

# 2022 Atlantic Large Whale Entanglement Report

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# 2022 Atlantic Large Whale Entanglement Report

This report summarizes all of the large whale entanglement incidents for the Atlantic coast that were reported to the National Marine Fisheries Service (NOAA Fisheries) in 2022 in which large whales were directly observed with rope, gear or other unknown materials on their body. Only incidents with new indications of entanglement that occurred in the calendar year of 2022 are included. Earlier large whale entanglements that continued into 2022 are not listed. This report is not a comprehensive list of every entanglement interaction that occurred but was reported in 2022. It does not include incidents where entanglement injuries were evident but no gear was present, and we know that not all interactions are observed and reported. Note that this report includes incidents in which large whales were not killed or seriously injured. Each gear-present incident that is documented informs our understanding of how whales get entangled.

Table 1. 2022 Atlantic large whale entanglement reports.

## Indication of Entanglement with Gear present\*

	Live	Dead	Total
Right Whale	4	1	5
Humpback Whale	16	1	17
Finback Whale	0	0	0
Minke Whale	5	0	5
Sei Whale	0	0	0
Unknown Whale	0	0	0
TOTAL	25	2	27

\* “Indication of Entanglement with Gear Present” includes incidents where one or more of the following applies:

- Gear was reported on a whale by a reliable observer.
- Gear was photo-documented on a whale.
- Gear was retrieved from a whale.
- Gear was reported on a whale by an inexperienced observer who was interviewed by NOAA Fisheries or Center for Coastal Studies (CCS) staff and the account was descriptive enough to eliminate doubt about whether or not the whale was entangled.

## Health Descriptions and Serious Injury Determinations

Descriptions of wounds and animal condition in this report are based on information reported or documented at the time of each entanglement event. Additional information regarding the health of the animal may be obtained outside of this report's timeframe (ex. post-entanglement sighting information may indicate the health of the whale is improving or declining), which could alter the Serious Injury determination published here. Analysis of health data and final injury classifications were undertaken separately as part of the serious injury and mortality determinations completed by NOAA Fisheries Northeast Fisheries Science Center (NEFSC). Animals that have no gear documented or witnessed with a cause of death or injuries determined to be due to entanglement, will not be listed in this report but rather in the NEFSC Serious Injury and Mortality report. That report, entitled "Serious Injury and Mortality Determinations for Baleen Whale Stocks along the Gulf of Mexico, United States East Coast, and Atlantic Canadian Provinces, 2018-2022" is available online: <https://doi.org/10.25923/6xja-rh04> Stock assessment reports that summarize the full status of a species are also available on our website. <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>

### Notes:

- New information obtained outside of the production time frame of this report may alter any determination, status, or sighting information.
- Entanglement case information was compiled from numerous resources including U.S. and Canadian federal governments, U.S. state agencies, and U.S. and Canadian partners within the Atlantic Large Whale Disentanglement Network (ALWDN) and U.S. and Canadian marine mammal stranding networks. The incident reports contain all known U.S. Atlantic coast large whale entanglement data for which gear was present, including animals that fall under U.S. protection (e.g. North Atlantic right whales, Gulf of Maine humpback whales) even when outside U.S. borders. The incidents reported within this report should not be considered a comprehensive list of all documented entanglements since only those with gear present are included.
- The presence or absence of line can be difficult to determine in monofilament cases. The first gear-free sighting for monofilament cases is not a definitive assessment of lack of monofilament line as environmental conditions, lighting, and animal behavior, can make detectability of line difficult.
- Not all observed entanglement incidents are resighted. Entanglement status definitions is based on the last reported sighting:
  - Entangled = animal was last seen with an entanglement that may or may not be life-threatening;
  - Gear shed = animal shed the entangling gear on its own without human intervention;
  - Disentangled – gear free = animal had all gear completely removed by disentanglement network responders;

- Disentangled – gear shed = animal had all life-threatening gear removed by disentanglement network responders, but some non-life threatening gear remained and was later shed by the whale;
- Disentangled – monitor = animal had all life-threatening gear removed with some non life-threatening gear remaining that is expected to be shed.
- Monitor = animal had a non life-threatening entanglement that was expected to be shed. Animal was monitored in case health declined or entanglement configuration became life threatening, thus requiring disentanglement intervention.
- Gear analysis was conducted by NOAA staff on recovered gear and/or through owner interviews when possible. Canadian DFO gear experts, U.S. state agencies and law enforcement, fishery experts and the Atlantic Large Whale Take Reduction Team Gear Advisory Panel are sometimes consulted on complex or high profile cases.
- All gear analysis is quantitative in nature and any qualitative information is outside the scope of this report.
- Target species, where identified, were based on owner interviews regarding what they were fishing for, or gear determination based on gear characteristics.
- Location first observed is where the entangled whale was first sighted. Unless anchored, the location 1st observed is rarely where the whale first became entangled.
- Where possible, we have added photographs to the incident report. Personal identifying details of gear are manually redacted.

#### Acknowledgements:

- New England Aquarium (NEAq) and the Right Whale Consortium provided sighting and life history information for right whales.
- Demography and sighting information for humpback whales was provided by Center for Coastal Studies, with contributions from 7 Seas Whale Watch, Blue Ocean Society, Boston Harbor Cruises, Brier Island Whale and Seabird Cruises, Dolphin Fleet, Florida Fish & Wildlife Conservation Commission, Georgia Department of Natural Resources, Gotham Whale and Whale and Dolphin Conservation. Please contact Jooke Robbins of CCS for more information.
- Canadian Department of Fisheries and Oceans, stranding and disentanglement partners for providing case and gear information.
- CCS compiles thousands of photographs from numerous whale watch companies and ALWDN partners for these determinations. We are grateful for their analysis and contribution to this report.
- Many thanks to numerous NOAA Fisheries staff and the Greater Atlantic Region policy series editors that offered helpful comments.



