerations across peduncle, fluke insertion and leading edge; potential to cut bone. Subsequent sightings indicate injury healing and animal healthy.	0	L5a	0	4	-

					Cause of	Country	Country Conf	Gear		Old SI	New SI	New SI	Departure from new	
Date	Species		Catalog #	General Location	Fate	of Origin ^a	Code ^b	Type ^c	Description and Comments	value	Category	value	criteria ^d	LOF ^e
21-Jul-09	HUWH	Bayou	-	Jeffreys Ledge	VS	US	AE	-	Lacerations to outer portion of right fluke, not near major artery. Subsequent sightings indicate injury has healed and whale healthy.	0	L5b	0	-	-
28-Jul-09	HUWH	U	-	Stellwagen Bank near BE Buoy	VS	US	AE	-	Whale watch catamaran struck and passed over whale after watching it for a few minutes. No documentation of animal to prove injury or lack thereof, but speed of vessel < 5 kts & no blood in water. Several other vessels in the area and no one saw an injured animal that day or afterwards	0	L6c	0	-	-
14-Aug-09	HUWH	Anvil	0448	Stellwagen Bank	EN	US	AE	H/MF	Hooks in head and back with monofilament trailing past fluke. Subsequent sightings indicate whale gear free and healthy.	0	L4	0	-	-
12-Sep-09	HUWH	2008 Calf of Touchdown	8878	near White Island, NS	EN	CN	GI	WE	Swam out of entrapment in weir, but carrying some gear in an unknown configuration. Never resignted.	0	L10	0.75	-	1
16-Sep-09	HUWH	-	-	Outside Halifax Harbor	EN	XC	CE	NR	Video & consultation confirms entanglement, but entanglement configuration unknown.	0	L10	0.75	-	1
20-Sep-09	HUWH	Dali	-	Southern Stellwagen Sanctuary	EN	US	AE	H/MF	Entangled in monofilament line, but configuration unclear. Subsequent sightings indicate gear shed and whale healthy.	0	L10	0	3	-
21-Oct-09	HUWH	Ti	-	Southern Stellwagen Bank	EN	US	GI	PT	Disentangled. SI not warrantedno wraps of gear, open bridle through mouth. Whale not resignted.	0	L3	0	-	-
20-Nov-09	HUWH	U	-	Onslow Bay, NC	EN	XU	CE	NR	Entanglement configuration unknown.	0	L10	0.75	-	1
09-Dec-09	HUWH	U	-	~20 mi E of Jacksonville, FL	EN	CN	GI	GN	Line through mouth and meeting aft of flukes; unknown if flipper(s) involved. Disentangled off Bahamas, but in poor conditionemaciated, heavy cyamids, lethargic.	1	L10	1	1	1
07-Mar-10	HUWH	U	No ID	18.5 mi E of Ponte Verde, FL	EN	XU	CE	NR	Constricting body & flipper wraps. May have shed some or all of gear, but severe health declineemaciated, heavy cyamid load.	1	L2	1	-	1
05-May-10	HUWH	U	No ID	North Hampton, VA, Chesapeake Bay	EN	XU	CE	NR	Wrap around fluke blades near insertion and trailing gear. Young/small whale and gear likely to become constricting.	1	L2	1	-	1
15-May-10	HUWH	U	No ID	Hatteras Inlet Sandbar, NC	EN	XU	CE	NP	Live stranding. Whale euthanized. Necrotic infected wounds @ base of flukes and chronic abrasions on head contributed to stranding. No gear present but injuries consistent with fishing	1	L2	1	-	1
18-May-10	HUWH	Pinch	-	E of Stellwagen Bank	EN	XU	CE	NR	Constricting body wrap that will likely prevent full pleat expansion. Last sighted 05/24/10.	1	L2	1	-	1
19-Jun-10	HUWH	U	No ID	SE of Nauset Inlet, MA	EN	US	GI	PT	Not confirmed gear free, but likely to shed remaining gear. SI was warrantedembedded wraps on peduncle & constricting wraps on fluke blades.	0	L2	0	2	1
05-Jul-10	HUWH	Swallowtail	-	Nauset Inlet, Cape Cod, MA	EN	XU	CE	NR	Embedded wrap around peduncle. Shed gear on its own. Confirmed gear free on 8/2/11.	0	L2	0	3	-
