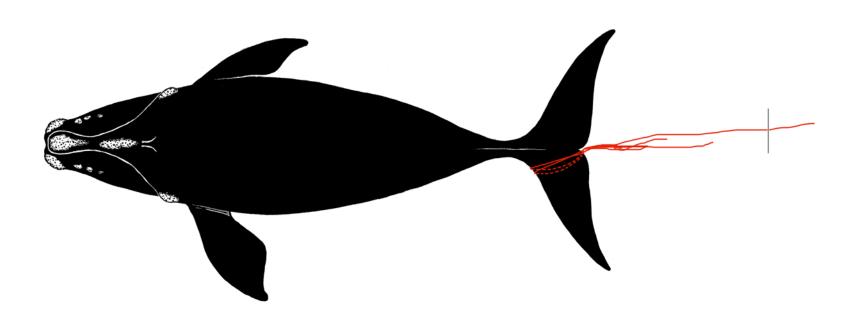
Date first observed entangled				
(date seen prior without gear)		(24 Jan 2010)		
Sex Male	Birth year	Unknown	Age at entanglement	17+

Whale ID 2470

Species Right Whale

Coop study ID	CCS	NMFS	GEAR ID
Case study ID	WR-2010-03		J051310
Gear sample collected?	Yes	Gear type	



Reproductive prior to/af					
Entanglement injury se			Severe		
Entanglement configuration ris			High		
Wound severity	Mouth	Head/ Rostrum	Flippers	Body	Flukes
	None	None	None	Unknown	High
Duration of time	carrying gear	Minimum 1 day, maximum 106 days			
Disentangled?		Yes - 13 May 2010			
	Alive - Last sighted in 2015				
Number of prior entanglement interactions		4			
Duration of time	None carrying gear Disentangled? Status	None Minimum 1 d Yes - 13 May Alive - Last s	None ay, maximum 2010	Unknown 106 days	

Entanglement configuration	One continuous piece of line wrapping the left fluke blade twice and trailing aft of the flukes by ~130feet
Anchoring point(s)	Flukes
Gear configuration confidence	High
Remaining questions	
Comments	Line was configured in such a way that the drag of the trailing line kept the fluke wraps tight even as the leading and trailing edges of the flukes eroded.

Polymer Type		Polysteel
Gear Component		
Rope Diameter (inches)		5/8 (0.652)
Breaking Strength	Tested	6 480
(lbs)	New	9 000



13 May 2010 NEFSC



13 May 2010 PCCS



13 May 2010 NMFS



13 May 2010 NEFSC
This case study was developed under NOAA Award # NA09NMF4520413 to the Consortium for Wildlife Bycatch Reduction, administered at the New England Aquarium, Boston, MA, USA (available at www.bycatch.org).
See: Knowlton, A.R., J. Robbins, S. Landry, H.A. McKenna, S.D. Kraus, T. B. Werner. 2015. Effects of fishing rope strength on the severity of large whale entanglements. Conservation Biology DOI: 10.1111/cobi.12590

DATA SHEET

FORENSIC ANALYSIS OF ROPES WHALE ENTANGLEMENT PROJECT

SPECIMEN ID NO. NMFS NO.

J051310rw E04-10

Gear Description:

The gear is as seen in the photos below. Algae growth on much of it. Tangling and some severe damage. Some cuts and knots noted by recovery team.





Rope description:

J051310-1: Line was ⁵/₈ inch white polysteel but measured slightly undersized. There were 18 yarns per strand. The line was soft. An orange tracer is in one strand. Condition was fair overall but some areas showed severe damage.

Tested (T) or adjusted (A)	Typical new strength	Rope condition
strength		
6,480 lbs (T)	9,000 lbs	Fair

Species	Right Whale	Whale ID	Eg # 1124
			0

Date first observed entangled		27 Jun 2010			
(date seen prior without gear)		(5 Jan 202	10)		
Sex	Male	Birth year		Age at entanglement	31+

Case study ID	CCS	NMFS	GEAR ID
	WR-2010-07	E08-10	
Gear sample collected?	No	Gear type	

Reproductive prior to/after entanglement detection					
	Entar			Severe	
	Entangle	ement configuration risk		High	
Wound coverity	Mouth		Flippers	Body	Flukes
Wound severity	Unk	High	High	Unk	Unk
Duration of t	ime carrying gear	Minimum 1 days, maximum 172 days			ys
	Disentangled?		No		
Status		Dead			
Number of pri	or entanglements	2			

Entanglement configuration	Multipe wraps embedded around rostrum. Flippers also had deep, chronic wounds
Anchoring points	Mouthline, flippers
Gear configuration confidence	High
Remaining questions	
Comments	Covered with orange cyamids

Polymer type		
Gear component		
Rope diameter	(inches)	
Breaking strength (lbs)	Tested	
	New	



30 June 2010, US Coast Guard, rostrum and left flipper



27 June 2010, US Coast Guard, left body



27 June 2010, US Coast Guard, body and left flipper



1 July 2010, WHOI, deep cut from rope in rostrum

Species Right Whale	Whale ID	Eg # 1503
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Date first observed entangled		10 Sep 20)10		
(date seen prior without gear)		(12 Apr 2	010)		
Sex	Female	Birth year	1985	Age at entanglement	25

Case study ID	CCS	NMFS	GEAR ID
	WR-2010-20	E20-10	
Gear sample collected?	No Gear type		

Reproduct	t detection	Yes/No			
	ıry severity	Moderate			
	Entangle	ment configuration risk		High	
Wound severity	Mouth	Head/ rostrum	Flippers	Body	Flukes
would severity	Unk	Medium	Unk	None	Medium
Duration of t	ime carrying gear	Minimum 1 days, maximum 150 days			ys
Disentangled?		No			
Status		Presumed dead. Last seen 2010			
Number of pri	or entanglements	4			

Entanglement configuration	Three entwined ropes exit left mouth crossing rostrum towards right flipper
Anchoring points	Mouthline, flipper?
Gear configuration confidence	Low
Remaining questions	Involvement of one or both flippers is unknown
Comments	

Polymer type		
Gear component		
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



10 Sep 2010, Blue Ocean Society

Species Right Whale Whale ID Eg # 3120
--

Date first observed entangled		20 Oct 2010			
(date seen prior without gear)		(19 Oct 2010)			
Sex	Male	Birth year	2001	Age at entanglement	9

Case study ID	CCS	NMFS		GEAR ID
	WR-2010-21	E22-10		
Gear sample collected?	No	Gear type	Gillnet	

