

1997 - 2001

Large Whale Entanglement Summary

NMFS Northeast Region - Protected Resources Division

DRAFT
Large Whale Entanglement Summary
1997 - 2001

John Kenney¹ & Dana Hartley²

October, 2001



Right whale 2212 in Provincetown Harbor, September 12, 1998

National Marine Fisheries Service
Protected Resources Division
One Blackburn Drive
Gloucester, MA

Summary of Confirmed Entanglements

1997 - 2001

Total number of entanglement events from **Table 1** is 125.

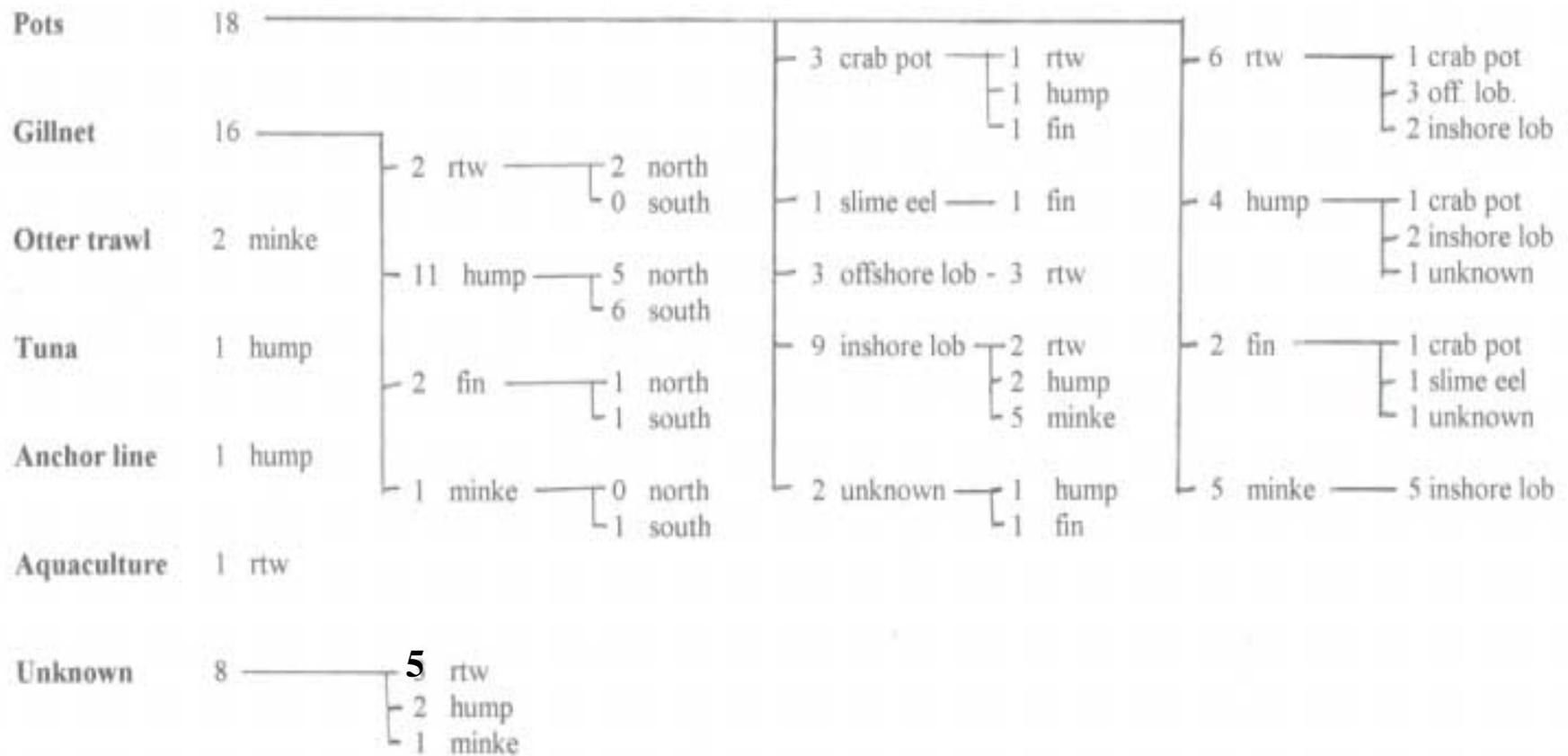
Of the 125 events, 104 are *confirmed* entanglements - **Table 1a**.