23-Jul-10	HUWH	Vault	-	8 mi SE of Nauset Inlet, MA	EN	US	AE	NR	Entanglement configuration unknown. Shed gear on its own. Confirmed gear free on 10/19/10 w/ slight health decline. Resignted healthy in 2011.	0	L10	0	3	-
26-Jul-10	HUWH	-	-	14 mi E of Chatham Harbor Inlet, MA	EN	XU	CE	NR	Configuration and extent of entanglement unknown.	0	L10	0.75	-	1
27-Jul-10	HUWH	Sodapop	-	Stellwagen Bank	EN	XU	CE	NR	Full Entanglement configuration unknown. Shed gear. Confirmed gear free on 05/02/11.	0	L10	0	3	-
27-Jul-10	HUWH	Bearclaw	-	4 mi E of Chatham, MA	EN	XU	CE	NR	Constricting body wrap; partial disentanglement. Confirmed gear free from this event (new entanglement on 8/31/10).	0	L2	0	2	1
06-Aug-10	HUWH	Aphid	-	Southern Stellwagen	VS	US	AE	-	At least five superficial lacerations on left head. Resighted on 9/8/10 & 10/8/10 with injuries healing.	0	L5b	0	-	-
13-Aug-10	HUWH	U	No ID	E of Nauset Inlet, MA	EN	US	GI	PT	Full Entanglement configuration unknown; mouth involved w/ head wrap + trailing gear. Partial disentanglement, but remaining head wrap likely to become constricting.	1	L2	1	-	1
20-Aug-10	HUWH	Chili	-	SE corner of Stellwagen Bank	EN	XU	CE	NR	Embedded wraps, skinny, moderate cyamids indicating health decline.	1	L2	1	-	1
31-Aug-10	HUWH	Bearclaw	-	E of Chatham, MA	EN	US	GI	PT	Disentangled. Loop around right pec w/ trailing gear likely to have become constricting as animal grew. Resighted in 2011 looking healthy.	0	L2	0	2	1
10-Sep-10	HUWH	-	-	4 miles from White Head Island, Grand Manan	EN	XC	CE	NR	Extent and configuration of entanglement unknown.	0	L10	0.75	-	1

-	a .				Cause of	-	Country Conf	Gear		Old SI	New SI	New SI	Departure from new	0
Date	Species	Individual	Catalog #	General Location	Fate	of Origin ^a	Code ^b	Type ^c	Description and Comments	value	Category	value	criteria ^d	LOF ^e
02-Oct-10	HUWH	-	-	4 nm NE of Race Point, MA	EN	XU	CE	NR	Entanglement configuration unknown. Unable to confirm if a resight of 8/20/10 event.	0	L10	0.75	-	1
23-Dec-10	HUWH	-	-	S of Port Everglades Inlet, FL	EN	XU	CE	NP	Evidence of recent constricting entanglement and severe health decline. No gear present.	1	L10	1	1	1
07-Jan-11	HUWH	U	No ID	Oregon Inlet, Outer Banks	EN	US	AE	NR	Extensive entanglement with netting covering majority of body including head and blowholes. Anchored.	1	L2	1	-	1
01-Feb-11	HUWH	EKG	8819	24 m S of Bar Harbor	EN	US	AE	NR	Anchored. Cuts were made to gear but whale still anchored. No resights as of 11/2012.	1	L2	1	-	1
07-Mar-11	HUWH	U	No ID	Thorofare Bay, Core	VS	US	AE	-	Live stranded with 8 deep lacerations across back. Euthanized.	1	L5a	1	-	-
11-Apr-11	HUWH	U	No ID	Sound, NC Off Halibut Point,	EN	XU	CE	NR	Entanglement configuration unknown.	0	L10	0.75	-	1
15-Apr-11	HUWH	U	No ID	Rockport, MA 1/2 mile off NE Little Island Park Pier	EN	US	GI	GN	Broke free from anchoring gear. Swam off with unknown amount of gear. Likely gear free based on assessment of recovered gear, but cannot confirm.	0	L10	0.75	-	1
30-May-11	HUWH	-	-	Offshore Nauset Beach, Orleans MA	EN	XU	CE	NR	Entanglement configuration unknown.	0	L10	0.75	-	1
03-Jun-11	HUWH	Flyball	-	15 mi ESE of Isle of	EN	US	AE	GU	Disentangled. Resights indicate healthy. SI was warranted evidence of weighted gear, constricting wraps and emaciated.	0	L2	0	2	1
02-Jul-11	HUWH	-	-	Shoals Off Race Point, Cape Cod	EN	XU	CE	NP	Young whale. No gear present but missing flukes attributed to chronic entanglement. Laceration due to SS appears minor. Significant health decline, emaciated. No resights.	1	L2	1	-	1