Reproduct	t detection				
	Entan	nglement injury severity		Severe	
	Entangle	ement configuration risk		High	
Wound severity	Mouth	Head/ rostrum	Flippers	Body	Flukes
would severity	Medium	None	High	None	Medium
Duration of t	ime carrying gear	Minimum 89 days, maximum 153 days			ays
	Disentangled?		No		
Status		Alive - last seen in 2015			
Number of pri	or entanglements	2			

Entanglement configuration	Line around body and probably one or both flippers
Anchoring points	Flippers?, mouthline?
Gear configuration confidence	Low
Remaining questions	Uncertain how mouth and flippers were involved
Comments	Gear shed

Polymer type		
Gear con	nponent	Float line
Rope diameter	(inches)	
Breaking strength (lbs)	Tested	
	New	



20 Oct 2010, Blue Ocean Society



20 Oct 2010, Blue Ocean Society



20 Oct 2010, Blue Ocean Society

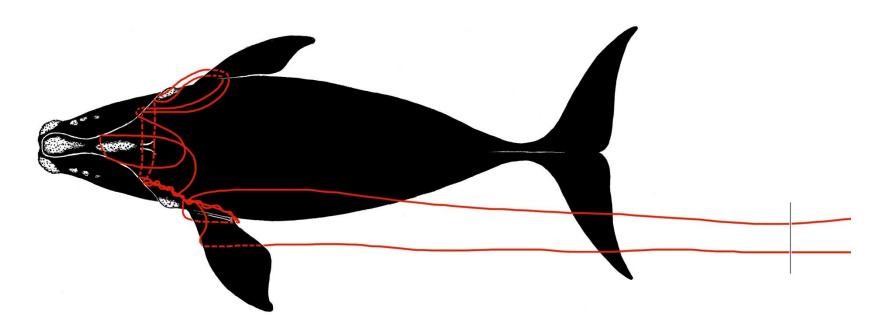


18 Sep 2011, NEAq, deep injury left flipper

Species Right Whale	Whale ID	Eg # 3911
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Date first observed entangled		25 Dec 2010			
(date	(date seen prior without gear)		(23 Feb 2	010)	
Sex	Female	Birth year	2009	Age at entanglement	2

Case study ID	CCS	NMFS	GEAR ID
ŕ	WR-2010-23	E25-10	J122510 rw
Gear sample collected?	yes	Gear type	



Reproduc	t detection	No/No			
	Entar	nglement inju	ury severity	Severe	
	Entangle			High	
Wound severity	Mouth	Head/ rostrum	Flippers	Body	Flukes
would severity	High	High	High	Medium	High
Duration of	ime carrying gear	Minimum 38 days, maximum 342 days			ays
Disentangled?		Yes, partial			
Status		Dead			
Number of pri	or entanglements	1			

Entanglement configuration	Ropes through mouth, around both flippers, and trailing ~200 ft
Anchoring points	Moutline, flippers
Gear configuration confidence	High
Remaining questions	
Comments	Poor conditon, succumbed to sharks

Polymer type		
Gear con	nponent	
Rope diameter	(inches)	
Breaking strength (lbs)	Tested	
	New	



25 Dec 2011, FL FWC



25 Dec 2011, FL FWC



25 Dec 2011, FL FWC

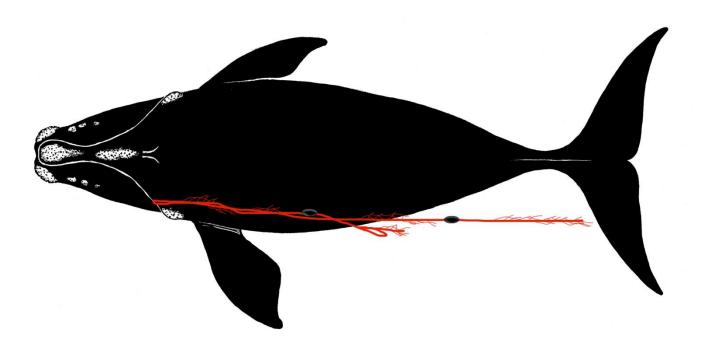


1 Feb 2011, FL FWC

Species Right Whale	Whale ID	Eg # 3010
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Date first observed entangled		19 Jan 20	11		
(date s	seen prior	without gear)	(31 Dec 2	010)	
Sex	Female	Birth year		Age at entanglement	12+

Case study ID	CCS	NMFS		GEAR ID
	WR-2011-02	E02-11		
Gear sample collected?	No	Gear type	Gillnet	



Reproduc	t detection	Yes/No			
	Entanglemen				
	Entangle			Low	
Wound severity	Mound soverity		Flippers	Body	Flukes
vvound severity	Low	None	Unk	None	Medium
Duration of	time carrying gear	Minimum 11 days, maximum 110 days			
Disentangled?		P No			
Status		Alive - last seen in 2012			
Number of pri	or entanglements	1			

Entanglement configuration	Single rope exiting left side of mouth
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Gear shed

Polymer type		
Gear con	nponent	
Rope diameter	(inches)	
Breaking strength (lbs)	Tested	
	New	



19 Jan 2011, Florida FWC

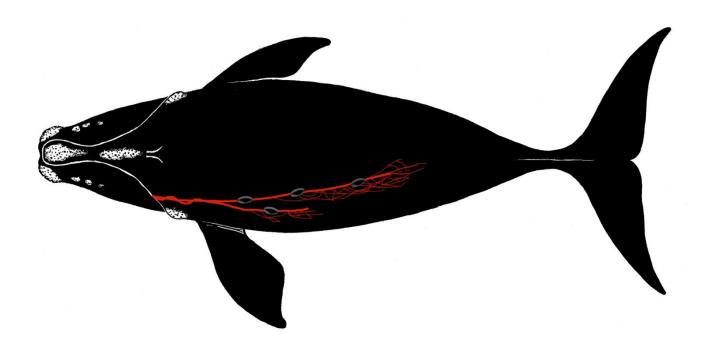


19 Jan 2011, Florida FWC

Species	Right Whale	Whale ID	Eg # 3712

Date first observed entangled		30 Jan 2011				
(date seen prior without gear)		(13 Nov 2010)				
Sex	Male	Birth year	2007 Age at entanglement		4	