Table 2 was generated based on the entanglements where gear was either recovered, or information about the gear was available from a reliable source. $n = 47$

	From Table 1: Confirmed Events $n = 104$		From Table 2: Gear Recovered or Known $n = 47$	
Species	Number	Percent	Number	Percent
right	29	28	15	32
humpback	46	44	19	40
fin	8	8	4	9
minke	17	16	9	19
unknown / other	4	4	0	0

Grouped from Gear Type

PRELIMINARY 11-01-01

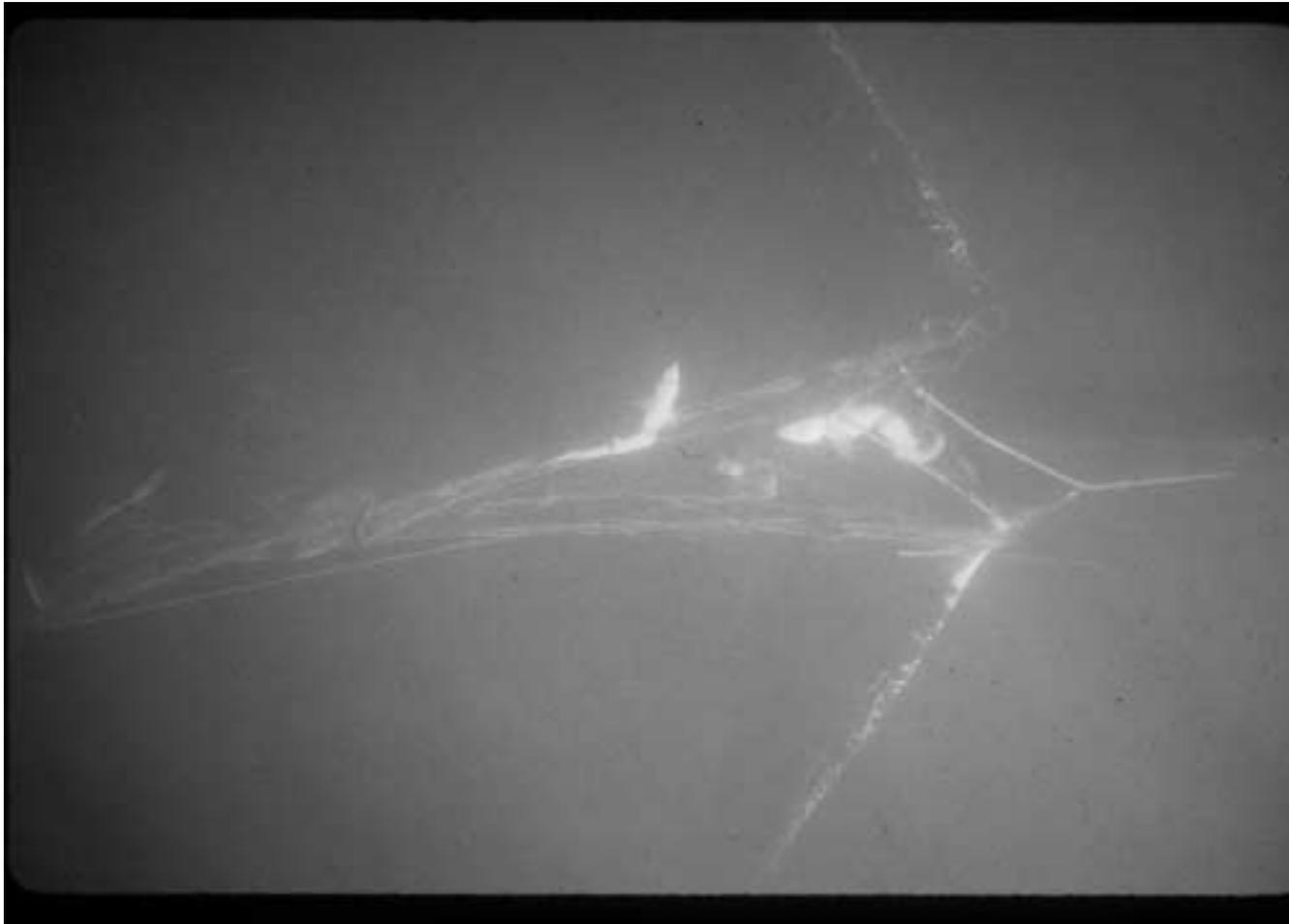


The number of events where rope characteristics relative to floating or sinking were identified is 27. Of the 27, both floating and sinking were present on 10 occasions, leaving 17 occasions with only 1 type present.