05-Jul-11	HUWH	Chalkline	-	-	VS	US	AE	-	Minor laceration across dorsal that does not penetrate blubber.	0	L5b	0	-	-
09-Jul-11	HUWH	-	-	3 mi S Monomoy Island	EN	XU	CE	NR	Entanglement configuration unknown.	0	L10	0.75	-	1
10-Jul-11	HUWH	-	-	7 mi E of Monomoy Island	EN	XU	CE	NR	Report was of two entangled whales but could not confirm that both were entangled. Configuration of entanglement unknown.	0	L10	0.75	-	1
18-Jul-11	HUWH	Reflection	8246	Off Truro, MA	EN	US	GI	РТ	Disentangled. Resights indicate healthy. SI was warranted whale anchored in gear.	0	L2	0	2	1
21-Jul-11	HUWH	-	-	Oregon Inlet, Rodanthe, NC	EN	XU	CE	NR	Entanglement configuration unknown.	0	L10	0.75	-	1
25-Jul-11	HUWH	Ganesh	-	Stellwagen Bank	EN	US	AE	NR	Entanglement configuration unknown. Whale shed all gear. Resights indicate healthy.	0	L10	0	3	-
30-Jul-11	HUWH	2009 Calf of Rapier	-	Stellwagen Bank	EN	US	AE	MF	Monofilament at head and trailing along flank and aft of flukes. Confirmed gear free in August 2012. Resights indicate healthy.	0	L10	0	3	-
30-Jul-11	HUWH	Reflection	8246	Stellwagen Bank	EN	US	AE	MF	Monofilament around tailstock and aft of flukes; actual point of	0	L10	0	3	-
31-Jul-11	HUWH	2011 Calf of	-	Stellwagen Bank	EN	US	AE	MF	attachment unknown. Confirmed gear free on 8/2/11. Monofilament around flipper. Confirmed gear free on 8/2/11.	0	L10	0	3	-
02-Aug-11	HUWH	Canopy Artillery	-	Stellwagen Bank	EN	US	AE	MF	Monofilament over fluke. Shed gear. Resights indicate healthy.	0	L10	0	3	-
04-Aug-11	HUWH	2011 Calf of Ganesh	-	Stellwagen Bank	VS	US	AE	-	Two sets of lacerations across back that do not appear to penetrate through blubber & into muscle. Resights show	0	L5b	0	-	-
14-Aug-11	HUWH	Echo	0805	-	EN	US	AE	H/MF	iniuries healing (not resignted in 2012). Monofilament and lure around left flipper. Shed gear. Resignts indicate healthy.	0	L10	0	3	-
24-Aug-11	HUWH	Piano	-	-	VS	US	AE	-	Deep lacerations penetrating blubber along left flank. Resighted in 2012 (entangled) with lacerations injuries healing.	0	L5a	0	4	-
15-Sep-11	HUWH	Checkmark	-	Outside Plymouth Harbor, MA	EN	US	AE	NR	Drapped line cutting into leading edge of right fluke tip, but not wrapping. Shed gear. Resights indicate healthy.	0	L3	0	-	-
Sep-11	HUWH	Hippocampus	-	Offshore of Chatham,	EN	US	GI	GN	Entanglement configuration unclear but extensive amount of	0	L10	0	2	1
10-Oct-11	HUWH	Clutter	8818	MA 5.3 nm NE of Grand	EN	XC	CE	NR	gear involved. SI was warranted. Disentangled. Constricting wraps embedded at fluke insertion.	1	L2	1	-	1
08-Nov-11	HUWH	Dyad	-	Manan, BOF 32 nm E of Nantucket, MA	EN	XU	CE	MF	Monofilament line trailing over right fluke. Point of attachment unknown. Potential for ingested hook.	0	L10	0	3	-

Date	Species	Individual	Catalog #	General Location	Cause of Fate	Country of Origin ^a	Country Conf Code ^b	Gear Type ^c	Description and Comments	Old SI value	New SI Category	New SI value	Departure from new criteria ^d	LOF ^e
13-Nov-11	HUWH	-	-	3.15 nm S of Southern Wolf Island, BOF	EN	CN	GI	PT	Anchored. Disentangled and all gear removed. SI was warranted.	0	L2	0	2	1
Minke Whale		I		Wolf Istand, DOI	1	1			Warrantoa.	4		16.25	8	27
25-Jun-07	MIWH	-	-	Wild Bight, Northern Peninsula, NL	EN	CN	GI	GN	Head and footrope of cod gillnet through mouth, no wraps. Disentangled.	0	L3	0	-	-
07-Jul-07	MIWH	-	-	Provincetown harbor, MA	EN	XU	CE	NR	Unable to relocate or to determine extent of entanglement.	0	L10	0.75	-	1
