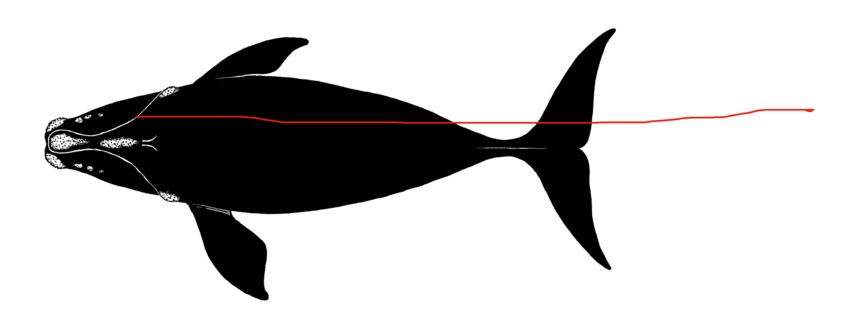
	Date first obser	ved entangled	12 Jan 2008		
	(date seen prior without gear)		(17 Sep 2007)		
ĺ	Sex Female	Rirth year	1996	Age at entanglement 12	

Coop atual ID	PCCS	NMFS		GEAR ID
Case study ID	WR-2008-02			
Gear sample collected?	No	Gear type		



Reproductive prior	Yes				
Reproductive af	ter entangleme	ent detection?	Yes		
	Entangle	ment severity	Low		
Wound coverity	Head/ Rostrum	Flippers	Body	Flukes	
Wound severity Low		Low	None	None	Low
Duration of time	Minimum 139 days, maximum 421 days				
	No				
	Alive - Last sighted in 2015				
Number of prior entangleme	nt interactions	3			

Entanglement configuration	Single line exiting right side of mouth and trailing less than one body length behind flukes.
Anchoring point(s)	Mouth
Gear configuration confidence	High
Remaining questions	Nature of rope inside mouth
Comments	



12 Jan 2008 PCCS



11 Mar 2008 PCCS

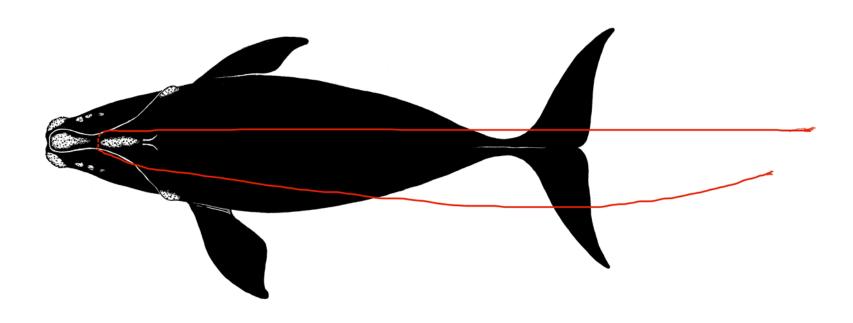


11 Mar 2008 PCCS



Date first observed entangled			29 Jan 2008		
(date seen prior without gear)		(14 Sep 2007)			
Sex	Male	Birth year	2003	Age at entanglement	5

Coop attedy ID	PCCS	NMFS	GEAR ID
Case study ID	WR-2008-04		
Gear sample collected?	No	Gear type	



Reproductive prior					
Reproductive after entanglement detection?					
	Entangle	ment severity	Moderate		
Mouth		Head/ Rostrum	Flippers	Body	Flukes
vvourid severity	Wound severity Low		Unknown	None	Medium
Duration of time	carrying gear	Minimum 4 days, maximum 234 days			
Disentangled?		No			
	Alive - Last sighted in 2016				
Number of prior entangleme	nt interactions	1			

Entanglement configuration	Continuous line through mouth and trailing on either side to just aft of flukes
Anchoring point(s)	Mouthline
Gear configuration confidence	High
Remaining questions	None
Comments	Gear was later shed.



29 Jan 2008 NEA



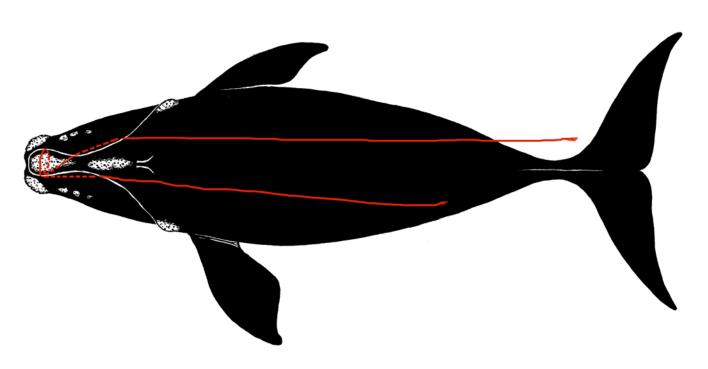
29 Jan 2008 FWRI



10 Feb 2010 GDNR

Date first observed entangled			03 Feb 2008		
(date seen prior without gear)		(07 Jun 2007)			
Sex	Male	Birth year	Unknown	Age at entanglement	20+