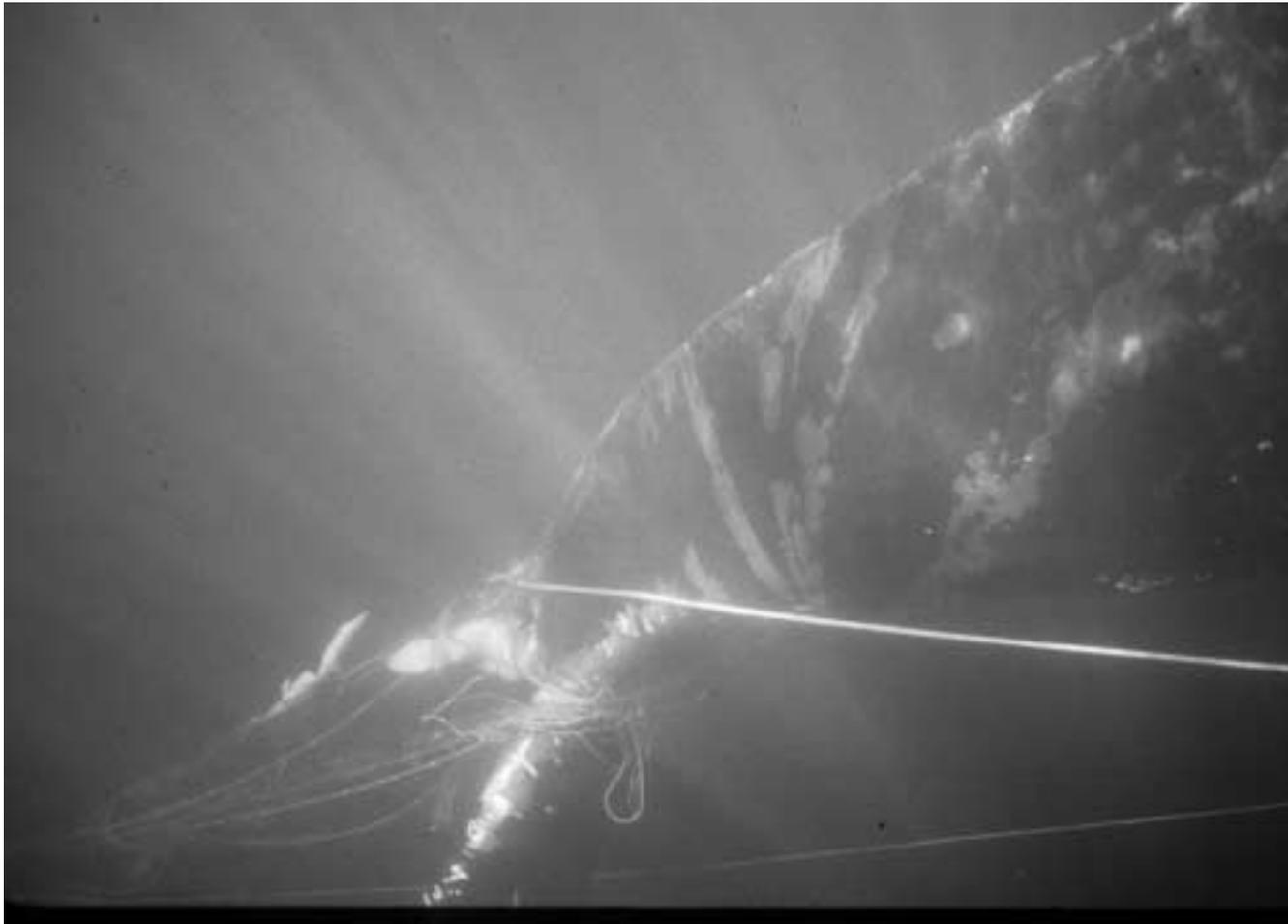
<u>ROPE</u>	<u>No.</u>	Species	Gear Type	Species	Gear Type
<u>floating</u>	<u>13</u>			8 right	4 unknown 1 inshore lob 1 crab pot 1 unk. Pot 1 gillnet
<u>sinking</u>	<u>4</u>	3 right	2 offshore lob 1 unknown	3 hump	2 unknown 1 gillnet
		1 hump	1 gillnet	1 Fin	1 gillnet
				1 Minke	1 inshore lob