11-Jul-07	MIWH	-	-	Duntarra, Trinity Bay, NL	EN	CN	GI	GN	Entangled in cod gillnets. Partially disentangled by tourists. Unknown configuration of gear remaining.	0	L10	0.75	-	1
16-Jul-07	MIWH	-	-	1 nm S of Eastern Head, Trescott, ME; 27 nm NE of Jonesport, ME	EN	US	AE	NR	Anchored. No photos. Not relocated.	1	L2	1	-	1
26-Jul-07	MIWH	-	-	Ochre Pit Cove, Conception Bay, NL	EN	CN	GI	GN	Full entanglement configuration unknown. Caught in webbing, head rope of gillnet through the mouth. Disentangled.	0	L10	0	2	1
09-Aug-07	MIWH	-	-	Cartwright, Labrador	EN	CN	AE	PT	Bridle in mouth. No wraps of gear. Disentangled	0	L3	0	-	-
24-Sep-07	MIWH	-	-	Massachusetts Bay; 8 nm E of Marblehead Neck and 8 nm S of Gloucester, MA	EN	XU	CE	NR	Unable to determine extent of entanglement from photos & description.	0	L10	0.75	-	1
11-Mar-08	MIWH	-	-	Off Yarmouth, NS	EN	XC	CE	NR	No photos or description to determine extent of entanglement.	0	L10	0.75	-	1
16-Jun-08	MIWH	-	-	Plum Point, NL	EN	CN	GI	PT	Constricting wraps on flipper. SI warranted if not disentangled.	0	L2	0	2	1
19-Jun-08	MIWH	-	-	Grand Manan Island, NB	EN	XC	CE	NR	No photos or description to determine extent of entanglement.	0	L10	0.75	-	1
28-Jul-08	MIWH	-	-	Hopeall Point, Trinity Bay, NL	EN	CN	GI	GN	Gear removed from whale, but unclear if some gear remains. Whale not resignted after disentanglement.	0	L10	0.75	-	1
20-Aug-08	MIWH	-	-	off Outer Heron Island, Boothbay Harbor, ME	EN	XU	CE	NR	No photos. Unable to determine extent of entanglement.	0	L10	0.75	-	1
21-Sep-08	MIWH	-	-	~8 nm SSW of Port Clyde, ME	EN	XU	CE	NR	No photos. Inadequate description of gear to determine extent of entanglement of if whale anchored.	0	L10	0.75	-	1
09-Oct-08	MIWH	-	-	near Isles of Shoals, NH	EN	XU	CE	NR	Extent of entanglement unknown.	0	L10	0.75	-	1
19-Apr-09	MIWH	-	-	Grand Le Pierre, Fortune Bay, Labrador	EN	CN	GI	PT	Entanglement configuration unknown.	0	L10	0.75	-	1
03-Jun-09	MIWH	-	-	Tadoussac, Northern Gulf of St. Lawrence	EN	CN	AE	NR	Tight wrap on rostrum.	1	L2	1	-	1
17-Jun-09	MIWH	-	-	Quirpon, Northern Peninsula, NL	EN	CN	GI	GN	Anchored. Disentangled. SI was warranted.	0	L2	0	2	1
11-Aug-09	MIWH	-	-	8 mi E of Plymouth, MA	EN	XU	CE	NR	Constricting wrap & poor skin condition indicating health decline.	1	L2	1	-	1
02-Sep-09	MIWH	-	-	~5 mi S of Pumpkin Island, ME	EN	XU	CE	NR	Entanglement configuration unknown.	0	L10	0.75	-	1
11-Oct-09	MIWH	-	-	~ 9 mi from Cape Cod National Sea Shore	EN	US	GI	MT	In net and on deck for short period. Released & swam off.	0	L9	1	-	1
14-Aug-10	MIWH	-	-	3 mi ESE of Schoodic Island, ME	EN	US	GI	РТ	Anchored. Disentangled. SI was warranted.	0	L2	0	2	1
19-Aug-10	MIWH	-	-	3.2 mi SE of Bailey Island, ME	EN	US	GI	РТ	Anchored. Disentangled. SI was warranted.	0	L2	0	2	1
21-Aug-10	MIWH	-	-	Plymouth Harbor, MA	EN	XU	CE	NR	Constricting wrap embedded in rostrum.	1	L2	1	-	1
06-Jul-11	MIWH	-	-	Ochre Pit Cove, Conception Bay, NL	EN	CN	GI	GN	Entangled at mouth and peduncle. Disentangled (cut out of net). SI warranted due to indication of extensive entanglement.	0	L10	0	2	1
17-Jul-11	MIWH	-	-	outside Boston Harbor	EN	XU	CE	NR	Entanglement configuration unknown. No resights.	0	L10	0.75	-	1
24-Jul-11	MIWH	-	-	Highland Light, Cape Cod	EN	XU	CE	NR	Entanglement configuration unknown. No resights.	0	L10	0.75	-	1
07-Sep-11	MIWH	-	-	Greenspond, NL	EN	CN	GI	GN	Anchored initially. Freed but some gear may have still been attached. Configuration unknown.	0	L10	0.75	-	1