Table 2. Key for common acronyms

CCS	Center for Coastal Studies, MA
CWI	Canadian Whale Institute (Canada)
DFO	Department of Fisheries and Oceans (Canada)
FDNY	New York Fire Department
FL FWCC	Florida Fish & Wildlife Conservation Commission
GA DNR	Georgia Department of Natural Resources
IFAW	International Fund for Animal Welfare, MA
MA EP	Massachusetts Environmental Police
MMP	Maine Marine Patrol
NEAq	New England Aquarium Right Whale Research Team, MA
NEFSC	Protected Species Branch, Northeast Fisheries Science Center
NMFS	National Marine Fisheries Service/NOAA Fisheries
NOAA	National Oceanic and Atmospheric Administration
OLE	NOAA Office of Law Enforcement
UNB	University of New Brunswick, Canada
USCG	United States Coast Guard
WDC	Whale and Dolphin Conservation Society

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Table 3. Atlantic entanglement summary for 2022 confirmed cases. Continued on next page

Entanglement Report Number	Species	Date of First Observation	Dead/Alive	SI Determination	Gear Collected	Type of Gear	Gear part ID
E01-22	Humpback	3/12/2022	Alive	SI	No	Unknown	U
E02-22	Right	5/19/2022	Alive	SI (PR)	No	Unknown	S, V
E03-22	Minke	5/22/2022	Alive	SI (PR)	No	Unknown	U
E04-22	Minke	5/29/2022	Alive	SI	No	Unknown	U
E05-22	Humpback	5/30/2022	Alive	Non-SI	Yes	Unknown	U
E06-22	Humpback	6/14/2022	Alive	SI	Yes	Unk. trap and debris	G, U
E07-22	Humpback	6/29/2022	Alive	SI	No	Unknown	B or N, V
E08-22	Minke	6/29/2022	Alive	Non-SI	No	U.S. lobster	S, V
E09-22	Right	6/25/2022	Alive	SI	No	Unknown	U
E10-22	Humpback	7/4/2022	Alive	Non-SI	No	Unknown	U
E11-22	Minke	7/8/2022	Alive	SI	No	Unknown	S, V
E12-22	Humpback	7/23/2022	Alive	Non-SI	No	Monofilament and lures	M
E13-22	Humpback	7/26/2022	Alive	SI (PR)	No	Monofilament	M
E14-22	Humpback	8/3/2022	Alive	Non-SI	No	Monofilament	M

Table 3 notes –

- Dead/Alive column represents the status as of the writing of this report.
- SI determination: SI = Serious injury or mortality was determined to be the primary cause from entanglement; Non-SI = No serious injury or mortality caused by the entanglement; SI (PR) = Insufficient information available to make an informed determination, prorated value of 0.75. Refer to <https://media.fisheries.noaa.gov/dam-migration/02-238-01.pdf> for more information regarding determination definitions.
- Gear part ID: V = Vertical/End Line; B= Single Buoy; S = Surface System (multiple buoys); G = Ground Line; N = Gillnet/Mesh; T = Trap/Pot; M = Monofilament Line; U = Unknown, gear type or gear part could not be determined; N/A = Not applicable, no gear was analyzed. Any combination of codes is possible although each code will only be listed once, regardless if different types/sets of gear were involved. This column may not represent all portions of the true initial entanglement as gear could have been shed before the first observation. Gear portions identified may not represent the section that initially caused the entanglement.

Table 3 continued. Atlantic entanglement summary for 2022 confirmed cases.

Entanglement Report Number	Species	Date of First Observation	Dead/Alive	SI Determination	Gear Collected	Type of Gear	Gear part ID
E15-22	Minke	8/5/2022	Alive	SI (PR)	No	Unknown	U
E16-22	Right	8/20/2022	Dead	SI	No	U.S. lobster - ME	S, U
E17-22	Right	8/24/2022	Alive	Non-SI	No	Unknown	U
E18-22	Humpback	8/15/2022	Alive	Non-SI	No	Monofilament	M
E19-22	Humpback	9/4/2022	Alive	Non-SI	No	Monofilament	M
E20-22	Humpback	9/15/2022	Alive	SI (PR)	No	Unknown	B, V
E21-22	Humpback	9/17/2022	Alive	SI (PR)	No	Unknown	U
E22-22	Right	9/21/2022	Alive	SI	No	Unknown	U
E23-22	Humpback	9/25/2022	Alive	Non-SI	Yes	U.S. lobster - ME	B, V
E24-22	Humpback	10/7/2022	Alive	Non-SI	No	U.S. trap - ME	B, V
E25-22	Humpback	10/11/2022	Alive	Non-SI	No	Monofilament	M
E26-22	Humpback	10/31/2022	Alive	SI	Yes	Line and buoys	S, V
E27-22	Humpback	12/5/2022	Dead	SI	Yes	Unknown line	U

Table 3 notes –

- Dead/Alive column represents the status as of the writing of this report.
- SI determination: SI = Serious injury or mortality was determined to be the primary cause from entanglement; Non-SI = No serious injury or mortality caused by the entanglement; SI (PR) = Insufficient information available to make an informed determination, prorated value of 0.75. Refer to <https://media.fisheries.noaa.gov/dam-migration/02-238-01.pdf> for more information regarding determination definitions.
- Gear part ID: V = Vertical/End Line; B= Single Buoy; S = Surface System (multiple buoys); G = Ground Line; N = Gillnet/Mesh; T = Trap/Pot; M = Monofilament Line; U = Unknown, gear type or gear part could not be determined; N/A = Not applicable, no gear was analyzed. Any combination of codes is possible although each code will only be listed once, regardless if different types/sets of gear were involved. This column may not represent all portions of the true initial entanglement as gear could have been shed before the first observation. Gear portions identified may not represent the section that initially caused the entanglement.

## 2022 Entanglements

<b>NMFS No: E01-22</b>	<b>Date First Observed Entangled: 3/12/2022</b>
<b>Location First Observed Entangled:</b> Caribbean, Silver Bank, Dominican Republic	<b>Latitude/Longitude First Observed Entangled:</b> Unknown exact location
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Monitor
<b>Sighting prior to entanglement:</b> Contact CCS	<b>Re-sightings Post-entanglement:</b> 5/6/2022
<b>Whale Biology:</b> Live humpback whale, Twine, adult female	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
<p>3/12/2022</p> <ul style="list-style-type: none"> <li>A whale watch vessel sighted the humpback whale Twine, entangled, with a possible calf present.</li> </ul> <p>5/6/2022</p> <ul style="list-style-type: none"> <li>The CCS response team sighted Twine and her calf on Stellwagen Bank, and no entangling gear was observed, including in underwater documentation. The CCS aerial survey team also assisted with aerial documentation.</li> </ul>

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Rope coming from forward on the body and into a jumble just before the dorsal fin. No trailing line observed.	<b>Subsequent Descriptions:</b> Presumed to be gear free.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> Both Twine and calf were in poor condition. Twine was thin with entanglement wounds.