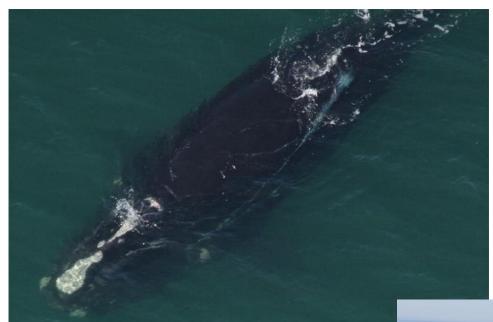
Case study ID	CCS	NMFS		GEAR ID
	WR-2011-03	E03-11		
Gear sample collected? No		Gear type	Gillnet	



Reproduc					
	Entan	glement injury severity		Moderate	
	ment configuration risk		Low		
Maund soverity	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	None	None	None	None	Medium
Duration of	time carrying gear	Minimum 10 days, maximum 163 days			ays
Disentangled?		No			
Status		Alive - last seen in 2016			
Number of pri	or entanglements	2			

Entanglement configuration	Single rope and netting exiting left mouth and halfway down body
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Gear shed

Polymer type		
Gear component		Floatline
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



30 Jan 2011, FWRI

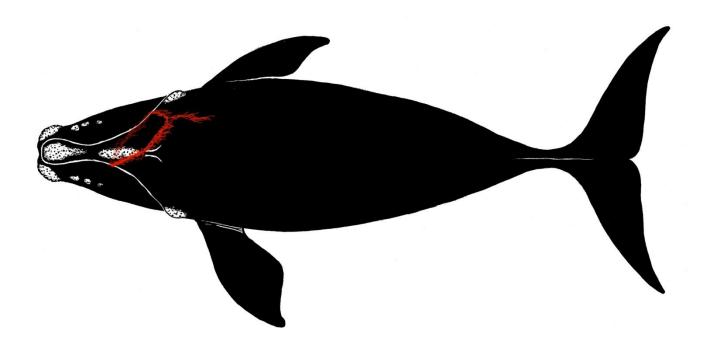


13 Aug 2011, New England Aquarium

Species	Right Whale	Whale ID	Eg # 3760
Opcoics	INDIIC WILLIAM	TTIIGIC ID	-B :: 37 00

Date first observed entangled		13 Feb 2011		
(date seen prior without gear)		(1 May 20	010)	
Sex Female Birth year		2007	Age at entanglement	4

Case study ID	CCS	NMFS		GEAR ID
	WR-2011-05	E05-11		
Gear sample collected?	No	Gear type	Gillnet	



Reproduc	t detection	No/No			
	Entar	nglement injury severity M		Moderate	
	ment configuration risk		Low		
Mouth Wound severity		Head/ rostrum	Flippers	Body	Flukes
vvound severity	Low	None	Unk	None	Medium
Duration of	time carrying gear	Minimum 1 days, maximum 357 days			
Disentangled?		No			
	Alive - last seen in 2016				
Number of pri	or entanglements	2			

Entanglement configuration	Nettting only extending out of left and right sides of mouth and partway down the body
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Gear shed

Polymer type		
Gear component		Monofilament netting
Rope diameter	(inches)	
Breaking strength (lbs)	Tested	
	New	



13 Feb 2011, GA DNR



13 Feb 2011, GA DNR



13 Feb 2011, GA DNR

Species	Right Whale	Whale ID	Eg # 3993
0,000.00			_0

Date first observed entangled		13 Feb 2011			
(date	(date seen prior without gear)		(20 Apr 2	010)	
Sex	Male	Birth year	2009	Age at entanglement	2

Case study ID	CCS NMFS		GEAR ID
	WR-2011-06	E06-11	
Gear sample collected?	No	Gear type	

Reproductive prior to/after entanglement detection					
	glement inju	ıry severity	Severe		
	Entangle	ment configu	uration risk	High	
Wound soverity	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	None	None	High	None	Low
Duration of time carrying gear		Minimum 1 days, maximum 298 days			
Disentangled?		No			
Status		Presumed dead. Last seen in 2011			
Number of pri	or entanglements	1			

Entanglement configuration	Rope wrapped around right flipper and trailing 10 ft behind flukes
Anchoring points	Flipper
Gear configuration confidence	Low
Remaining questions	Unknown if mouth involved
Comments	Poor condition

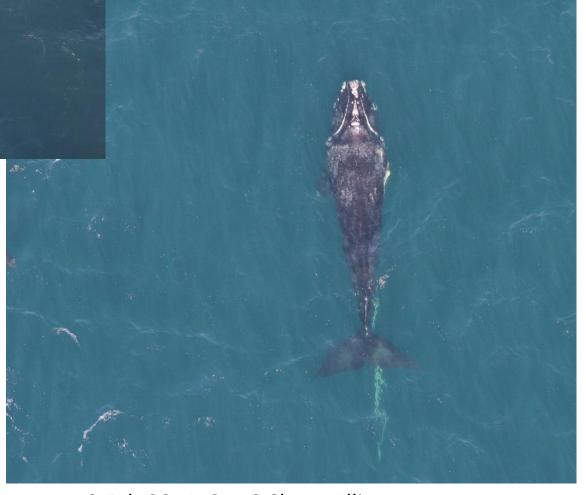
Polymer type		
Gear component		
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



13 Feb 2011, Sea 2 Shore Alliance



13 Feb 2011, Sea 2 Shore Alliance



13 Feb 2011, Sea 2 Shore Alliance

Species Right Whale Whale ID Unknown

Date first observed entangled		16 Mar 2	011		
(date seen prior without gear)		(Unknow	n)		
Sex	Unknown	Birth year		Age at entanglement	Unknown

Case study ID	CCS	NMFS	GEAR ID
	WR-2011-07	E07-11	J031611 rw
Gear sample collected?	yes	Gear type	

Reproductive prior to/after entanglement detection			t detection		
	Entan			Severe	
	Entangle	ment configi	uration risk	High	
Mound soverity	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	Unk	Unk	High	Unk	Unk
Duration of t	Duration of time carrying gear		Minimum 1 days, maximum unknown		
Disentangled?		No			
Status		Dead			
Number of pri	Number of prior entanglements				

Entanglement configuration	Gear wrapped 13 times around flipper
Anchoring points	Flipper
Gear configuration confidence	Low
Remaining questions	Unknown if any other body areas involved
Comments	Very decomposed carcass

Polymer type		
Gear component		
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