NMFS No.	E4-98	
Date Observed	5/15/98	
Species	Humpback Whale	
No. of animals	1	
Individual ID	Entropy	
Location	N of SW corner of Stellwagen Bank	
Latitude/Longitude	42° 09' N	70° 22' W
Event Description	<ul style="list-style-type: none"> • 5/15/98; 13:00 Sighted by crew of whale watch vessel • Entanglement presumed to be very recent, whale anchored • CCS and USCG disentangled whale 	
Description of Gear on Whale	Gear initially reported on tail stock, flukes and back. CCS disentangled gear from the tail stock & flukes only; there was no longer gear on the whale's back	
Description of wounds	Some blood on back	
Gear Type	Tied down sink gillnet, 6 1/2" mesh, recovered during disentanglement. No buoy line or buoys recovered. First observation was of the floatline over the back in front of the dorsal fin. By the time of disentanglement, float line, lead line, and webbing were wrapped around tail stock several times.	
Determination	Pending	

E4 - 98 Humpback *Entropy*. Tied down gillnet
Disentangled 5/15/98 by CCS & USCG



E4 - 98 Humpback *Entropy*.



E4 - 98 Humpback *Entropy*.





E4 - 98 Humpback
Entropy.

Gear recovered

5/15/98

Entanglement Report - rtw # 2212

NMFS No.	E38-98	
Date Observed	9/14/98	
Species	Right Whale	
No. of animals	1	
Individual ID	2212	
Location	2 nm off Barnstable Harbor, Cape Cod, MA	
Latitude/Longitude	40° 46' N	70° 13' W
Event Description	<ul style="list-style-type: none"> • CCS responded to report of entangled, anchored whale • Whale freed of this gear, but some of the 8/97 gear remains 	
Description of Gear on Whale	Line on mouth, head, maybe tail stock	
Description of wounds	none observed	
Gear Type	<p>Floating 5/8" dia. ground line of 5 pot trawl caught in baleen. Whale dragged through and was anchored by two other 5 pot trawls, one single pot, and a derelict pot. The 5 pot trawls are all owned by the same fisherman and were set close to each other in 30 to 35' of water. Buoy lines were 7/16" sink line. Ground line was acquired from another lobsterman and is unusually heavy for the area fished. Gangion spacing on the ground line varied from 6 ½ fathoms to 17 fathoms.</p>	
Determination	Pending	

FISHERY INTERACTION GEAR ANALYSIS

NMFS No.	E-38	Report Date	11-16-99
Field No.	FE-98-30-9/14-rtw		
Species	right whale	Individual ID	2212
Date Gear Received	9-17-98	Received From	Mass. DMF

ENTANGLEMENT DESCRIPTION

Date First Reported	9-14-98	Date Gear Retrieved	9-15-98
Disentangled	9-14-98	Stranding	Other (describe)
Location	Cape Cod Bay		
Gear Description	Whale was anchored by three 5 trap trawls, one of which was incomplete. Trawls were dragged before stopping the whale and collected a single trap with warp and buoy, and a ghost pot. Trawls had floating ground line and sinking buoy line.		

GEAR DESCRIPTION / ANALYSIS

Sources:	USCG CCS X Fisherman X Other Kenney & Blott	Date Set Date Lost Location Depth Bottom Type	June, 1998 9-14-98 41-46 N x 70-13 W 30 feet Smooth, Sand
Gear Type:	Lobster pot trawls	Target Species:	Lobster

Comments: This whale had been disentangled from lobster gear in Provincetown Harbor on 9-12-98. A buoy and line from that incident was still in its baleen and was removed on the 14th. There was also line in its mouth from a disentanglement on 7-24-98, some of which was removed on the 14th.

The entanglement on the 14th had the floating ground line from one of the trawls in the whale's mouth and stuck in the baleen in more than one place. The whale dragged that trawl into the other gear until it was anchored by 15 pots and the accompanying rope. The ground line was 5/8" poly and a fisherman's knot in the poly with long free ends was caught in the baleen. These trawls had gangion spacings which varied from 6.5 to 17 fathoms. The ground line which was in the whale's mouth had 17 fathoms between the first and second gangion, but the analysis indicates that the first pot was probably missing which resulted in about 19.5 fathoms of floating line between the sinking buoy line and the first pot on the bottom in about 30 feet of water.

This gear is not typical of what is normally used in Cape Cod Bay, and was actually used gear acquired by a part time lobsterman from an offshore fisherman.