<b>NMFS No: E01-22</b>	<b>Date First Observed Entangled: 3/12/2022</b>
<b>Whale Biology:</b> Live humpback whale, Twine, adult female	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E01-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown		
<u>Gear Description:</u>	Documentation showed a rope coming from the left flipper or mouth area with a bundle of rope over the back forward of the dorsal fin, leading down the right side of the body.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	Whale was entangled in a rope of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E02-22</b>	<b>Date First Observed Entangled: 5/19/2022</b>
<b>Location First Observed Entangled:</b> Gulf of St. Lawrence, 26.5 NM east of Cap-des-Rosiers, NB Canada	<b>Latitude/Longitude First Observed Entangled:</b> 48° 50.00, -63° 32.08
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> 3/11/2022	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live North Atlantic right whale, #3823 - Sundog, adult female	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)	

<b>Event Description:</b>
Both DFO and NEFSC aerial survey teams documented an entangled right whale, whom NEAq identified as Sundog, with a new entanglement present. Due to the time of day and distance, no response was possible.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Rope through the mouth leading to a possible bridle underneath. One end of line consists of a bullet buoy and polyball trailing hundreds of feet aft of the whale. Based on the photographs, the other end of the rope likely has some form of weight attached.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Fair condition. Fresh entanglement wounds present, in addition to prior entanglement wounds re-opening.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E02-22</b>	<b>Date First Observed Entangled: 5/19/2022</b>
<b>Whale Biology:</b> Live North Atlantic right whale, #3823 - Sundog, adult female	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E02-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Buoy line, surface system
Fishery Mark Recovered/Documented	None	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown		
<u>Gear Description:</u>	Documentation showed two ropes emanating from the mouth/head area with one rope sinking to an unknown point and the other to a bullet buoy and polyball trailing hundreds of feet behind the whale.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	Whale was entangled in a buoy line of unknown origin with an unknown amount of additional gear trailing in the depths below.		



## 2022 Entanglements

<b>NMFS No: E03-22</b>	<b>Date First Observed Entangled: 5/22/2022</b>
<b>Location First Observed Entangled:</b> 8.2 NM northwest of Race Point, Provincetown, MA	<b>Latitude/Longitude First Observed Entangled: ~42° 11, -70° 20</b>
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status: Entangled</b>
<b>Sighting prior to entanglement: Unknown</b>	<b>Re-sightings Post-entanglement: None</b>
<b>Whale Biology: Live minke whale, unknown ID and life history</b>	
<b>NMFS Serious Injury/Mortality Determination: Serious Injury (Prorated)</b>	

<b>Event Description:</b>
A passenger aboard a whale watch was reviewing images they took from a recent trip, and had captured an entangled whale. They shared the photos with the naturalist, who then forwarded the report to the Network. Due to the delay in detection and reporting, no response was mounted.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Green rope/netting running off the whale. Unknown attachment point, but likely forward on the body. Unclear how long the trailing rope is.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E03-22</b>	<b>Date First Observed Entangled: 5/22/2022</b>
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E03-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	None	Fishery Mark Origin and Color	N.A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown		
<u>Gear Description:</u>	Documentation showed multiple ropes/netting exiting the left side of the mouth area.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	Whale was entangled in a rope of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E04-22</b>	<b>Date First Observed Entangled: 5/29/2022</b>
<b>Location First Observed Entangled:</b> 36.9 NM south of Martha's Vineyard, MA	<b>Latitude/Longitude First Observed Entangled:</b> 40° 44.1, -70° 28.6
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
A protected species observer from a wind energy area reported a sighting of an entangled minke to the NOAA Fisheries hotline once they were back on land. No response was possible.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Bridle of rope through the mouth, wrapped around the head just aft the blow holes.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E04-22</b>	<b>Date First Observed Entangled: 5/29/2022</b>
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E04-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	None	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown		
<u>Gear Description:</u>	Documentation showed a loop of rope around the upper jaw.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	Whale was entangled in a rope of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E05-22</b>	<b>Date First Observed Entangled: 5/30/2022</b>
<b>Location First Observed Entangled:</b> 12.7 NM east of Chatham, MA	<b>Latitude/Longitude First Observed Entangled:</b> 41° 36.4, -69° 40.6
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Disentangled
<b>Sighting prior to entanglement:</b> Contact CCS	<b>Re-sightings Post-entanglement:</b> 5/30/2022
<b>Whale Biology:</b> Live humpback whale, Thumper, adult female	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
A private vessel reported the entangled whale Thumper and her calf to CCS once they were back on land, but agreed to help relocate the whales while the CCS response team was en route. Sea conditions were poor and the whale behavior/ calf presence made the response difficult. The team made several attempts to use a cutting grapple to sever the wrapping line, and were successful. They documented Thumper before sea conditions further worsened, and found her to be gear free.