Cana atudu ID	PCCS	NMFS	GEAR ID
Case study ID	WR-2008-05		
Gear sample collected?	No	Gear type	



Reproductive prior					
Reproductive after entanglement detection?					
	Entangle	ement severity	Severe		
Wound coverity	Head/ Rostrum	Flippers	Body	Flukes	
vvourid severity	Wound severity Low		Low	None	Medium
Duration of time	carrying gear	Minimum 73 days, maximum 313 days			
Disentangled?		No			
	Alive - Last sighted in 2016				
Number of prior entangleme	nt interactions	1			

Entanglement configuration	Continuous line entering mouth and knotted in a wrap around the rostrum; line trailing from mouth to flanks
Anchoring point(s)	Mouthline
Gear configuration confidence	High
Remaining questions	None
Comments	Whale sighted gear free in 2011



16 Apr 2008 PCCS



16 Apr 2008 PCCS



16 Apr 2008 PCCS



16 Apr 2008 PCCS



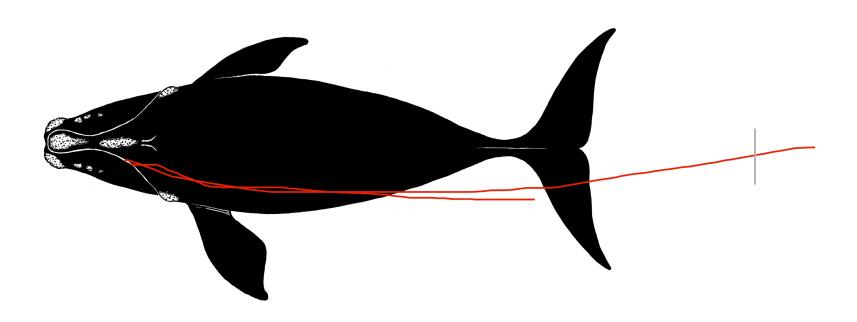
16 Apr 2008 PCCS



16 Apr 2008 PCCS

D	ate first obser	ved entangled	06 Mar 2008		
(date seen prior without gear)		(08 May 2007)			
Sev	Famala	Rirth year	Unknown	Age at entanglement	28+

Casa study ID	PCCS	NMFS		GEAR ID
Case study ID	WR-2008-06			J030608
Gear sample collected?	Yes	Gear type		



Reproductive prior	Yes				
Reproductive af	No				
	Entangle	ment severity	Moderate		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Low	Low	Unknown	None	Medium
Duration of time	carrying gear	Minimum 786	6 days, maxim	num 1090	days
	Yes - 02 May 2010				
	Alive - Last sighted in 2014				
Number of prior entangleme	nt interactions	1			

Entanglement configuration	Long length of line caught in baleen of left mouthline and trailing to ~50 feet.
Anchoring point(s)	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	The entanglement configuration of this whale changed substantially between 2008 and 2010 with the long length of line coming unlaid with one strand forming a complete wrap of the upper jaw. This new configuration was considered lethal and the whale was disentangled.

Polymer type		
Gear component		
Rope diameter (inches)		Rope not yet analyzed.
Breaking	Tested	
strength (lbs)	New	



11 Mar 2008 PCCS



01 May 2010 PCCS



01 May 2010 PCCS



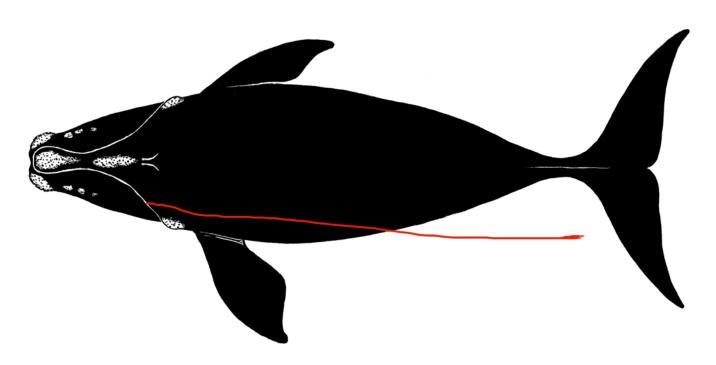
01 May 2010 PCCS



01 May 2010 PCCS

			07 May 2008		
(date seen prior without gear)		(21 Apr 2008)			
Sex Male Birth year		1982	Age at entanglement	26	

Casa study ID	PCCS	NMFS		GEAR ID
Case study ID	WR-2008-09			
Gear sample collected?	No	Gear type		