Subsequent to the documentation and analysis of the disentangled gear one of the trawls from the entanglement was reset by MA DMF in about 30 feet of water in Cape Cod Bay. The purpose was to observe and video record the characteristics of the gear. The trawl was set with one end pot missing. The observations indicate that the ground line floated up to and along the surface, and then descended to its connection with the sinking buoy line below the surface. It is likely that this was the configuration of the gear when the whale swam into it, probably while feeding.

Although the characteristics of this gear are not typical, consideration of this and other entanglements has led to the proposal to conduct a pilot project in which floating line in use by fishermen will be replaced with sinking line. The purpose is to demonstrate that sinking line, although more expensive, is a feasible alternative to the floating line which is used by much of the industry.

Conclusions:

This lobster trawl gear was typical of that used offshore and much stronger than normal inshore gear. It was set with sinking buoy line and floating ground line with long lengths between gangions which was the apparent cause of the entanglement after an end pot was lost.

Date:	11-16-99	Filed By:	AJB	Current Location of Gear	Some in D-11, Narragansett The rest returned.
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Fishery Interaction Gear Report E 38 - 98

rtw # 2212



Gear Recovered

9/15/98 E 38 - 98

rtw 2212

PRELIMINARY FISHERY INTERACTION GEAR ANALYSIS

NMFS No.	J060801		
Field No.	J060801	Date 1 st Observed Entangled	06-08-01
Location 1 st Observed	Grear South Channel 41° 51.78'N 68° 40.30'W	Type of Event - Observation, Disentanglement, Stranding. Other (describe)	SAS Survey - Entanglement
Species	right whale	Gear Recovered (y/n)	Yes
Individual ID	# 1102	Gear Analysis Conducted (y/n)	Yes