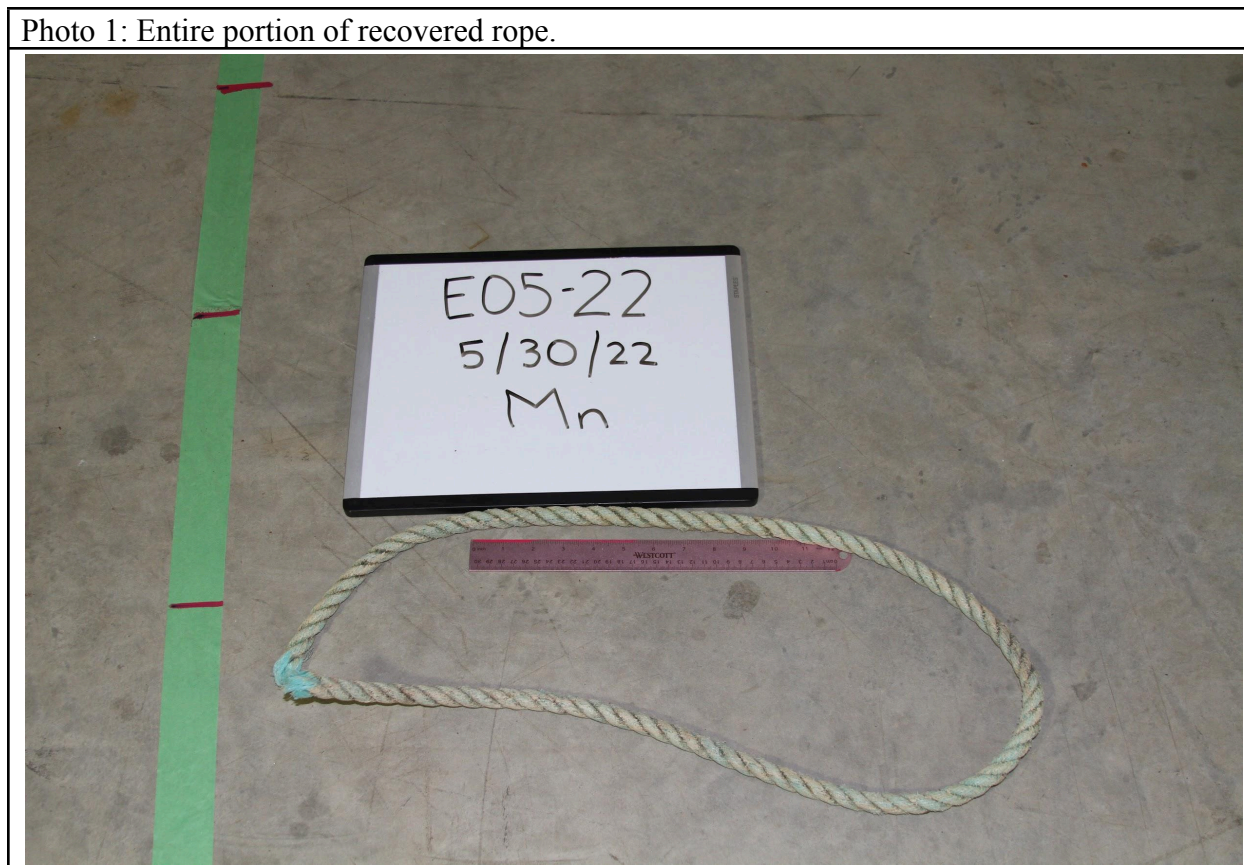
<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Five wraps of rope around the body in front of the dorsal fin, with a large jumble of rope along the left flank. No trailing rope aft the flukes observed.	<b>Subsequent Descriptions:</b> Whale is now gear free.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Poor condition with entanglement wounds and cyamids beginning to appear.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E05-22</b>	<b>Date First Observed Entangled: 5/30/2022</b>
<b>Whale Biology:</b> Live humpback whale, Thumper, adult female	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E05-22</b>	Gear Recovered (y/n)	Yes
Date Set	Unknown	Date Lost	Unknown
Line Diameter	5/8"	Gear Part	Unknown
Fishery Mark Recovered/Documented	None	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown		
Gear Description:	4 feet 8 inches of 5/8" poly float rope was recovered.		
Comments:	The majority of the gear was not recovered.		
Conclusions:	The whale was entangled in rope of unknown origin.		

### Gear Image



## 2022 Entanglements

<b>NMFS No: E06-22</b>	<b>Date First Observed Entangled: 6/14/2022</b>
<b>Location First Observed Entangled:</b> 11.2 NM east of Chatham, MA	<b>Latitude/Longitude First Observed Entangled:</b> 41° 38.40, -69° 42.07
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Disentangled
<b>Sighting prior to entanglement:</b> Contact CCS	<b>Re-sightings Post-entanglement:</b> 6/14/2022
<b>Whale Biology:</b> Live humpback whale, pending ID name, female calf	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
The Atlantic White Shark Conservancy documented and reported an entangled calf to CCS, and stood by for as long as possible before having to return to port. CCS relocated the calf, and the team made directed approaches using a pole with a fixed knife to successfully make several cuts to the gear. The whale moved away, and the floating gear was recovered. The recovered gear, combined with underwater documentation once the whale returned to the surface, confirmed it was now gear free.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Bridle of rope through the mouth that led to a jumble on the dorsal side of the peduncle region, with two bitter ends slightly trailing aft the flukes. The rope was loose enough for the jumble to shift up and down as the whale swam.	<b>Subsequent Descriptions:</b> Whale is now gear free.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Covered in fresh wounds/abrasions, as well as scars likely from the shifting entanglement configuration.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E06-22</b>	<b>Date First Observed Entangled: 6/14/2022</b>
<b>Whale Biology:</b> Live humpback whale, pending ID name, female calf	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E06-22</b>	Gear Recovered (y/n)	Yes
Date Set	Unknown	Date Lost	Unknown
Line Diameter	1/16", 3/16", 3/8"	Gear Part	Groundline, debris
Fishery Mark Recovered/Documented	No	ALWTRP Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Trap groundline, debris.		
<u>Gear Description:</u>	A bundle of black 3/8" poly float rope groundline totaling approximately 150' in length with two bridles. Small portions of two different types of 3/16" rope and various pieces of marine debris were also intertwined in the bundle of groundline.		
<u>Comments:</u>	It is unknown if the floating groundline was associated with an active fishing set or just marine debris.		
<u>Conclusions:</u>	Whale was entangled in floating groundline with some marine debris.		



Photo 1: Entire portion of recovered gear.



Photo 2: Floating groundline



Photo 3: One bridle off the floating groundline.