							Country						Departure	
				~	Cause of	Country	Conf	Gear		Old SI	New SI	New SI	from new	
Date	Species	Individual	Catalog #	General Location	Fate	of Origin ^a	Code ^b	Type ^c	Description and Comments	value	Category	value	criteria ^d	LOF ^e
19-Sep-11	MIWH	-	-	Northumberland Strait, Pointe-Sapin, PEI	EN	CN	AE	NR	Anchored initially. Freed but some gear may have still been attached. Configuration unknown.	0	L10	0.75	-	1
05-Oct-11	MIWH	-	-	Boothbay Harbor, ME	EN	US	GI	PT	Anchored. Disentangled.	0	L2	0	2	1
end of Oct	MIWH	-	-	La Poile Bay, NL	EN	CN	GI	SN	Disentangledrolled out of mackerel seine and released alive.	0	L10	0	2	-
2010														
Right Whale 09-Mar-07	RIWH	Viola	2029	20 nm SE of Chatham,	EN	XU	CE	NR	Original full Entanglement configuration unknown, suspected	<u>12</u> 0	L10	14.25	16 2	22
09-1011-07	KI W H	VIOIA	2029	MA	EN	AU	CE	INK	constricting flipper wraps (confirmed later - in 2011 based on scarring). Partial disentanglement in 2007 cut loose loops across back. Unable to confirm shed gear until 2011. SI was warranted - constricting flipper wraps. **Confirmed gear free 2/23/11;	0	LIU	0	2	1
12-Mar-07	RIWH	Caterpillar	3503	Cape Cod Bay	VS	US	AE	-	2 yr old whale documented w/ 12 healing lacerations along right flank. Could not tell if cuts penetrated blubber. Subsequent sightings in 2007 & 2008 indicate wounds healing, decreased cvamid load.	0	L11	0	4	-
08-May-07	RIWH	Skittle	3260	65 mi ESE of Chatham, MA	EN	XU	CE	NR	Line & buoy exiting left mouth with trailing line. Only baleen involved. Shed all gear. Confirmed gear free on 2/14/08. Subsequent sightings indicate healthy.	0	L3	0	-	-
12-Jan-08	RIWH	Insignia	2645	Cape Cod Bay	EN	XU	CE	GU	Line exiting mouth on right side & trailing past flukes. Partial disentanglement removed some trailing line. Whale shed remaining gear. Confirmed gear free on 12/23/08. Subsequent sightings indicate healthy.	0	L3	0	-	-
29-Jan-08	RIWH	-	3333	Little Talbot Island, FL	EN	XU	CE	NR	Line exiting both sides of mouth and trailing. Shed gear. Confirmed gear free on 05/08/08. Subsequent sightings indicate healthy.	0	L3	0	-	-
29-Jan-08	RIWH	Ruffian	3530	~10 mi off Jacksonville Beach, FL	EN	XU	CE	NP	Animal sighted off Florida with raw wrapping entanglement lacerations on head, body and peduncle. Documented pre-injury on 12/19/07 in central Gulf of Maine. Subsequent sightings	0	L2	0	4	1
03-Feb-08	RIWH	-	1980	Cape Hatteras, NC	EN	XU	CE	NR	show healed scars and good health. Embedded wrap on rostrum & decline in health. Warranted SI. Seen gear free & healthy on 4/19/11.	0	L2	0	3	-
06-Mar-08	RIWH	Wart	1140	Cape Cod Bay, MA	EN	XU	CE	NR	Gear trailing from left side of mouth. No wraps. Some trailing line removed in 2008. Gear shifted to exit both sides of mouth in 2009. Line seen tightly wrapped on rostrum in 2010. Disentangled in 2010 but not resignted until 2013 (with a calf).	0	L2	0	2	1
07-May-08	RIWH	Lacrosse	1249	Great South Channel	EN	US	AE	NR	Gear exiting left mouth and trailing to fluke. Shed gear. Confirmed gear free on 6/1/09. Subsequent sightings indicate healthy.	0	L3	0	-	-
24-Sep-08	RIWH	-	2110	Jeffreys Ledge, NH	EN	XU	CE	NP	In poor health with heavy cyamid load, swath lesions and rake marks. Presented old prop scars and fresh entanglement scars (no gear present). SI due to entanglement with ship strike as secondary cause. Images received in 2011 clearly show scoliosis. Spinal damage to peduncle similar to entanglement injury of right whale case reported on 27-Jan-09 off Cape Lookout NC	1	L2	1	-	1