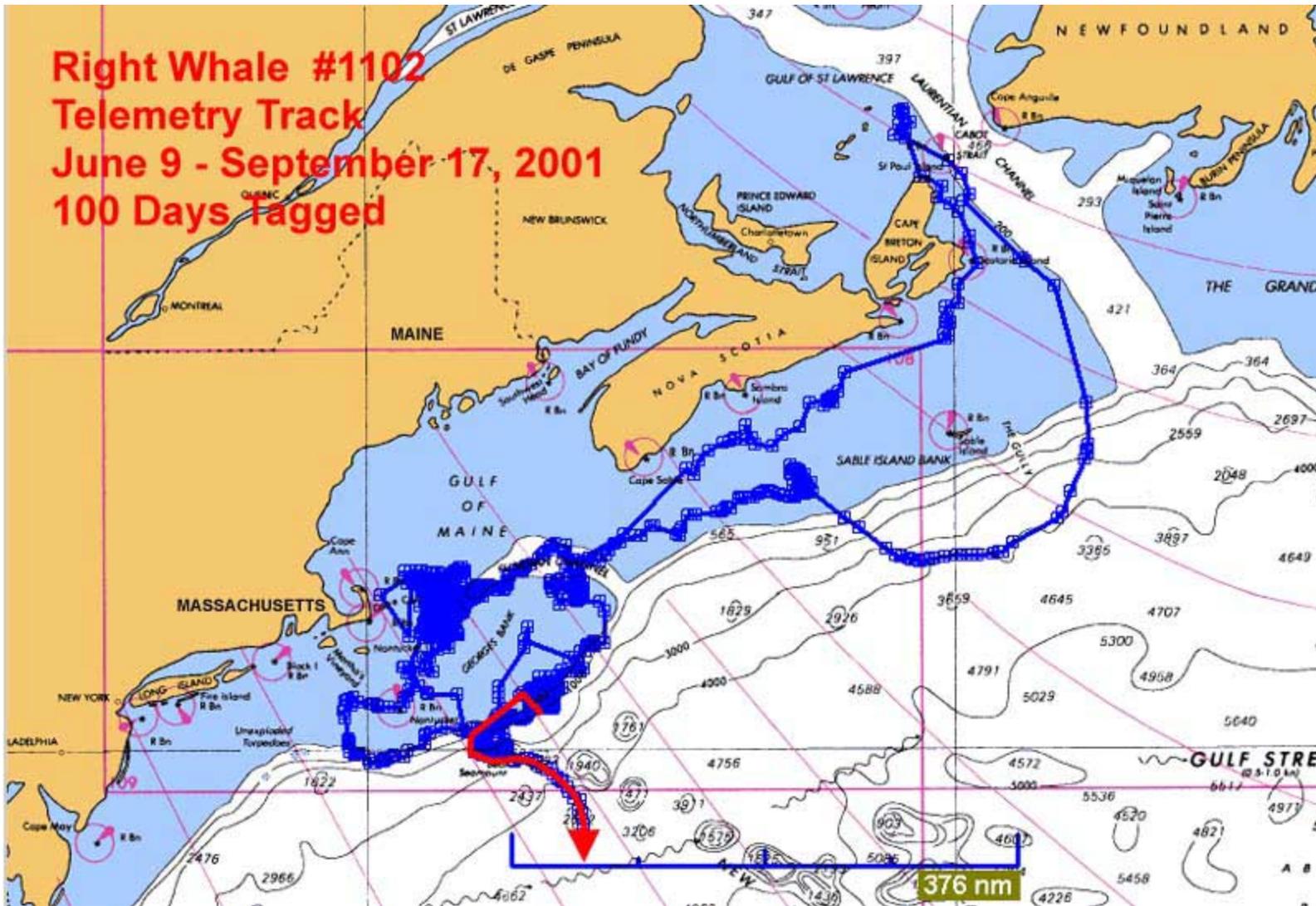
Fishery Interaction Gear Report P4 - 01

rtw # 1102, aka: Churchill

GEAR DESCRIPTION / ANALYSIS

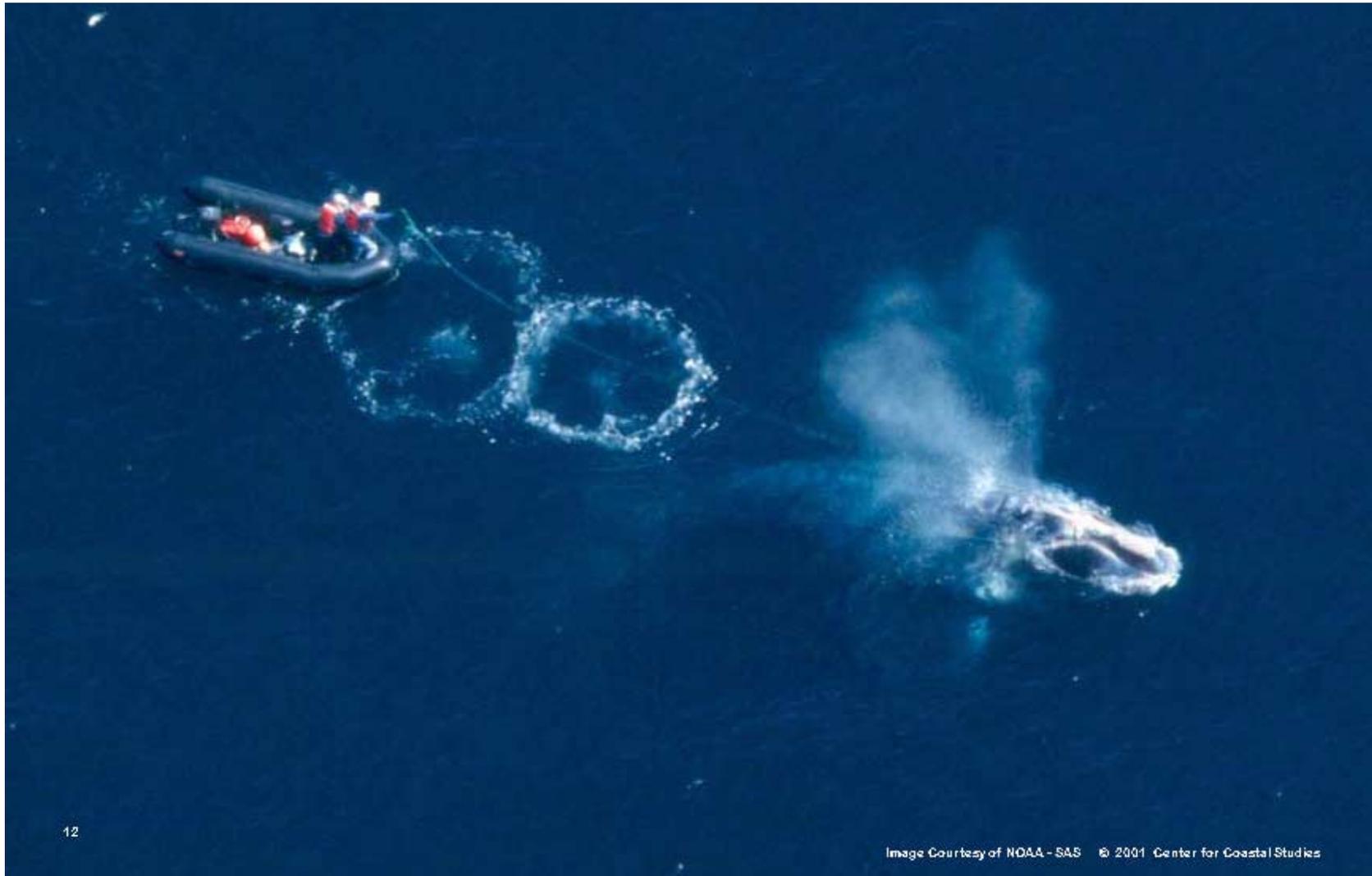
Date Gear Retrieved	6-9-01 & 6-26-01	Gear Retrieved By	CCS
Date Gear Received	6-25-01 & 6-26-01	Received From	CCS, Mattila & Morin
Sources:	USCG	Date Set	
	CCS	Date Lost	
	Fisherman	Location	
	Other	Depth	
		Bottom Type	
Gear Type:	Unknown	Target Species:	
<u>Gear Description:</u> Floating rope, approximately 5/8" diameter, green with red tracer.			
<u>Comments:</u> The rope removed has no identifying marks.			
<u>Conclusions:</u> Whale was entangled in 5/8" diameter floating rope of unknown origin.			
Gear was tagged by Joe Green 8/10/01, # 0073148			
Report By:	John Kenney	Date:	7-31-01 8-20-01
		Current Location of Gear	Kingston, RI