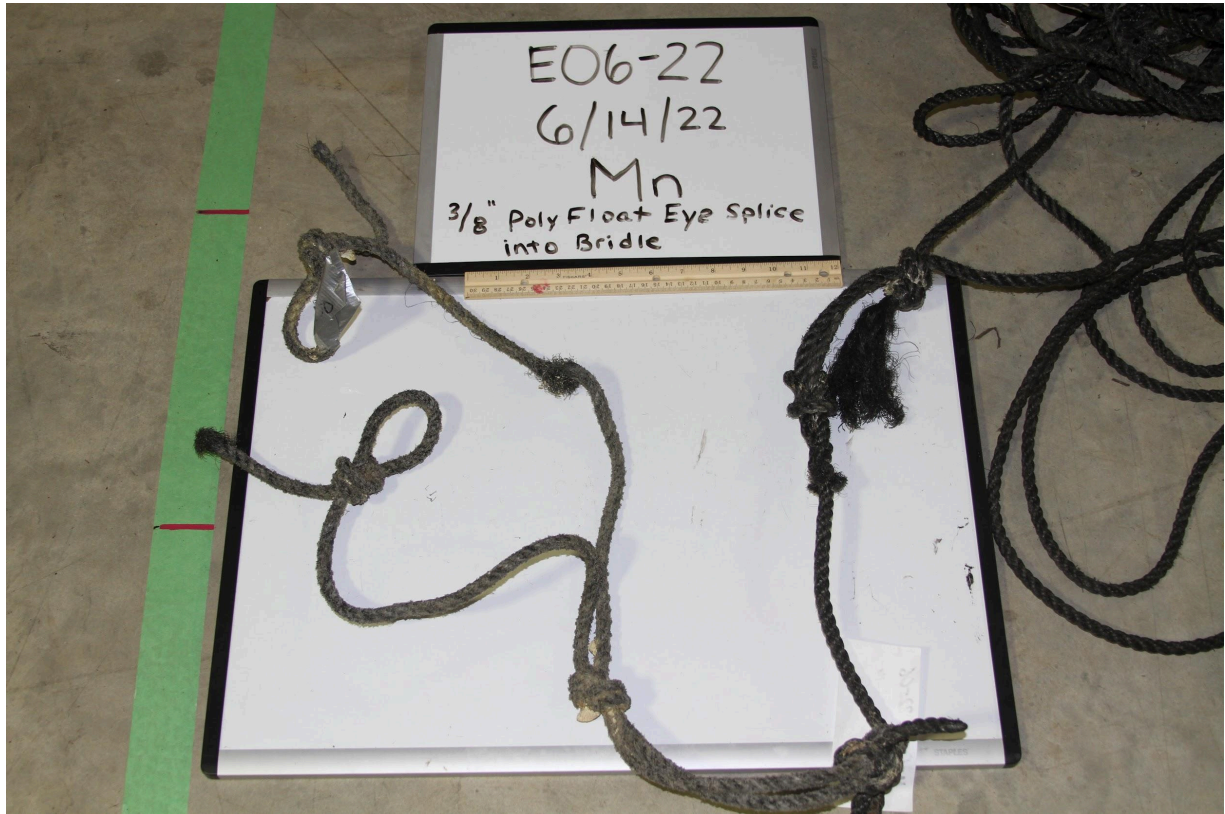




Photo 4: Another bridle off floating groundline.



Photo 5: Small portion of recovered 3/16" rope.



Photo 6: Marine debris.



## 2022 Entanglements

<b>NMFS No: E07-22</b>	<b>Date First Observed Entangled: 6/29/2022</b>
<b>Location First Observed Entangled:</b> 0.7 NM west of Coney Island, NY	<b>Latitude/Longitude First Observed Entangled:</b> 40° 34.4, -74° 01.7
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
FDNY and USCG documented and reported an entangled whale to CCS. A NMFS responder went out with USCG to search for the whale along with FDNY, but were unsuccessful in relocating.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Peduncle is tightly wrapped with line and at least one small float, along with potential monofilament webbing. It is unknown how much gear is trailing.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Embedded trauma on tailstock.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E07-22</b>	<b>Date First Observed Entangled: 6/29/2022</b>
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E07-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Rope and/or mesh and buoy
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown rope and/or mesh and buoy		
<u>Gear Description:</u>	Documentation showed embedded rope and/or possible twisted monofilament mesh and a small buoy trailing. Unknown how much gear was trailing.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	Whale was entangled in rope and/or twisted mesh with a small buoy of unknown origin.		



## 2022 Entanglements

<b>NMFS No: E08-22</b>	<b>Date First Observed Entangled: 6/29/2022</b>
<b>Location First Observed Entangled:</b> 3.5 NM east of Plymouth, MA	<b>Latitude/Longitude First Observed Entangled:</b> 41° 57.95, -70° 34.49
<b>Initial Movement (Anchored/Free):</b> Anchored	<b>Status:</b> Disentangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
An entangled whale was reported several times to the CCS hotline, prompting a response by WDC and the Plymouth Harbormaster to document. Due to poor sea conditions, a response by CCS was planned for the following day. NMFS, the commercial fishermen, and the harbormaster stood by the whale first thing in the morning until CCS arrived on scene. The team used a grappling hook into the gear to stay close for documentation. Using a pole and fixed knife, they made one cut to the rope, freeing the whale and enabling the fishermen to retrieve the gear.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Likely anchored in a 20 pot lobster trawl. Tight wrap of the lower jaw where the whale bit down on the buoy line, which became fouled back on itself. The buoy line at the throat was a tight jumble with a coil of rope, likely from the whale swimming in circles.	<b>Subsequent Descriptions:</b> Whale is now gear free.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E08-22</b>	<b>Date First Observed Entangled: 6/29/2022</b>
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E08-22</b>	Gear Recovered (y/n)	Yes
Date Set	6/28/2022	Date Lost	N/A
Line Diameter	3/8"	Gear Part	Surface system and buoy line
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Lobster	Location of set	41° 57.95, -70° 34.49
Gear Type	Lobster gear set in MA state waters.		
<u>Gear Description:</u>	Fisherman described it as a 20 trap trawl with 65 feet of 3/8" buoy line with the top 1/3 float and the bottom 2/3 sink.		
<u>Comments:</u>	The fisherman who was on scene recovered all the gear. Gear information provided by the fisherman interview.		
<u>Conclusions:</u>	The whale was entangled in the buoy line of lobster gear set in MA state waters.		

## 2022 Entanglements

<b>NMFS No: E09-22</b>	<b>Date First Observed Entangled: 6/25/2022</b>
<b>Location First Observed Entangled:</b> Gulf of St. Lawrence, 55.6 NM east of Shippagan, NB Canada	<b>Latitude/Longitude First Observed Entangled:</b> 47° 40.940, -63° 16.346
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> 3/7/2022	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live North Atlantic right whale, #1403 - Meridian, adult male	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
<p>6/25/22</p> <ul style="list-style-type: none"> <li>In June 2024 when conducting photo analysis, NEAq found a photo from 5 days prior to reported entanglement with entanglement present.</li> </ul>
<p>6/30/22</p> <ul style="list-style-type: none"> <li>A DFO aerial survey team documented an entangled right whale that NEAq identified as Meridian.</li> </ul>
<p>7/7/22</p> <ul style="list-style-type: none"> <li>A joint research team (CWI/UNB/NEAq) sighted and documented Meridian on the Shediac Valley, still entangled. Due to the time of day and unpredictable whale behavior, a tagging effort was not attempted.</li> </ul>

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Pass of rope over the dorsal side aft the flippers with line trailing from the body on the right side towards the flukes. Unknown point of attachment as well as how far the rope trails.	<b>Subsequent Descriptions:</b> One tight wrap of rope around the middle of the body. Rope appears to be pulled forward, so likely involves the mouth or flippers. Trailing rope observed aft the flukes.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> In overall good condition.	<b>Subsequent Descriptions:</b> Did not appear to have any new entanglement wounds present.