08-Dec-08	RIWH	Equator	3294	just N of St John's River inlet; about 10 mi offshore	EN	XU	CE	GU	Constricting body wrap w/ trailing gear. Disentangled. Confirmed gear free and subsequent resights indicate healthy.	0	L2	0	2	1
26-Dec-08	RIWH	-	3701	Crescent Beach, FL	EN	CN	GI	РТ	Loops through mouth met at back and trailed past flukes. Disentangled. Confirmed gear free 1/7/09. Subsequent sightings indicate healthy.	0	L3	0	-	-
14-Jan-09	RIWH	Bridle	3311	~16 nm E of Brunswick, GA	EN	XU	CE	GU	Line deeply embedded in rostrum and lip. Sedated & wrap on head cut and some gear removed. SI due to health decline (heavy cyamids, skin discoloration). No resignts.	1	L2	1	-	1
27-Jan-09	RIWH	-	3710	Shoals off of Cape Lookout, NC	EN	ХС	CE	NP	Live stranded & euthanized. Entanglement never witnessed, though evidence of entanglement first seen in 2007 as a calf. Scoliosis evident in images from 2007. Necropsy found scoliosis due to entanglement injury & not congenital; entanglement wounds chronically infected	1	L2	1	-	1

					Cause of	Country	Country Conf	Gear		Old SI	New SI	New SI	Departure from new	
Date	Species	Individual	Catalog #	General Location	Fate	of Origin ^a	Code ^b	Type ^c	Description and Comments	value	Category	value	criteria ^d	LOF ^e
31-Jan-09	RIWH	Platypus	3420	22 nm ENE of St. Mary's inlet on FL/GA border	EN	XU	CE	GU	Line exited left side of mouth & trails over back. Right flipper involvement could not be confirmed. Telemetry buoy attached and whale freed of gear. Resignts indicate healthy.	0	L10	0	2	1
07-Feb-09	RIWH	-	3714	20 nm ESE of Brunswick, GA	EN	XU	CE	GU	Wraps on head and flipper likely to become constricting as animal grew. Disentangled. Resights indicate healthy.	0	L2	0	2	1
19-Apr-09	RIWH	Dog-ear	3590	Outside Stellwagen Sanctuary near Scituate	VS	US	AE	-	Struck by 50 ft research vessel traveling at 19.7 kts. Eight superficial lacerations to left fluke tip and 7 to right dorsal fluke. Resights show injuries healed.	0	L5b	0	-	-
18-Jul-09	RIWH	Radiator	1019	39 mi S of Nantucket Island	EN	XU	CE	NR	Entanglement configuration unknown	0	L10	0.75	-	1
09-Aug-09	RIWH	-	3930	BOF	EN	XC	CE	NP	Deep lacerations at fluke insertion potentially affecting arteries. Health decline including increased cyamids & rake marks.	1	L5a	1	-	1
04-Sep-09	RIWH	Mavynne	1151	Off Jeffreys Ledge	EN	US	AE	NR	Mom of the year with constricting wraps around rostrum & back descending to weighted gear below. Disentangled. Resights of mom & calf indicate both healthy. SI was warranted due to constricting wraps.	0	L2	0	2	1
26-Sep-09	RIWH	-	3821	Outside of Provincetown Harbor, MA	EN	US	GI	PT	Disentangled. Subsequent sightings indicate healthy. SI was warranted due to constricting head wrap.	0	L2	0	2	1
26-Nov-09	RIWH	-	3850	Off Cape Lookout Shoals, NC	EN	XU	CE	NR	Full Entanglement configuration unknown; scarring indicates constriction at right mouth. Shed gear. Subsequent sightings indicate healthy.	0	L2	0	3	-
14-Dec-09	RIWH	U	-	1.5 nm NW of Cape Henry, VA	VS	US	AE	-	USCGC (87 ft, 8-9 kts) escorting naval vessel possibly struck a right whale. The navy vessel reported 2 right whales surfaced in front of the vessel. Unclear which animal struck. No injuroes or blood in water seen and the whales appeared to behave normally following the incident.	0	L6c	0	-	-