Reproductive prior							
Reproductive af							
	Entangle	ement severity	Minor				
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes		
Wound severity	Low	Low	Unknown	None	None		
Duration of time	carrying gear	Minimum 1 d	ay, maximum	181 days			
	Disentangled?			No			
	Alive - Last sighted in 2016						
Number of prior entangleme	nt interactions	1					

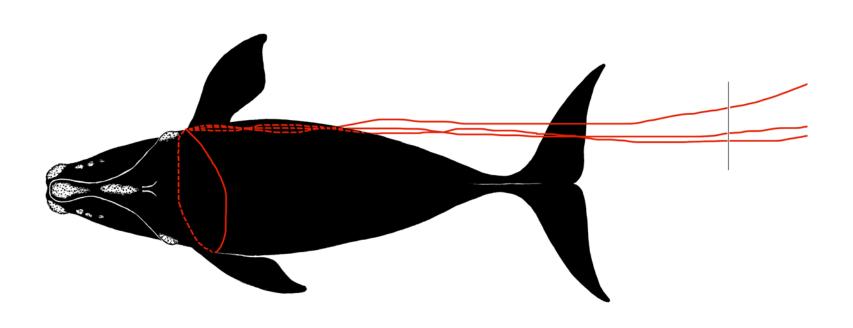
Entanglement configuration	Line exiting left mouthline, trailing to flank
Anchoring point(s)	Mouthline
Gear configuration confidence	Low
Remaining questions	Unclear if the line exists on the other side of mouth or is
	just trapped in baleen on left side.
Comments	Gear was later shed.



07 May 2008 NEFSC

Ì		•	·	
	Date first obser	ved entangled	08 Dec 2008	
(date seen prior without gear)		(14 Apr 2008)		
	Sex Female	Birth year	Unknown	Age at entanglement 7+

Casa study ID	PCCS	NMFS	GEAR ID
Case study ID	WR-2008-33	E39-08	J120808
Gear sample collected?	Yes	Gear type Trap/po	t



Reproductive prior to/after entanglement detection?			No/ Yes		
	Moderate				
Enta	inglement con	figuration risk	High		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Medium	Medium	Unknown	Medium	Medium
Duration of time	carrying gear	Minimum 10 days, maximum 291 days			
	No				
	Alive - Last sighted in 2014				
Number of prior entangleme	nt interactions	2			

Entanglement configuration	Body wrap at level of flippers with three lines trailing aft
	of flukes to ~300feet.
Anchoring point(s)	Body
Gear configuration confidence	Low
Remaining questions	Some question remains if there was also a tight rostrum wrap (based on no evidence of line exiting mouth this seems unlikely); unclear if either flipper was wrapped.
Comments	Whale was telemetry-tagged and gear was later shed.

Polymer type		PP	PP
Gear component			
Rope di	iameter (inches)	5/16 (0.312)	5/16 (0.312)
Breaking	Tested	1 560	1 670
strength (lbs)	New	1 700	1 700



18 Dec 2008 GDNR



18 Dec 2008 GDNR



18 Dec 2008 GDNR



18 Dec 2008 WT/GA



18 Dec 2008 WT/GA

FORENSIC ANALYSIS OF ROPES WHALE ENTANGLEMENT PROJECT

SPECIMEN ID NO. NMFS NO.

J120808rw E39-08

Gear Description:

Several long sections of ⁵/₁₆ inch polypropylene orange rope. One coil included a length of ⁵/₁₆ inch polypropylene pale green rope about 100 feet long and spliced into a section of orange line. One swivel appeared in an orange line and one in the green indicating an endline. Gangions were apparent at some locations in the orange line indicating trap connections. The apparent use was for fixed trap gear.





Connecting orange to green and swivel halves.

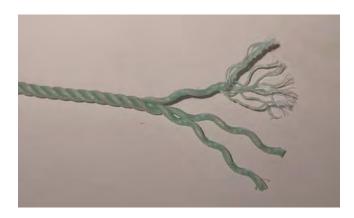


Gangion connection.

Rope description

J120808-1: This is a $^5/_{16}$ inch pale green polypropylene rope. It has a very hard lay. Condition is very good. The line has10 yarns per strand and 3 center yarns.