16 Mar 2011, NOAA, right flipper

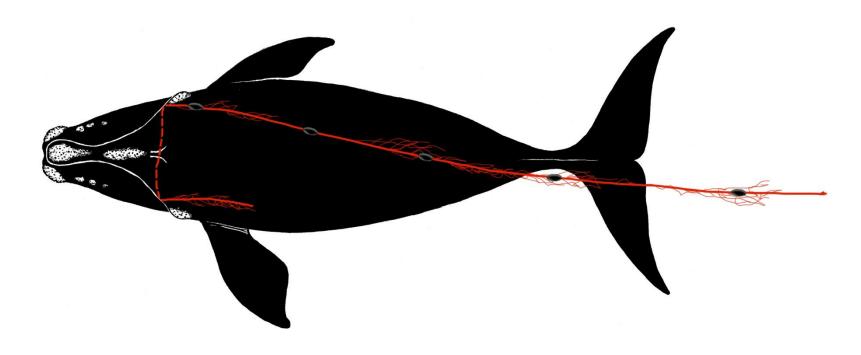


16 Mar 2011, NOAA, right flipper

Species	Right Whale	Whale ID	Eg # 3893

Date first observed entangled		17 Mar 2	011		
(date seen prior without gear)		(27 Aug 2	010)		
Sex	Female	Birth year	2008	Age at entanglement	3

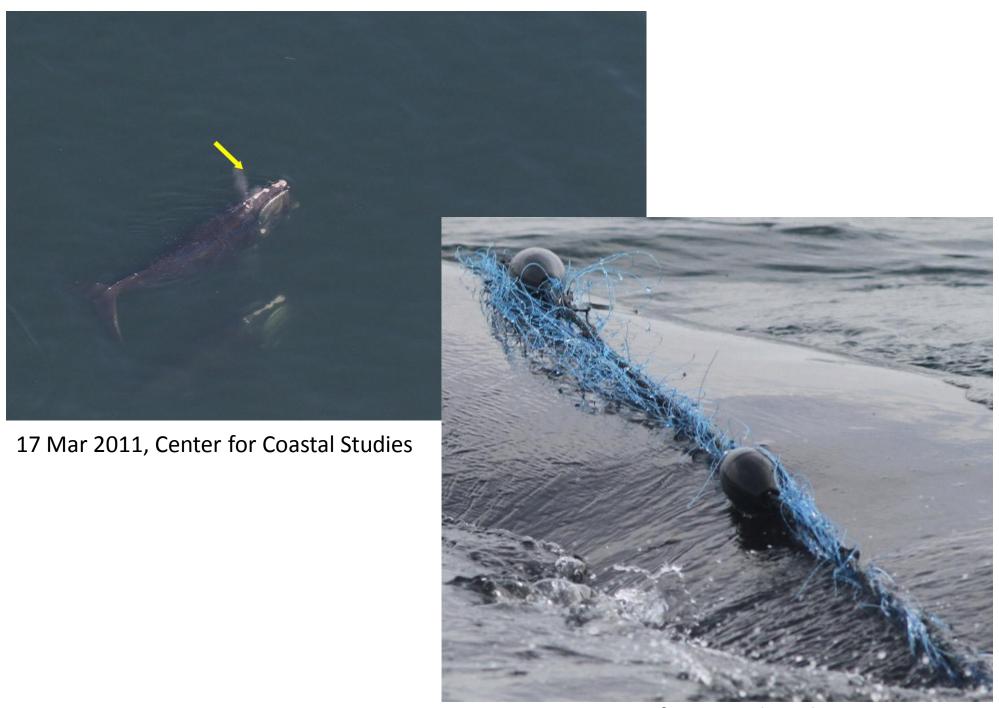
Case study ID	CCS	NMF	S	GEAR ID
	WR-2011-10	E08-11		
Gear sample collected?		Gear type	Gillnet	



Reproduct	ntanglemen	t detection	No/No		
	nglement injury severity Minor				
	ment configi	uration risk	Low		
Mound soverity		Head/ rostrum	Flippers	Body	Flukes
Wound severity	Unk	Low	Low	None	Low
Duration of time carrying gear		Minimum 38 days, maximum 243 days			
Disentangled?		Yes, partial			
Status		Alive - last seen in 2016			
Number of pri	or entanglements	0			

Entanglement configuration	Rope and netting through both sides of mouth and extending to flukes on right side
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Remaining gear shed

Polymer type		
Gear component		Floatline
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



24 Apr 2011, Center for Coastal Studies

	Species	Right Whale	Whale ID	Eg # 3302
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Date first observed entangled		22 Apr 2011			
(date seen prior without gear)		(27 Aug 2010)			
Sex	Male	Birth year	2003	Age at entanglement	8

Case study ID	CCS	NMFS	GEAR ID
	WR-2011-33	E12-11	
Gear sample collected?	No	Gear type	

Reproduct	tive prior to/after e	ntanglemen	t detection		
	Entan	nglement injury severity Minor			
	ment configi	uration risk	High		
Mound soverity		Head/ rostrum	Flippers	Body	Flukes
Wound severity Unk		Low Unk Low Low			
Duration of t	Minimum 201 days, maximum 438 days				
	No				
	Presumed dead. Last seen in 2011				
Number of pri	or entanglements	2			

Entanglement configuration	Single rope across nares and likely leading into mouth. No trailing gear
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Rope is taught across blowholes but not embedded

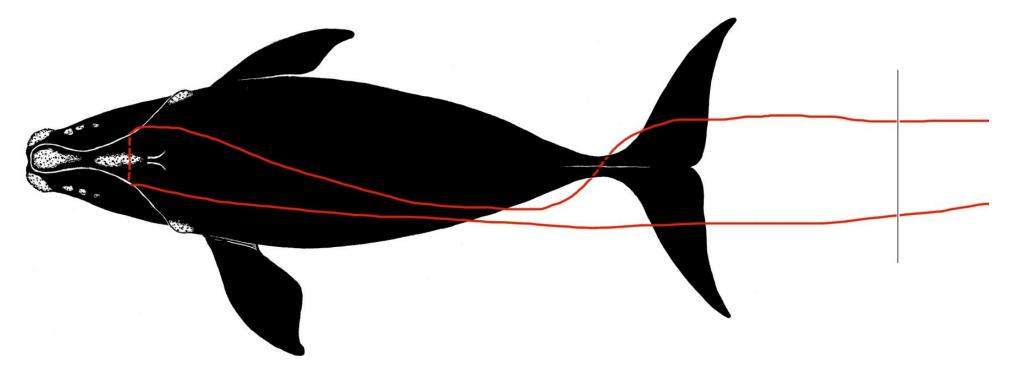
Polyr	ner type	
Gear component		
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