<b>NMFS No: E09-22</b>	<b>Date First Observed Entangled: 6/25/2022</b>
<b>Whale Biology:</b> Live North Atlantic right whale, #1403 - Meridian, adult male	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E09-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown rope		
<u>Gear Description:</u>	Whale was documented with rope over the body and trailing an unknown distance.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in rope of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E10-22</b>	<b>Date First Observed Entangled: 7/4/2022</b>
<b>Location First Observed Entangled:</b> 15.7 NM southeast of Frenchboro, ME	<b>Latitude/Longitude First Observed Entangled:</b> ~44°, -68°
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Monitor
<b>Sighting prior to entanglement:</b> 5/28/2022	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, Sword, adult male	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
A whale watch naturalist, who was reviewing images from a previous trip, noticed Sword had rope trailing in the photos, and reported the sighting. Due to the cryptic nature, subsequent sightings and documentation have not yet been able to confirm whether Sword is gear free.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Green rope running down the side of the whale. Point of attachment unknown.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Behaving normally. One possible indentation due to the entanglement just behind the blow holes.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E10-22</b>	<b>Date First Observed Entangled: 7/04/2022</b>
<b>Whale Biology:</b> Live humpback whale, Sword, adult male	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E10-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown rope		
<u>Gear Description:</u>	The whale was documented with some rope near the blowholes and trailing an unknown amount. Entanglement was very cryptic.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in a rope of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E11-22</b>	<b>Date First Observed Entangled: 7/08/2022</b>
<b>Location First Observed Entangled:</b> 2.0 NM southeast of Chatham, MA	<b>Latitude/Longitude First Observed Entangled:</b> 41° 40.391, -69° 54.366
<b>Initial Movement (Anchored/Free):</b> Anchored	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
Recreational fishers reported an entangled minke to CCS but were unable to standby. CCS responded and searched the area, but efforts were suspended due to incoming weather. The whale was not relocated.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> At least one wrap of the rostrum. Two buoys in association that would get pulled under with the whale.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E11-22</b>	<b>Date First Observed Entangled: 7/08/2022</b>
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E11-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Surface system, buoy line
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown buoy line and surface system.		
<u>Gear Description:</u>	The whale was documented with a rope over the head and a surface system went under the surface when the whale dove.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in a buoy line and surface system of unknown origin.		



## 2022 Entanglements

<b>NMFS No: E12-22</b>	<b>Date First Observed Entangled: 7/23/2022</b>
<b>Location First Observed Entangled:</b> 2.5 NM north of Race Point, Provincetown, MA	<b>Latitude/Longitude First Observed Entangled: 42° 06.1, -70° 15.8</b>
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status: Monitor</b>
<b>Sighting prior to entanglement: Contact CCS</b>	<b>Re-sightings Post-entanglement: None</b>
<b>Whale Biology: Live humpback whale, Dusky, adult female</b>	
<b>NMFS Serious Injury/Mortality Determination: Non-serious Injury</b>	

<b>Event Description:</b>
Whale watch vessel sighted Dusky with line and lures attached on the right flank of the body.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> ‘Squid’ lures with monofilament line attached forward on the body.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E12-22</b>	<b>Date First Observed Entangled: 7/23/2022</b>
<b>Whale Biology:</b> Live humpback whale, Dusky, adult female	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E12-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Monofilament and lures
ALWTRP Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown monofilament and 'squid' lures		
<u>Gear Description:</u>	Documentation showed squid lures and monofilament on the right side of the body.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled with lures and monofilament of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E13-22</b>	<b>Date First Observed Entangled: 7/26/2022</b>
<b>Location First Observed Entangled:</b> 7.1 NM southeast of Plymouth, MA	<b>Latitude/Longitude First Observed Entangled: ~41° 55, -70° 31</b>
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status: Monitor</b>
<b>Sighting prior to entanglement: None</b>	<b>Re-sightings Post-entanglement: Unknown</b>
<b>Whale Biology: Live humpback whale, unknown ID and life history</b>	
<b>NMFS Serious Injury/Mortality Determination: Serious Injury (Prorated)</b>	

<b>Event Description:</b>
A photo of a humpback whale with monofilament attached was posted on social media.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Monofilament line appears to be trailing off the head.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E13-22</b>	<b>Date First Observed Entangled: 7/26/2022</b>
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E13-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Monofilament
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown monofilament		
Gear Description:	Documentation showed a monofilament line over the mouth.		
Comments:	None.		
Conclusions:	The whale was entangled in a monofilament line of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E14-22</b>	<b>Date First Observed Entangled: 8/03/2022</b>
<b>Location First Observed Entangled:</b> 0.2 NM north of Long Island, MA	<b>Latitude/Longitude First Observed Entangled:</b> 42° 20.04, -70° 57.27
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Monitor
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
Upon reviewing images taken from a previous trip, a whale watch discovered they had documented line trailing from a humpback.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Monofilament line trailing from the left fluke blade.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E14-22</b>	<b>Date First Observed Entangled: 8/03/2022</b>
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E14-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Monofilament
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown monofilament		
<u>Gear Description:</u>	The whale was documented with a monofilament line seen over the flukes with an unknown attachment point.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in a monofilament line of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E15-22</b>	<b>Date First Observed Entangled: 8/05/2022</b>
<b>Location First Observed Entangled:</b> 12.0 NM east of Hampton Beach, NH	<b>Latitude/Longitude First Observed Entangled:</b> 42° 56.4, -70° 31.4
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)	

<b>Event Description:</b>
A whale watch vessel sighted an entangled minke, reported it, and stood by while CCS mounted a response. They passed off stand-by support to another vessel. When CCS arrived, the whale had not been seen for some time, and despite searching the area, relocation efforts were unsuccessful. Due to incoming weather, the response was called off.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Green rope exiting both sides of the mouth leading to a jumble of rope on the left side just aft of the blowholes. At least one rope from the jumble trailed aft to possible weight.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E15-22</b>	<b>Date First Observed Entangled: 8/05/2022</b>
<b>Whale Biology:</b> Live minke whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E15-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown rope		
<u>Gear Description:</u>	The whale was documented with green rope exiting both sides of the mouth with a bundle of rope just aft of the blowholes and trailing down the left side of the body.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in a rope of unknown origin.		