Tested (T) or adjusted (A) strength	Typical new strength	Rope condition
1,560 lbs (T)	1,700 lbs	Very good



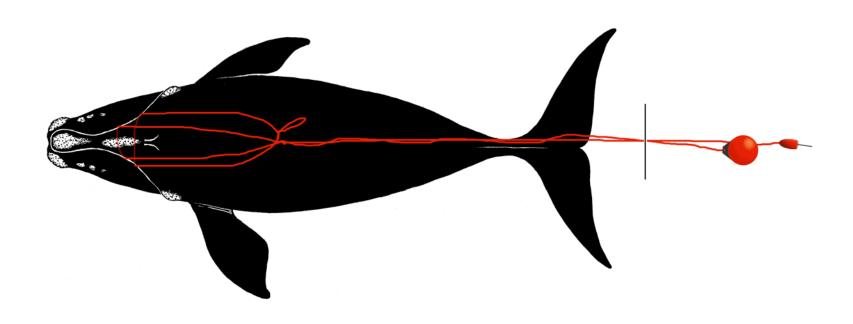
J120808-2 : This is a $^5/_{16}$ inch orange polypropylene rope. It has a hard lay. Condition is very good. The line has 6 yarns per strand and 1 center yarn.

Tested (T) or adjusted (A) strength	Typical new strength	Rope condition
1,670 lbs (T)	1,700 lbs	Very good



Date first obser (date seen prior				
Sex Male	Birth year	2007	Age at entanglement	1

Cana atudu ID	PCCS	NMFS	GEAR ID
Case study ID	WR-2008-35		
Gear sample collected?	Yes	Gear type	



Reproductive prior to entanglement detection?					
Reproductive after entanglement detection?					
	Entangle	ment severity	Minor		
Wound goverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Low	Low	None	Low	Medium
Duration of time carrying gear		Minimum 2 d	ays, maximur	n 99 days	
	Disentangled?		Yes - 27 Dec 2008		
Status		Alive - Last sighted in 2015			
Number of prior entangleme	nt interactions	0			

Entanglement configuration	Two loops of line through mouth, gathered over back and leading to buoys trailing ~ 300 ft aft of flukes.
Anchoring point(s)	Mouthline
Gear configuration confidence	High
Remaining questions	Not all bitter ends can be accounted for and may be inside mouth/baleen
Comments	Rope not analyzed yet.







27 Dec 2008 FWRI



28 Dec 2008 FWRI



26 Dec 2008 FWRI

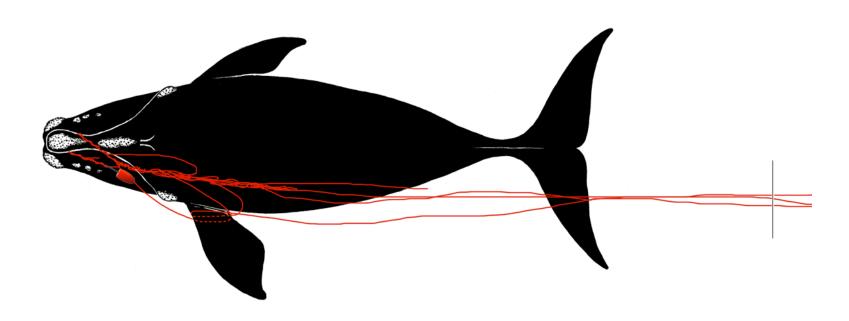


26 Dec 2008 FWRI

•				
	Date first obser	ved entangled	14 Jan 2009	
	(date seen prior	r without gear)	(21 Apr 2008)	
	Sex Male	Birth year	2003	Age at entanglement 6

Whale ID Eg #3311

Cana atudu ID	CCS	NMFS		GEAR ID
Case study ID	WR-2009-01	E01-0	9	J011409
Gear sample collected?	Yes	Gear type	Trap/po	t gear



Reproductive prior to/after entanglement detection?					
Entanglement injury severity			Severe		
Ent	anglement con	figuration risk	High		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	High	High	Medium	None	Medium
Duration of time carrying gear		Minimum 51 days, maximum 318			
Disentangled? Yes - F			06 Mar 2009		
	Presumed de condition	ead, last sight	ted in 2009	9 in poor	
Number of prior entangleme	nt interactions	2			

Entanglement configuration	Loop of twisted lines caught around upper jaw and leading to heavy tangle of lines and bullet buoy along left flank; some of the tangle also wrapped the left flipper; lines trailing to ~300feet aft of the flukes.		
Anchoring point(s)	Mouthline, flipper		
Gear configuration confidence	Reasonable		
Remaining questions	Unclear if any line wrapped under the body and unclear if any other lines entered the mouth.		
Comments	Large tangle of line made exact assessment difficult.		
Polymer type	Polysteel	Polysteel	
Gear component	Groundline		
Rope diameter (inches)	9/16 (0.562)	9/16 (0.562)	

6 810

7 000

Tested 6 280

New 7 000

Breaking

strength (lbs)



18 Jan 2009 FWRI



23 Jan 2009 FWRI



06 Mar 2009 FWRI



06 Mar 2009 FWRI



06 Mar 2009 FWRI

FORENSIC ANALYSIS OF ROPES WHALE ENTANGLEMENT PROJECT

SPECIMEN ID NO. NMFS NO.