26 Sep 2011, New England Aquarium

Date first observed entangled			22 Apr 20)11	
(date seen prior without gear)			(21 Apr 2	010)	
Sex Unknown Birth year			Age at entanglement	2+	

Case study ID	CCS	NMFS		GEAR ID
	WR-2011-11	E11-11		J042211 rw-1
Gear sample collected?	yes	Gear type	NE trap/	pot, nearshore



Reproduct	ive prior to/after e	t detection			
	Entan	nglement injury severity		Moderate	
	ment configuration risk		High		
Mouth		Head/ rostrum	Flippers	Body	Flukes
Wound severity	None	Low	Unk	Low	Medium
Duration of t	Minimum 3	1 days, maxi	mum 364 da	ys	
	Yes				
	Alive - last seen in 2016				
Number of pri	or entanglements	0			

Entanglement configuration	Single rope exiting both sides of mouth and extending ~50 feet behind flukes
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	

Polyr	ner type	
Gear con	nponent	
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



22 Apr 2011, Center for Coastal Studies



22 Apr 2011, Center for Coastal Studies



22 Apr 2011, Center for Coastal Studies

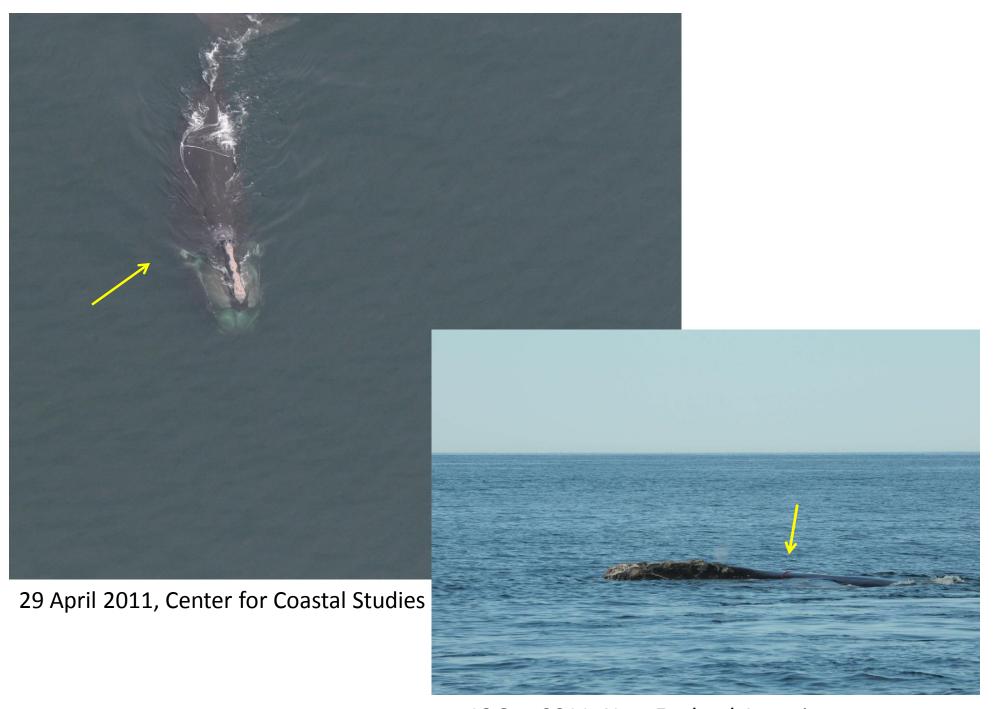
Date first observed entangled			29 Apr 2011			
(date	(date seen prior without gear)			010)		
Sex	Sex Female Birth year		2001	Age at entanglement	10	

Case study ID	CCS	NMFS	GEAR ID
	WR-2011-13	E13-11	
Gear sample collected?	No	Gear type	

Reproductive prior to/after entanglement detection				Yes/No		
	Entar	nglement injury severity		Minor		
	Entangle			Low		
Mouth Wound severity		Head/ rostrum	Flippers	Body	Flukes	
would severity	Low	None	None	None	None	
Duration of	Duration of time carrying gear			Minimum 142 days, maximum 698 days		
	No					
	Alive but then suffered a severe entglmnt in 2013					
Number of pri	Number of prior entanglements					

Entanglement configuration	Short length of line exiting right mouth gape and extending 1/2 of body
Anchoring points	Mouthline, flipper?
Gear configuration confidence	Low
Remaining questions	Uncertain if right flipper was involved
Comments	Gear shed

Polyr	ner type	
Gear con	nponent	
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



18 Sep 2011, New England Aquarium

Species Right Whale Whale ID Eg # 4090
--

Date first observed entangled			18 Sep 20)11			
(date	(date seen prior without gear)			(29 Apr 2011)			
Sex	Unknown	Birth year	2010	Age at entanglement	1		

Case study ID	CCS	NMFS		GEAR ID
	WR-2011-32	E31-11		J091811 rw
Gear sample collected?	No	Gear type	Gillnet	

Reproduct	tive prior to/after e	ntanglemen	t detection		
	Entan	glement injury severity		Low	
	Entangle	ment configi	uration risk	High	
Mouth		Head/ rostrum	Flippers	Body	Flukes
Wound severity	None	Low	Unk	Unk	Low
Duration of t	ime carrying gear	Minimum 1 days, maximum 141 days			ys
	No				
	Presumed dead? Last seen in 2011 entangled				
Number of pri	or entanglements	1			

Entanglement configuration	Gillnet line and netting through mouth and around tail
Anchoring points	Mouthline, tail
Gear configuration confidence	Low
Remaining questions	Unknown if flippers involved
Comments	Whale thrashing, gear shifting

Polyr	ner type	
Gear component		Floatline
Rope diameter (inches)		
Breaking strength (lbs) Tested		
	New	



Species	Right Whale	Whale ID	Eg # 3111
			-0

Date first observed entangled			27 Sep 20)11	
(date seen prior without gear)		(31 May 2011)			
Sex	Male	Birth year	2001	Age at entanglement	10

Case study ID	CCS	NMFS	GEAR ID
	WR-2011-34	E32-11	
Gear sample collected?	No	Gear type	