15-Dec-09	RIWH	Junction	3745		VS	US	AE	-	Whale sighted with two 2 new, healing sets of lacerations (7 & 8 respectively) across it's back. Do not appear to have penetrated blubber layer. Subsequent sightings indicate injury healing and animal healthy	0	L5b	0	-	-
13-May-10	RIWH	Killick	2470	Great South Channel	EN	XU	CE	GU	Constricting wraps on fluke & moderate cyamid loads. Disentangled. Resights indicate healthy. SI was warranted.	0	L2	0	2	1
10-Sep-10	RIWH	Trilogy	1503	Jeffreys Ledge	EN	XU	CE	NR	Constricting wrap on rostrum. Poor health. No resights.	1	L2	1	-	1
20-Oct-10	RIWH	-	3120	30 mi ENE of Gloucester, MA	EN	US	AE	NR	Constricting wraps indicated by discolored flippers. Shed gear confirmed gear free on 9/19/11; left pec pale but robust.	0	L2	0	3	-
18-Dec-10	RIWH	Lou	3140	Cashes Ledge	VS	US	AE	-	Seen with deep, raw injury to peduncle. Experts agree origin is ship strike. Resights indicate wound healing and whale healthy.	0	L5a	0	4	-
25-Dec-10	RIWH	-	3911	10 mi offshore Jacksonville Beach, FL	EN	XU	CE	GU	Embedded line on flipper & in mouth. Severe health decline. Partial disentanglement.	1	L2	1	-	1
19-Jan-11	RIWH	Binary	3010	15 m E of St. Augustine, FL	EN	US	AE	NR	Entanglement configuration unclear. Shed gear. Subsequent sightings indicate gear free & healthy.	0	L10	0	3	-
20-Jan-11	RIWH	-	3853	off South Carolina	VS	US	AE	-	Sixteen deep lacerations across back, potentially penetrating body cavity. No resignts.	1	L5a	1	-	-
30-Jan-11	RIWH	-	3712	9 mi ESE of St. Augustine, FL	EN	XU	CE	NR	Gear exiting left mouth and trailing to peduncle, no wraps. Shed gear; confirmed gear free on 12/8/11. Subsequent sightings indicate healthy.	0	L3	0	-	-
13-Feb-11	RIWH	-	3993	22 mi SSE of Tybee, GA	EN	XU	CE	NR	Discolered right pectoral fine evidence of constricting gear. Health declineemaciated, skin discoloration. No resights.	1	L2	1	-	1
13-Feb-11	RIWH	-	3760	34 mi ESE of Brunswick, GA	EN	XU	CE	GU	Loose loop of gear through the mouth, connecting at the back. Partial disentanglement. Whale shed remaining gear. Subsequent sightings indicate healthy. SI was not warranted due to no constricting gear.	0	L3	0	-	-
17-Mar-11	RIWH	-	3893	Cape Cod Bay	EN	XU	CE	NR	Netting exiting both sides of mouth and trailing down sides; no wraps. Gear shed.	0	L3	0	-	-
27-Mar-11	RIWH	2011 Calf of 1308	-	Nags Head, NC	VS	US	AE	-	Dependent calf of mom that was killed by ship strike.	1	L8	1	-	-

Date	Species	Individual	Catalog #	General Location	Cause of Fate	Country of Origin ^a	Country Conf Code ^b	Gear Type ^c	Description and Comments	Old SI value	New SI Category	New SI value	Departure from new criteria ^d	LOF ^e
22-Apr-11	RIWH	Chiminea	4040	2 mi WSW of Pamet Harbor, Truro	EN	US	GI	PT	Line trailing from both sides of mouth and draped over peduncle & fluke blade. Disentangled. SI not warranted becaasue no constricting wraps.	0	L3	0	-	-
22-Apr-11	RIWH	-	3302	S of Martha's Vineyard, MA	EN	XU	CE	NR	Constricting wrap on head.	1	L2	1	-	1
29-Apr-11	RIWH	-	3123	Cape Cod Bay	EN	XU	CE	NR	Entanglement configuration unknown. Shed gearconfirmed gear free on 3/20/12.	0	L10	0	3	-
19-Jul-11	RIWH	2011 Calf of 2660	-	Off Race Point, Cape Cod	EN	XU	CE	NP	Abandoned dependent calf of seriously injured mother. Fresh entanglement wounds but no gear present. Mom not seen. Mom sighted seriously injured on 03-Sep-12 in Gaspe Bay without the calf	1	L8	1	-	1