P4 - 01 rtw 1102, aka: Churchill



rtw 1102, aka: Churchill

CCS Disentanglement Team



P4 - 01 rtw 1102, aka: Churchill



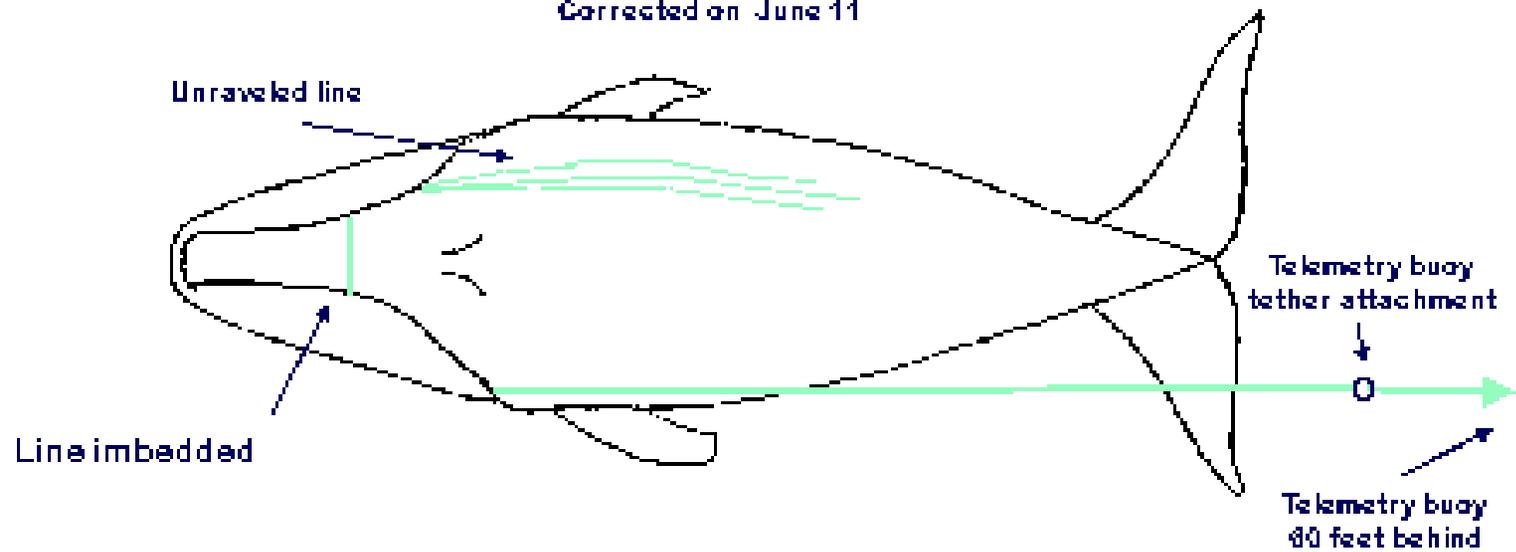
7.