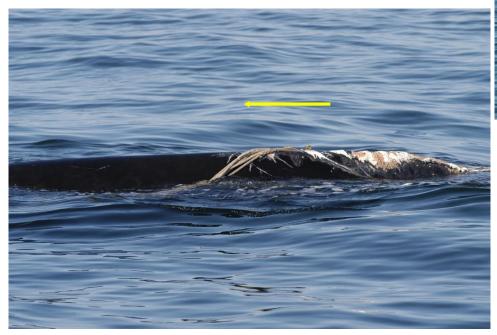
Reproduct	ntanglemen	t detection			
	Entan	nglement injury severity		Severe	
	Entangle			High	
Mouth		Head/ rostrum	Flippers	Body	Flukes
Wound severity	Unk	Low	High	Medium	High
Duration of t	ime carrying gear	Minimum 1 days, maximum 276 days			ys
	Yes, partial				
	Alive? Last seen in 2012				
Number of pri	or entanglements	4			

Entanglement configuration	Multiple ropes wrapped around left flipper and trailing around 20 ft behind flukes
Anchoring points	Flipper, mouthline?
Gear configuration confidence	High
Remaining questions	Uncertain if line went into left mouth
Comments	Peduncle injuries are not fully healed

Polyr	ner type	
Gear con	nponent	
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



27 Sep 2011, Campobello Whale Rescue



27 Sep 2011, Campobello Whale Rescue

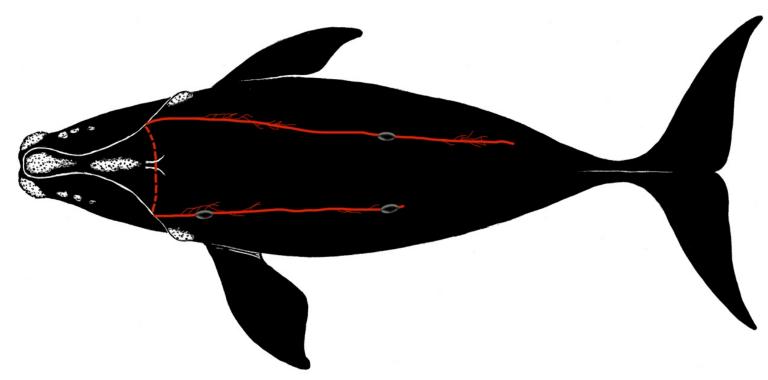


27 Sep 2011, New England Aquarium

«Comments»«Comments»Species	Right Whale	Whale ID	Eg # 3821
The state of the s			-6

Date first observed entangled		7 Jan 2012			
(date seen prior without gear)		(2 Sep 2011)			
Sex	Unk	Birth year	2008	Age at entanglement	4

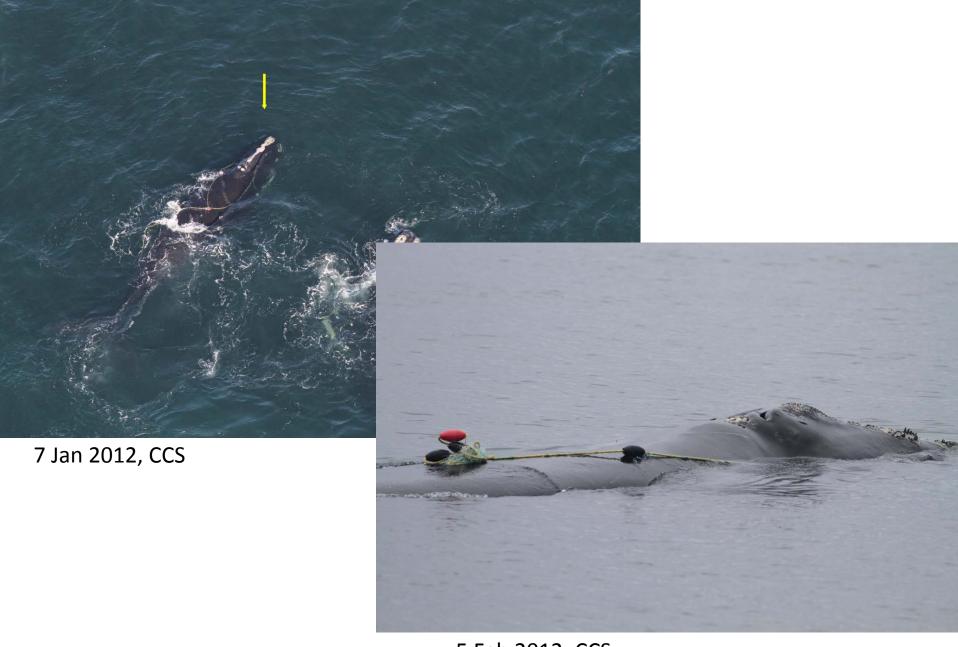
Case study ID	CCS	CCS NMFS		GEAR ID
	WR-2012-01	E01-12		
Gear sample collected? No		Gear type	Gillnet	



Reproductive prior to/after entanglement detection					
	Entan			Minor	
	Entanglem			Low	
Wassad assassites	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	Unk	None	Unk	None	Low
Duration of time carrying gear		Minimum 823 days, maximum 949 days			
Disentangled?		Yes			
Status		Alive – last seen in 2014			
Number of prior entanglements		2			

Entanglement configuration	Rope and netting through mouth
Anchoring points	Mouth
Gear configuration confidence	High
Remaining questions	
Comments	Remaining gear shed

Polymer type		
Gear component		
Rope diameter	(inches)	
Breaking strength (lbs)	Tested	
	New	

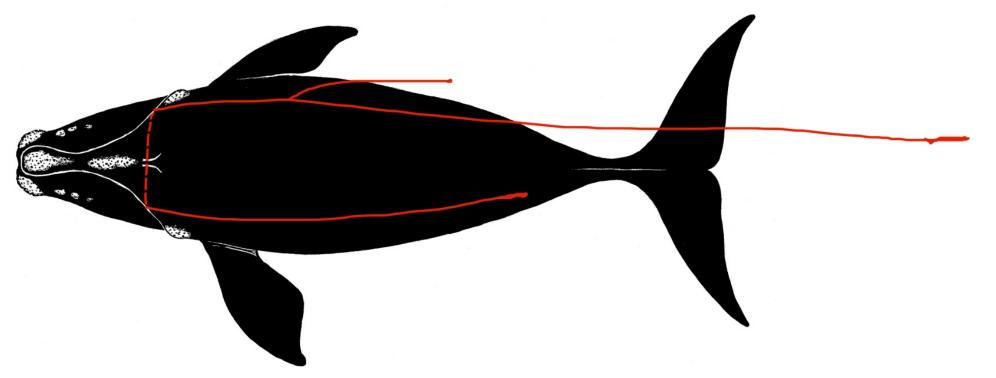


5 Feb 2012, CCS

Species Right Whale W	/hale ID Eg # 1719
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Date first observed entangled			19 Jan 20	12	
(date seen prior without gear)			(22 Apr 2	011)	
Sex	Female	Birth year		Age at entanglement	26+