J011409rw E01-09

Gear Description:

The attached "Fishery Interaction Gear Analysis and sketch provide the best description of the gear.

Two specimens were taken from different parts of the gear.

This appeared to be fixed trap gear.



Gear laid out showing scale of the lines.



Gear as stored

Rope description:

J011409-1 Polysteel, $^9/_{16}$ pale green float line. Apparently a ground line as gangion attached. Very good condition. There are 6 yarns per strand with a center yarn.

Tested (T) or adjusted (A) strength	Typical new strength	Rope condition
6,280 lbs (T)	7,000 lbs	Very good

J011409-2 Polysteel, $^9/_{16}$ pale green float line. Uncertain as to use in the gear. Very good condition. There are 6 yarns per strand with a center yarn.

Tested (T) or adjusted (A)	Typical new strength	Rope condition
strength		
6,810 lbs (T)	7,000	Very good



J011409-1 and J011409-2 are identical

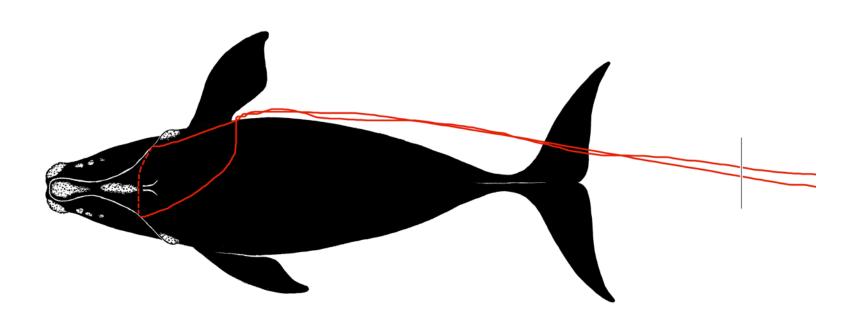
J011409-3 Polysteel, ⁷/₁₆ orange float line. Used as gangion to a trap.



Connection of gangion. No specimen taken for gangion as it was so short.

Date first obser	ved entangled	31 Jan 2009	
(date seen prior without gear)		(13 Sep 2008)	
Sex Female	Birth year	2004	Age at entanglement 5

Casa study ID	CCS	NMFS	GEAR ID
Case study ID	WR-2009-02	E02-09	J013109-1
Gear sample collected?	Yes	Gear type	



Reproductive prior to/after entanglement detection?			No/ Yes		
Entanglement injury sever			Moderate		
Ent	anglement con	figuration risk	Low		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Low	Low	Medium	Low	Medium
Duration of time carrying gear		Minimum 12 days, maximum 347 days			
	No				
	Alive - Last sighted in 2016				
Number of prior entangleme	1				

Entanglement configuration	Line through mouth and twisted together to form a loop on the right shoulder with both lengths of line trailing aft of the flukes by ~40 feet.
Anchoring point(s)	Mouthline
Gear configuration confidence	Low
Remaining questions	Unclear if the line wrapped the right flipper
Comments	Whale was telemetry-tagged and gear was later shed.

Polymer type		Polysteel
Gear component		
Rope diameter (inches)		7/16 (0.437)
Breaking	Tested	3 200
strength (lbs)	New	4 100









FORENSIC ANALYSIS OF ROPES WHALE ENTANGLEMENT PROJECT

SPECIMEN ID NO. NMFS NO.

J013109rw E02-09

Gear Description:

This limited specimen did not allow determination as to use. The unraveled green line (J0101309-2) is spliced into the grey line (J013109-1) and may have been a gangion for a trap. If so, the line could be a ground line. A small section of the grey line was also recovered and showed considerable damage.



Rope description:

J013109-1 Å 7 /₁₆ inch polysteel float line. Size was reported as 3 /₈ inch but it is closer to 7 /₁₆ inch. One strand contains a yellow yarn and two green tracers parallel to the yellow yarn. There are 7 total yarns per strand plus a center yarn.