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P4 - 01 rtw 1102, aka: Churchill

Right Whale #1102 June 8 - 9

Corrected on June 11



From CCS Web Site

P4 - 01 rtw 1102, aka: Churchill



PRELIMINARY FISHERY INTERACTION GEAR ANALYSIS

Fishery Interaction Gear
Report P8 - 01

rtw 2427

NMFS No.		Date 1 st Observed Entangled	7-20-01
Field No.	J072001	Type of Event - Observation, Disentanglement, Stranding. Other (describe)	disentanglement
Location 1 st Observed	east Jeffreys Ledge GOM	Gear Recovered (y/n)	Yes
Species	right whale	Gear Analysis Conducted (y/n)	Yes
Individual ID	2427		

GEAR DESCRIPTION / ANALYSIS

Date Gear Retrieved	7-20-01	Gear Retrieved By	CCS
Date Gear Received		Received From	CCS
Sources:	USCG	Date Set	1-7-01
	CCS	Date Lost	late Jan, 2001
	Fisherman	Location	GOM, Sewell Ridge
	Other	Depth	110 fm
		Bottom Type	edge of mud & gravel
Gear Type:	offshore lobster gear	Target Species:	lobster

Gear Description: Gear recovered consisted of a complete surface system with the exception of the high-flyer. The high-flyer bridle was present, from the bridle ran a 5 fm length of ½" sink rope to an eye of a '3-legger'. The 3-legger is 5/8" polysteel. To the center eye of the 3-legger was attached an A3 poly ball with ½" sink rope with a steel swivel midway along it's 1 fathom length. The final leg terminates in an eye and there was nothing attached to it when recovered. This eye is where the buoy line would be attached.

Comments: From the markings on the poly ball, the original owner was identified, contacted and interviewed on 7/31/01. Information from this interview indicated the gear was set in 110 fathoms of water on mud/gravel edge southwest of Crowell Basin in early January, 2001. In late January, the Capt. discovered 20 traps along with the buoy line and surface system missing.

Conclusions: The gear recovered from this entanglement is consistent with gear that has been equipped with a weak link.

Gear was tagged by Joe Green 8/10/01, # 24876

Report By:	John Kenney	Date:	8-20-01 8-24-01	Current Location of Gear	Kingston, RI
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Fishery Interaction Gear
Report P8 - 01

rtw 2427



PRELIMINARY FISHERY INTERACTION GEAR ANALYSIS

**Fishery Interaction Gear
Analysis P10 - 01
humpback**

NMFS No.			
Field No.	J081501	Date 1 st Observed Entangled	8/15/01
Location 1 st Observed	5 nm N.W. of Race Pt.	Type of Event - Observation, Disentanglement, Stranding. Other (describe)	Disentanglement
Species	Humpback	Gear Recovered (y/n)	Yes
Individual ID	Drizzle	Gear Analysis Conducted (y/n)	Yes

GEAR DESCRIPTION / ANALYSIS

Date Gear Retrieved	8/15/01	Gear Retrieved By	CCS
Date Gear Received	Aug. 2001	Received From	CCS
Sources:	USCG	Date Set	
	CCS	Date Lost	
	Fisherman	Location	
	Other	Depth	
		Bottom Type	
Gear Type:		Target Species:	

Gear Description: Gear consists of 11 fathoms of 3/8" white sinking rope tied into a spliced eye in 5/8" floating rope (yellow w/green tracer). Also attached to this eye, with a caribiner clip and 2 feet of 5/8" sinking rope, was a low drag poly ball (LD-2). The poly ball has no markings or growth on it. From the eye, the 5/8" float rope runs 14 fm. to an end that appears to have been cut. At a point 9 fm from the eye is a splice and the same 5/8" float rope extends 4 fm to an end that appears to be cut as well.

Comments:

Conclusions:

Gear appears to be some sort of anchoring system, possibly used by one of the dozens of vessels anchored in the area while fishing for tuna.

Report By:	J.F.Kenney	Date:	10-16-01	Current Location of Gear	Kingston, RI
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Fishery Interaction Gear
Report P10 - 01

humpback

CCS Disentanglement Team using Helmet Camera