Case study ID	PCCS	NMFS	GEAR ID
	WR-2012-02	E02-12	
Gear sample collected?	No	Gear type	



Reproduct	No/ No				
	Entan	nglement injury severity		Moderate	
	Entangle	ement configuration risk		Low	
Marina di ancomita di	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	Low	No	Unk	None	Medium
Duration of t	ime carrying gear	Minimum 2 days, maximum 694 days			ys
	No				
	Alive – last	seen in 201	6		
Number of pri	or entanglements	2			

Entanglement configuration	Rope through mouth and not trailing behind body
Anchoring points	Mouth
Gear configuration confidence	High
Remaining questions	
Comments	Gear shed

Polyr	ner type	
Gear component		
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



19 Jan 2012, Georgia DNR

Species	Right Whale	Whale ID	Eg # 3996
000.00			-0

Date f	Date first observed entangled)12	
(date seen prior without gear)			(6 Oct 20	11)	
Sex	Male	Birth year	2009	Age at entanglement	3

Case study ID	CCS	NMFS		GEAR ID
	WR-2012-05	E05-12		
Gear sample collected? No		Gear type	Gillnet	

No drawing available

Reproduct	t detection				
	Entan	glement inju	ıry severity	Moderate	
	Entangle	ement configuration risk		High	
Maria da seria da	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	Unk	Medium	Unk	Low	Low
Duration of t	ime carrying gear	Minimum :	149 days, ma	ximum unkr	nown
Disentangled?		No			
Status		Presumed	dead? Last s	een in 2012	
Number of pri	or entanglements	1			

Entanglement configuration	Rope goes through mouth on both sides and across rostrum, shifted forward and tightened over time
Anchoring points	Mouth
Gear configuration confidence	High
Remaining questions	Uncertain if right flipper involved
Comments	Rope embedded forward of blowholes

Polyn	ner type	
Gear component		
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



Species	Right Whale	Whale ID	Eg # Unid
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Date first observed entangled		23 Jul 20:	12		
(date seen prior without gear)		(Unknow	n)		
Sex	Female	Birth year		Age at entanglement	Unknown

Case study ID	CCS	DFO	GEAR ID
		86957	X-Canada 4
Gear sample collected?	Yes	Gear type	

No drawing available

Reproduct	t detection	Unknown			
	Entan	glement inju	ıry severity	Severe	
	ment configuration risk		High		
Maria da seconda	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	Unk	Unk	Unk	Unk	High
Duration of time carrying gear		Minimum 1 day, maximum unknown			
Disentangled?		No			
Status		Dead			
Number of pri	or entanglements	Unknown			

Entanglement configuration	30 wraps of rope around tail; likely drowned in gear
Anchoring points	Tail
Gear configuration confidence	High
Remaining questions	
Comments	Carcass very decomposed; gear collected by DFO

Polymer type		Co-polymer
Gear component		
Rope diameter	(inches)	7/8 (0.843)
Breaking strength (lbs) Tested		2,600 (left in sun for 4 weeks after removal)
	New	12,800

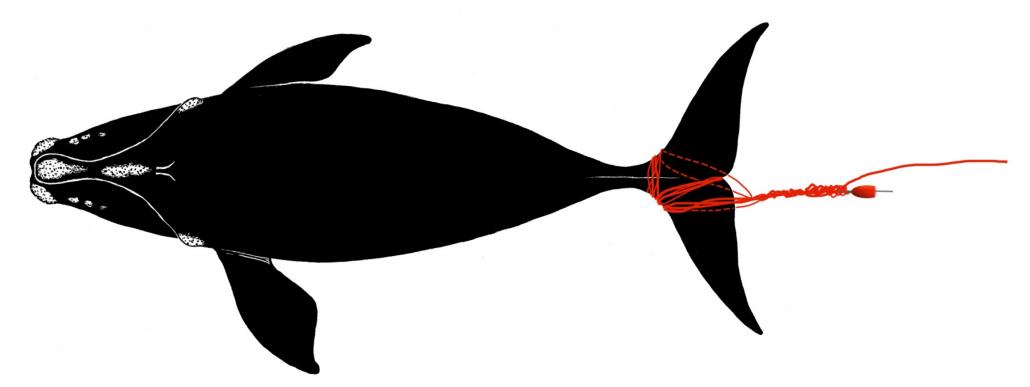


25 July 2012, UPEI

Species Right Whale Whale ID Eg # 4193	Species F	Right Whale	Whale ID	Eg # 4193	
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Date first observed entangled		18 Dec 2012			
(date seen prior without gear)		(28 Jan 2012)			
Sex	Male	Birth year	2011	Age at entanglement	2

Case study ID	PCCS	NMFS		GEAR ID
	WR-2012-42	E43-12		J121812 rw
Gear sample collected?	Yes	Gear type	NE trap/	pot, nearshore



Reproduct	t detection				
	Entan	glement inju	ıry severity	Severe	
	ment configi	uration risk	High		
Marinal agreement	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	Medium	Medium	Medium	Medium	High
Duration of time carrying gear		Minimum 1 days, maximum 324 days			ys
Disentangled?		No			
Status		Dead			
Number of pri	or entanglements	0			

Entanglement configuration	Three endlines wrapped multiple times around tail
Anchoring points	Tail
Gear configuration confidence	High
Remaining questions	
Comments	Entanglement injuries evident at mouth and flippers

Polymer type		PET; PET/Copolymer; PP
Gear component		End lines with spindle buoys
Rope diameter	(inches)	3/8 for all
Breaking strength (lbs) Tested		
	New	2900; 3400; 2430