## 2022 Entanglements

<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Location First Observed Entangled:</b> Gulf of St. Lawrence, 44.8 NM southeast of Shippagan, NB Canada	<b>Latitude/Longitude First Observed Entangled: ~47° 28, -63° 40</b>
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Deceased (2024) - entangled
<b>Sighting prior to entanglement:</b> 5/1/2022	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Deceased North Atlantic right whale, #5120, juvenile female	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
<p>8/20/22</p> <ul style="list-style-type: none"> <li>A DFO aerial survey team documented in the Gulf of St. Lawrence an entangled right whale that NEAq identified as #5120, the 2021 calf of #3720.</li> </ul>
<p>10/13/22</p> <ul style="list-style-type: none"> <li>A DFO aerial survey documented the whale in Gulf of St. Lawrence, but did not recognize the individual in the field and the sighting was not discovered until months later.</li> </ul>
<p>1/18/23</p> <ul style="list-style-type: none"> <li>The CCS aerial survey team documented this whale in Cape Cod Bay and alerted the CCS response team. Sea and lighting conditions were poor, and efforts were further inhibited by the whale's unpredictable behavior, as well as the presence of other whales in the area. Attempts were made to attach a telemetry buoy, but were unsuccessful. Sea conditions worsened and efforts were suspended.</li> </ul>
<p>1/22/23</p> <ul style="list-style-type: none"> <li>The CCS aerial survey team sighted this whale again in Cape Cod Bay. The CCS response team attempted to relocate, but stood down efforts after worsening sea state.</li> </ul>
<p>1/30/23</p> <ul style="list-style-type: none"> <li>The CCS aerial survey team documented this whale again in Cape Cod Bay and provided aerial support to the CCS response team. The team attempted to disentangle using a cutting grapple, but the whale became increasingly evasive during approaches, and was eventually lost.</li> </ul>
<p>2/9/23</p> <ul style="list-style-type: none"> <li>The NEFSC aerial survey team sighted #5120 south of Nantucket. The CCS team was in Cape Cod Bay searching for this animal, and due to the distance, was unable to respond.</li> </ul>
<p>6/12/23</p> <ul style="list-style-type: none"> <li>The NEFSC aerial survey team sighted this whale in the Gulf of St. Lawrence. Due to time of day and distance from shore, no response was possible.</li> </ul>
<p>1/28/24</p> <ul style="list-style-type: none"> <li>Whale found dead on Joseph Silvia Beach, Martha's Vineyard, MA. Multiple lines embedded in peduncle and bundle of gear still present.</li> </ul>

<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology:</b> Deceased North Atlantic right whale, #5120, juvenile female	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> At least one wrap of rope around the peduncle and fluke blade, with two small Go Deep type buoys and roughly 170' of rope in tow. The rope surfaces with the whale.	<b>Subsequent Descriptions:</b> On 1/18/23, the whale still had a wrap of the peduncle and left fluke blade, along with buoys trailing. No other trailing rope could be observed during this sighting. There were no significant changes in gear configuration during the 1/22/23 sighting. On 1/30/23, documentation confirmed at least four wraps of the peduncle and one short bitter end of rope trailing just aft of the buoys. On 2/9/23 there were no significant changes to the entanglement configuration and still no trailing rope observed. On 6/12/23, no trailing rope can be seen and the buoys were no longer visible. Whale was found dead on 1/28/24 with multiple ropes embedded in the tail and a bundle of rope under the fluke.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Wounds at the peduncle do not appear fresh.	<b>Subsequent Descriptions:</b> No significant changes in condition noted during subsequent sightings. At the 6/12/23 sighting, the overall condition of the whale appears to have declined, with severe wounds on the peduncle. Whale found dead on 1/28/24 with severe embedded entanglement trauma on peduncle.

<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology:</b> Deceased North Atlantic right whale, #5120, juvenile female	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E16-22</b>	Gear Recovered (y/n)	Yes
Date Set	Unknown	Date Lost	Unknown
Line Diameter	3/8" and 1/2"	Gear Part	Buoy line
Fishery Mark Recovered/Documented	2 purple zip ties	Fishery Mark Origin and Color	ME trap gear - state waters
Target Species	Unknown	Location of set	Unknown
Gear Type	Maine trap gear from state waters.		
<u>Gear Description:</u>	<p>Gear was removed from the carcass during three occasions. MA Environmental Police (EP) removed a gear bundle on the night of 1/28/24 and the gear was transferred to a NOAA Office of Law Enforcement (OLE) officer the following day.. IFAW removed gear during the necropsy efforts on February 1 and 2, 2024 which was also transferred to NOAA OLE.</p> <p>Gear removed on 1/28/24 (photos 2 &amp;3) – 4 pieces of rope with no marks. 4' of 1/2" blue poly float with orange fleck rope; 3.5' of 3/8" white with red fleck rope; 6' and 38' of 3/8" white with blue fleck rope.</p> <p>Gear removed with purple zip tie marks included one portion containing 14' of 1/2" blue rope with orange fleck with purple zip tie nub leading to an 8" eye splice. A double becket bend which leads to 5' of the white with blue fleck rope. See photo 4.</p> <p>A second portion contained 6' of 3/8" white with blue fleck rope. Complete 1 foot purple zip tie and a 1 foot traditional eye splice with only 1 tuck. See photo 5.</p> <p>Gear removed on 2/1/24: A portion of the embedded gear was removed during necropsy, which included two 4' pieces of 3/8" white with blue fleck sink rope. See photo 6.</p> <p>Gear removed on 2/2/24: The final portion was removed during a CT scan of the embedded line and tail, which contained 12.5' of 3/8" white with blue fleck sink rope, leading to ~3' of 3/8" white with red fleck sink rope from a carrick bend. See photo 7.</p>		

	In total 100 feet of 3 different types of rope were recovered (photo 8). Some embedded line was likely lost in the surf after the gear was removed on January 28 based on the recovered gear and initial stranding documentation.
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<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology:</b> Deceased North Atlantic right whale, #5120, juvenile female	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>	
<u>Comments:</u>	A bundle of gear was recovered by MA EP on 1/28/24. Remaining embedded gear was removed by IFAW on February 1 and (deeper in wound) February 2, 2024 and transferred to NOAA OLE. According to ME state trap fishery regulations, federal green marks were not required near every state purple mark until May 1, 2022. Right whale #5120 was sighted not entangled on May 1, 2022 in the Great South Channel approximately 90 NM away from the ME state fishing border.
<u>Conclusions:</u>	The whale was entangled in a buoy line with markings consistent from Maine state waters trap gear.