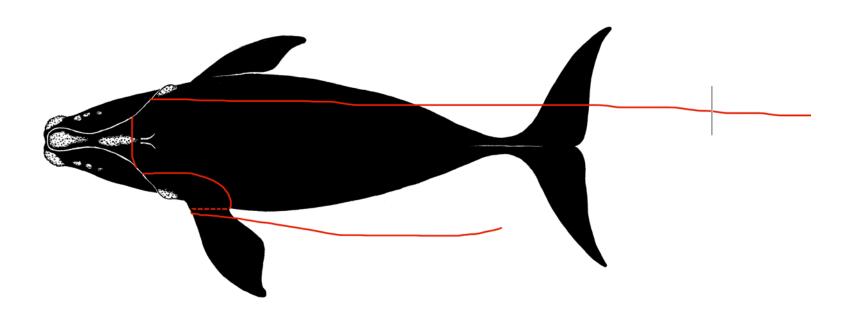
Tested (T) or adjusted (A)	Typical new strength	Rope condition
strength		
3,320 lbs (A)	4,100 lbs	Fair



J013109-1

	Speci	es Right Wh	Wh	ale ID	Eg #3714		
	Date first observed entangled (date seen prior without gear)						
Sex	Male	Birth year	2007		Age	at entanglement	2

Coop study ID	PCCS	NMFS	GEAR ID
Case study ID	WR-2009-03	E03-09	J020709-1
Gear sample collected?	Yes	Gear type	

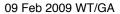


Reproductive prior to/af					
Entanglement injury severity			Minor		
Ent	anglement con	figuration risk	High		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Low	Low	Low	None	None
Duration of time carrying gear		Minimum 5 d	ays, maximun	n 62 days	
Disentangled?		Yes, 12 Feb 2009			
Status		Alive - Last sighted in 2016			
Number of prior entangleme	nt interactions	1			

Entanglement configuration	Thin line over rostrum and into mouth; on the right, this line exited low through the mouthline trailing aft of the flukes by ~30feet; on the left, line exited the mouth line and lead to a wrap(s) of the left flipper and trailed to tailstock.
Anchoring point(s)	Mouthline, flipper
Gear configuration confidence	High
Remaining questions	Due to the dark color of the line the nature of the flipper wrap(s) could not be determined.
Comments	The thin, dark nature of the line made detection and assessment difficult.

Polymer type		PP
Gear component		
Rope diameter (inches)		7/16 (0.437)
Breaking	Tested	2 560
strength (lbs)		3 150







09 Feb 2009 GDNR



09 Feb 2009 GDNR



09 Feb 2009 GDNR



09 Feb 2009 GDNR

FORENSIC ANALYSIS OF ROPES WHALE ENTANGLEMENT PROJECT

SPECIMEN ID NO. NMFS NO.

J020709rw E03-09

Gear Description:

The recovered gear consisted of one long and one short section of line as seen below. The application could not be determined.



Rope description:

J020709-1 The line was $^{7}/_{16}$ inch black polypropylene with one white yarn in one strand. The line was reported to be $^{3}/_{8}$ inch but is closer to $^{7}/_{16}$ inch. There are 9 yarns/strand with a single white yarn in one strand. This is a soft rope. The condition showed moderate wear. The frayed end may indicate a tensile break. See photo below.

Tested (T) or adjusted (A) strength	Typical new strength	Rope condition
2,560 lbs (T)	3,150 lbs	Good



Frayed end may indicate tensile break

	ate first obser	ved entangled	18 Jul 2009		
(0	date seen prio	r without gear)	(10 Mar 2009)		
Sex	Male	Birth year	Unknown	Age at entanglement	30+

Species Right Whale

Casa study ID	CCS	NMFS	GEAR ID
Case study ID	WR-2009-16		
Gear sample collected?	No	Gear type	

No drawing available

Reproductive prio	Yes				
Reproductive a					
	Entangle	ement severity	Severe		
Mound on with	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Unknown	Unknown	Unknown	None	High
Duration of time	Minimum 1 d	ay, maximum	124 days		
	No				
	Presumed dead - Last sighted in 2009				
Number of prior entangleme	ent interactions	2			

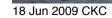
Entanglement configuration	Approximately 70-100 feet of trailing line with a ~20 inch
	yellow ball buoy. High severity scarring on the flukes.
Anchoring point(s)	Unknown
Gear configuration confidence	Low
Remaining questions	Anchoring point(s)
Comments	Animal not showing full flukes on dives. No sightings since the initial entanglement sighting - prognosis uncertain.





18 Jun 2009 CKC 18 Jun 2009 CKC

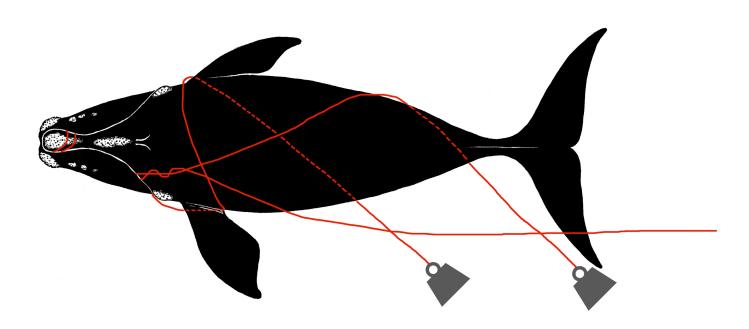




18 Jun 2009 CKC

Date first obser	ved entangled	03 Sep 2009		
(date seen prior	without gear)	(28 Aug 2009)		
Sex Female	Birth year	Unknown	Age at entanglement	30+