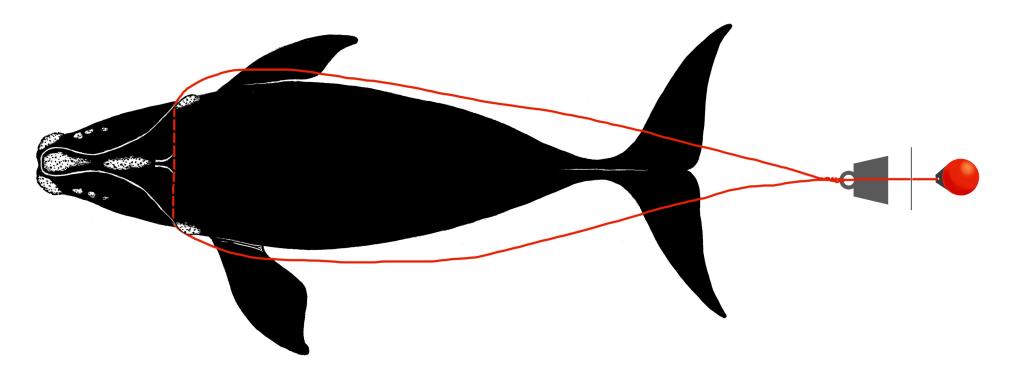


19 Dec 2012 UNCW/Florida FWC

19 Dec 2012 UNCW/Florida FWC

Date first observed entangled			12 Jul 2013		
(date s	(date seen prior without gear)			2012)	
Sex	Female	Birth year	2001	Age at entanglement	12

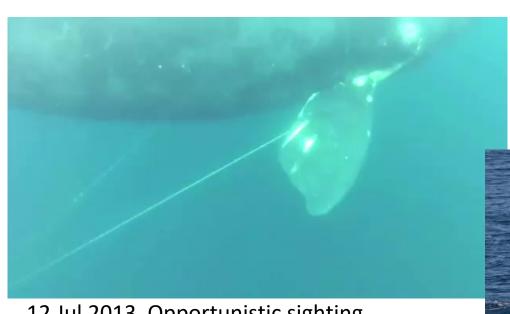
Case study ID	CCS	NMFS	GEAR ID
	WR-2013-04	E05-13	
Gear sample collected?	No	Gear type	



Reproduct	tive prior to/after e	entanglement detection Yes/No		Yes/No		
	Entan	nglement injury severity		Severe		
	Entangle	ment configuration risk		High		
Marinal agreement	Mouth	Head/ rostrum	Flippers	Body	Flukes	
Wound severity	Medium	Medium	Medium	None	High	
Duration of t	Duration of time carrying gear			Minimum 1 day, maximum 478 days		
	Yes, ad hoc disentanglement					
	Likely dead? No subsequent sightings			gs		
Number of pri	or entanglements	4				

Entanglement configuration	Single line through mouth forming bridle leading to depth with two polyballs several hundred yards behind tail
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Tail injury suggests constant abrasion

Polyn	ner type	
Gear con	nponent	
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



12 Jul 2013 Opportunistic sighting





17 Jul 2013 SEFSC/AMPS

Species Right Whale	Whale ID Eg # 1311
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[Date first observed entangled			11 Aug 20	013	
((date seen prior without gear)		(21 Apr 2	013)		
	Sex	Male	Birth year	1983	Age at entanglement	30

Case study ID	CCS	NMFS	GEAR ID
	WR-2013-06		
Gear sample collected?	No	Gear type	

No drawing available

Reproduct	tive prior to/after e	ntanglement detection Ye		Yes/No	Yes/No	
	Entan	nglement injury severity		Severe		
	Entangle	ment configuration risk		High		
Marinal agreement	Mouth	Head/ rostrum	Flippers	Body	Flukes	
Wound severity	Medium	Medium	Unknown	Medium	Unknown	
Duration of t	ime carrying gear	Minimum 1 day, maximum 111 days			S	
	No					
	Dead					
Number of pri	or entanglements	2				

Entanglement configuration	Rope through mouth and baleen
Anchoring points	Mouthline
Gear configuration confidence	Low
Remaining questions	Uncertain if flippers or tail involved
Comments	Scavenged heavily by sharks, relatively fresh

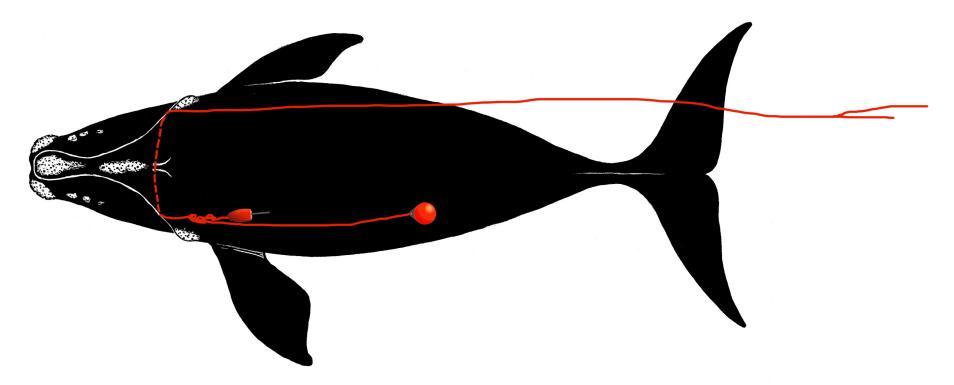
Polyn	ner type	
Gear component		
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



Species	Right Whale	Whale ID	Eg # 3946
Species .	mgiit wiiaic	Wilaic ib	-6 " 33 TO

Date first observed entangled		20 Sep 2013				
(date seen prior without gear)		(1 May 2013)				
	Sex	Female	Birth year	2009	Age at entanglement	4

Case study ID	CCS	NMFS	GEAR ID
	WR-2013-09	E10-13	
Gear sample collected? No		Gear type	



Reproductive prior to/after entanglement detection					
Entanglement injury severity				Moderate	
	ment configuration risk Low		Low	N	
Marind acres the	Mouth	Head/ rostrum	Flippers	Body	Flukes
Wound severity	Medium	Medium	Medium	Medium	Medium
Duration of time carrying gear		Minimum 1 day, maximum 326 days			
Disentangled?		No			
Status		Alive, last seen in 2016			
Number of prior entanglements		2			

Entanglement configuration	Line through mouth with polyball and small buoy on left side, no trailing gear
Anchoring points	Mouthline
Gear configuration confidence	High
Remaining questions	
Comments	Unusual lesions on back; gear shed

Polyn	ner type	
Gear component		Endline
Rope diameter (inches)		
Breaking strength (lbs)	Tested	
	New	



20 Sep 2013 CWI/NEAq



20 Sep 2013 CWI/NEAq