03-Aug-11	RIWH	4150	-	Off Provincetown	VS	XU	CE	-	Sighted with 6 new, healing superficial lacerations across back. Resights indicate healthy.	0	L5b	0	-	-
03-Sep-11	RIWH	Gannet	2660	Gaspe Bay	EN	XC	CE	NP	No gear present but evidence of extensive, constricting entanglement. Significant health declinecyamids, sloughing skin. Right blow hole not functional. Dependent calf absent (see 7/19/11 event).	1	L2	1	-	1
18-Sep-11	RIWH	-	4090	Jeffreys Ledge	EN	XU	CE	NR	Entanglement configuration unknown. Could not confirm if anchored.	0	L10	0.75	-	1
27-Sep-11	RIWH	-	3111	10 mi E of Grand Manan Island, BOF	EN	XC	CE	NR	Constricting wrap on left flipper. Partial disentanglement. Entanglement configuration unknown. Resight in 2012 did not resolve configuration or if still entangled, but health apparently improved.	0	L10	0.75	-	1
26-Nov-11	RIWH	-	1331		VS	XU	CE	-	Sighted with 13+ new healing superficial laceractions across back that were not present when whale seen in April 2011.	0	L5b	0	-	-
Sei Whale										1		1	-	1
09-Apr-08	SEWH	-	-	51 nm E of Chatham, MA	EN	XU	CE	NR	Constricting gear and health decline (sloughing skin).	1	L2	1	-	1
Unidentified V	Whale			-						0		3.88	-	-
28-Jul-07	UNWH	-	-	150 nm E of Cape May, NJ	VS	US	AE	-	Lookout reported unidentified animal(s) 5 m off bow too close to avoid. Large vibration felt a few minutes later in aft part of ship. Blood in wake, large animal circling. No photos. Vessel traveling @ 20.8 kts.	0	L6a	1	-	-
30-Sep-07	UNWH	-	-	~12 nm E of Cape Ann, MA	VS	US	AE	-	Vessel operator reported collision, blood, coarse/fatty pink chunks, and sheen on water. Vessel 24 ft traveling at unknown speed.	0	L11	0.52	-	-
03-Sep-08	UNWH	-	-	Stellwagen Bank	VS	US	AE	-	A small boat landed on an animal "as the wave flattened". The prop did not appear to hit the animal. No injuries were seen, and the animal submerged. Initial reports do not indicate species, however, the crew saw a fin.	0	L7b	0.14	-	-
31-Mar-09	UNWH	-	-	~3.5 mi off of Hilton Head Island, SC	VS	US	AE	-	30' pleasure craft reported striking a whale and seeing copious amounts of blood. Vessel speed unknown. Vessel sank. No injured whale was sighted despite intensive aerial surveys.	0	L11	0.52	-	-
20-Jun-09	UNWH	-	-	Race Point, Provincetown, MA	VS	US	AE	-	Private vessel was going 15-20 knots in vessel <65 ft when whale surfaced ~20 feet dead center in front of bow. Captain slowed the engines but struck whale. Vessel stayed with whale for ~20 min while it surfaced several times then swam away. No blood in water or injury seen	0	L6b	0.2	-	-
15-Nov-10	UNWH	-		east of East Wolf Island, NB	EN	XC	CE	NR	Extent and configuration of entanglement unknown.	0	L10	0.75	-	1
21-Sep-11	UNWH	-	-	Northumberland Strait, Pointe-Sapin, PEI	EN	CN	CE	NR	No photos or description to determine species or confirm extent of injury.	0	L10	0.75	-	1

Notes:

a. CN=Canada, US=United States, XB=Unk lst sight in Bahamas, XC=Unk 1st sight in CN, XU=Unk 1st sight in US
b. GI=gear identified, AE=acute/very recent event or confirmed location, CE=chronic/prolonged event without indication of initial location
c. GN=gillnet, GU=gear unidentifiable, H=hook, MF=monofilament, MT=midwater trawl, NP=none present, NR=none recovered/received, PT=pot/trap, SN=seine, WE=weir
d. 1=health decline 2=disentangled 3=shed gear 4=resighted healed/healthy 5=rehabilitated and released into wild
e. Consider for List of Fisheries inclusion (1=yes)

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