Coop atudy ID	CCS	NMFS	GEAR ID
Case study ID	WR-2009-25		
Gear sample collected?	No	Gear type	



Reproductive prior	Yes				
Reproductive af	Unknown				
Entanglement severity			Moderate		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Medium	Medium	Unknown	Medium	Medium
Duration of time	Minimum 2 d	ays, maximur	n 7 days		
	Yes - 04 Sep	2009			
	Alive? - Last	sighted in 20	12		
Number of prior entangleme	2				
Number of prior entangleme	nt interactions	2			

Entanglement configuration	Line wrapping rostrum twice, exiting mouth to left flipper then over body to weighted gear at depth; other line exiting mouth went to short bitter end as well as over the body to weighted gear at depth.
Anchoring point(s)	Mouthline, body
Gear configuration confidence	High
Remaining questions	
Comments	One of the few right whale entanglement cases in which whale was anchored by gear; all gear removed but not retained. Known mother, calf resighted after event.



04 Sep 2009 PCCS



04 Sep 2009 PCCS



04 Sep 2009 PCCS



04 Sep 2009 PCCS



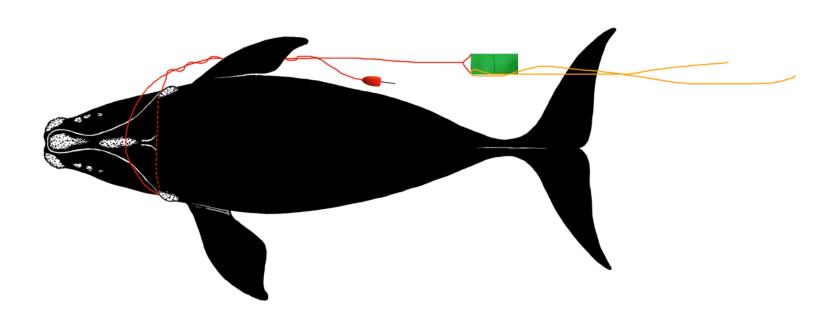
04 Sep 2009 PCCS



04 Sep 2009 PCCS

	Date first obser	ved entangled	26 Sep 200	09		
	(date seen prior	r without gear)	(10 Jul 200	9)		
ĺ	Sex Unknown	Birth vear	2008	<i>F</i>	ae at entanglement	1

Coop study ID	CCS	NMFS	GEAR ID
Case study ID	WR-2009-29	E25-09	J092609-1
Gear sample collected?	Yes	Gear type Lobster	



Reproductive prior to/after entanglement detection?					
Entanglement injury severity			Minor		
Entanglement configuration risk			High		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Low	Low	None	None	None
Duration of time carrying gear		Minimum 1 day, maximum 76 days			
Disentangled?		Yes - 26 Sep 2009			
Status		Alive - Last sighted in 2017			
Number of prior entanglement interactions		None			

Entanglement configuration	Single trap and buoy line caught in the gape of the mouth and wrapped over upper jaw.
Anchoring point(s)	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Original entanglement picked up other gear as whale
	traveled.

Polymer type		PP/PET
Gear component		Vertical line
Rope diameter (inches)		3/8 (0.375)
Breaking	Tested	2 140
strength (lbs)	New	2 600



26 Sep 2009 PCCS



26 Sep 2009 PCCS

FORENSIC ANALYSIS OF ROPES WHALE ENTANGLEMENT PROJECT

SPECIMEN ID NO. J092609rw

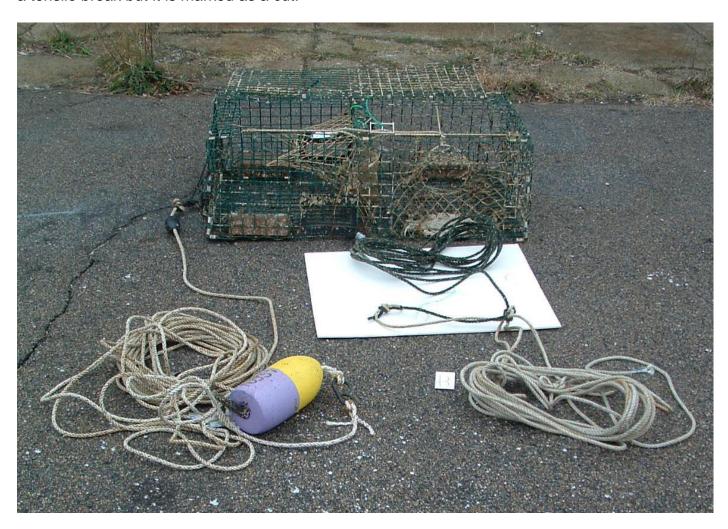
NMFS NO. E25-09

Gear Description:

This is a complete single lobster trap gear set. The end line attached to the buoy was in two pieces of sink line, $\frac{5}{16}$ inch and $\frac{3}{8}$ inch, joined by a splice. A second line of two pieces, seen to the right, did not appear to be part of this gear set.

The bridle connecting the trap to the end line was $\frac{5}{16}$ inch black mono polypropylene. No specimen was taken.

The third photo shows the extraneous lines and their assembly. The frayed end appears to be a tensile break but it is marked as a cut.







A weak link was placed below the buoy and connected by dipping spliced eyes together.

Bungee cord was inserted into the end line to control ascent of the float seen in the middle photo. A second bungee cord near the buoy was used as a gear marker.

Rope description:

J092609-1a This is a 3 / $_{8}$ inch combo sink rope with polyester over polypropylene fiber. This was one segment of the end line. Purple marker yarn in one strand.

Tested (T) or adjusted (A) strength	Typical new strength	Rope condition
2,140 lbs (T)	2,600 lbs	Good

J092609-1b This is a $\,^{5}/_{16}$ inch combo sink rope with polyester over polypropylene fiber. This was the second segment of the end line. There are 3 yarns/strand plus purple yarn in one strand. Not tested

J092609-2 This is a $^{5}/_{16}$ inch combo sink rope with polyester over Polysteel fiber. There are 3 yarns/strand plus red tracer. This was a segment of the line deemed not part of the set.

Tested (T) or adjusted (A) strength	Typical new strength	Rope condition
1,850 lbs (T)	2400 lbs	Good

J092609-3 This is a 3 / $_{8}$ inch polypropylene fiber float rope, black with a green marker yarn in one strand. This was the second segment of the line deemed not part of the set. There are 3 yarns/strand plus one green yarns in one strand.

Tested (T) or adjusted (A)	Typical new strength	Rope condition
strength		
1,790 lbs (T)	2,430 lbs	Fair



J092609-1a and J092609-1b Lines identical except for size



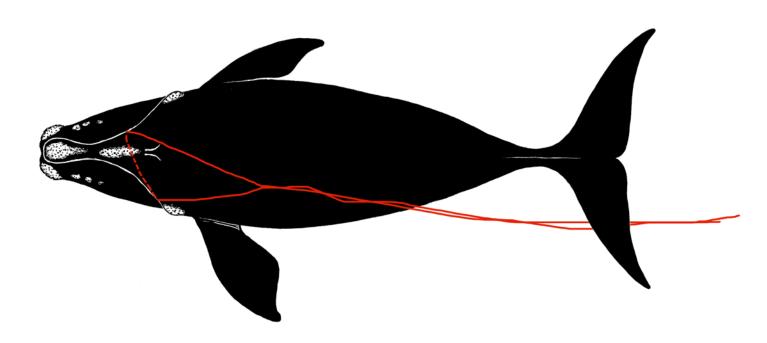
J092609-2



J092609-3

Date first obser	ved entangled	26 Nov 2009	
(date seen prior without gear)		(18 Feb 2009)	
Sex Unknown	Birth year	2008	Age at entanglement 1

Casa study ID	CCS	NMFS		GEAR ID
Case study ID	WR-2009-34			
Gear sample collected?	No	Gear type		



Reproductive prior to entanglement detection?					
Reproductive after entanglement detection?					
Entanglement severity			Moderate		
Wound coverity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
Wound severity	Low	Medium	Unknown	Medium	Medium
Duration of time carrying gear		Minimum 1 day, maximum 327 days.			
Disentangled?		No			
Status		Alive - Last sighted in 2014			
Number of prior entanglement interactions		0			

Entanglement configuration	Line through mouth twisted together forming loop on left shoulder; unknown distance of trailing line.
Anchoring point(s)	Mouthline
Gear configuration confidence	Low
Remaining questions	Unknown if flippers were involved.
Comments	Poorly documented case; some interpretation based on scarring seen on whale after it had shed gear.



26 Nov 2009 HDD



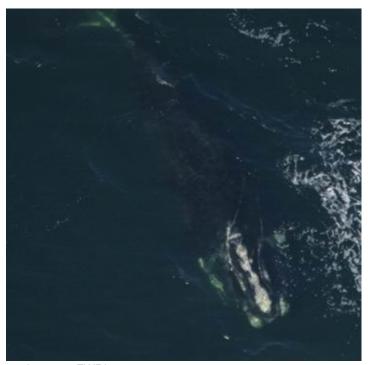
26 Nov 2009 HDD



26 Nov 2009 HDD



19 Jan 2010 GDNR



13 Jan 2010 FWRI