<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology: Deceased North Atlantic right whale, #5120, juvenile female</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

Photo 1: Carcass on the beach before gear was recovered on 1/28/24. Photo from the public individual who reported the carcass.





<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology: Deceased North Atlantic right whale, #5120, juvenile female</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

Photo 2: Bundle of gear recovered with purple zip ties visible on 1/28/24 from MA Environmental Police. Photo from MA Environmental Police.



<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology: Deceased North Atlantic right whale, #5120, juvenile female</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

Photo 3: Bundle of gear recovered on 1/28/24 from MA Environmental Police; unwound and laid out. Photo from NOAA Fisheries.





<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology:</b> Deceased North Atlantic right whale, #5120, juvenile female	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

Photo 4: Bundle of gear recovered on 1/28/24 from MA Environmental Police; portion with purple zip tie nub. Photo from NOAA Fisheries.





<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology: Deceased North Atlantic right whale, #5120, juve nile female</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

Photo 5: Bundle of gear recovered on 1/28/24 from MA Environmental Police; portion with 1' purple zip tie. Photo from NOAA Fisheries.



<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology: Deceased North Atlantic right whale, #5120, juvenile female</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

Photo 6: Portion of gear recovered on 2/01/24 from IFAW; two 4' sections. Photo from NOAA Fisheries.





<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology: Deceased North Atlantic right whale, #5120, juvenile female</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

Photo 7: Portion of gear recovered on 2/02/24 from IFAW; two different types of rope with carrick bend. Photo from NOAA Fisheries.



<b>NMFS No: E16-22</b>	<b>Date First Observed Entangled: 8/20/2022</b>
<b>Whale Biology: Deceased North Atlantic right whale, #5120, juvenile female</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

Photo 8: All gear recovered from the carcass. Photo from NOAA Fisheries.



## 2022 Entanglements

<b>NMFS No: E17-22</b>	<b>Date First Observed Entangled: 8/24/2022</b>
<b>Location First Observed Entangled:</b> Gulf of St. Lawrence, 48.2 NM east of Shippagan, NB Canada	<b>Latitude/Longitude First Observed Entangled: ~47° 41.27, -63° 30.35</b>
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Gear shed
<b>Sighting prior to entanglement: 8/24/2022</b>	<b>Re-sightings Post-entanglement: 3/31/2023</b>
<b>Whale Biology:</b> Live North Atlantic right whale, #4501, juvenile male	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
<p>8/24/22</p> <ul style="list-style-type: none"> <li>The DFO aerial survey team was searching for the 2021 calf of #3720, when they discovered another entangled right whale. NEAq identified this individual as #4501. The whale appeared agitated, and by the end of the sighting, was traveling quickly with no entangling gear visible.</li> </ul> <p>3/31/23</p> <ul style="list-style-type: none"> <li>The NEFSC aerial survey team documented #4501, and confirmed it was now gear free.</li> </ul>

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> One pass of rope across the midsection and another at the peduncle. Point of attachment unknown.	<b>Subsequent Descriptions:</b> Whale is now gear free.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None



<b>NMFS No: E17-22</b>	<b>Date First Observed Entangled: 8/24/2022</b>
<b>Whale Biology:</b> Live North Atlantic right whale, #4501, juvenile male	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E17-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown Canadian gear.		
Gear Description:	Documentation showed rope across the body and tailstock.		
Comments:	The whale was sighted earlier in the day gear free.		
Conclusions:	The whale was entangled in a rope of Canadian origin.		

## 2022 Entanglements

<b>NMFS No: E18-22</b>	<b>Date First Observed Entangled: 8/15/2022</b>
<b>Location First Observed Entangled:</b> 26.7 NM southeast of Chatham, MA	<b>Latitude/Longitude First Observed Entangled:</b> 41° 32.09, -69° 22.38
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Monitor
<b>Sighting prior to entanglement:</b> Contact CCS	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, Hiatus, Adult, contact CCS for sex determination	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
The CCS Humpback Whale Studies team was processing images from a recent cruise, and discovered they had documented Hiatus with monofilament in tow.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Hook lodged in the trailing edge of the right fluke blade with monofilament streaming.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E18-22</b>	<b>Date First Observed Entangled: 8/15/2022</b>
<b>Whale Biology:</b> Live humpback whale, Hiatus, adult, contact CCS for sex determination	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E18-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Hook and monofilament line
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown hook and monofilament line.		
<u>Gear Description:</u>	Whale was documented with a hook stuck in the right fluke blade and monofilament line trailing.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled with a hook and monofilament line of unknown origin.		



## 2022 Entanglements

<b>NMFS No: E19-22</b>	<b>Date First Observed Entangled: 9/04/2022</b>
<b>Location First Observed Entangled:</b> 14.5 NM east of Hampton, NH	<b>Latitude/Longitude First Observed Entangled:</b> 42° 55.01, -70° 27.88
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Monitor
<b>Sighting prior to entanglement:</b> Contact CCS	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, Clamp, adult female	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
Whale watch vessel observed Clamp with monofilament in tow. Further documentation from subsequent sightings throughout the day provided additional information on the attachment point.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Hook attached to the right fluke blade with monofilament line trailing.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E19-22</b>	<b>Date First Observed Entangled: 9/04/2022</b>
<b>Whale Biology:</b> Live humpback whale, Clamp, adult female	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E19-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Hook and monofilament line
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown hook and monofilament line.		
<u>Gear Description:</u>	Documentation showed a hook in the right fluke blade with monofilament line trailing.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled with a hook and monofilament line.		

## 2022 Entanglements

<b>NMFS No: E20-22</b>	<b>Date First Observed Entangled: 9/15/2022</b>
<b>Location First Observed Entangled:</b> 0.8NM east of North Truro, MA	<b>Latitude/Longitude First Observed Entangled: ~42° 02.2, -70° 02.1</b>
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)	

<b>Event Description:</b>
A CCS response team member was conducting fieldwork on shore, and documented an entangled humpback breaching a short distance away. The whale eventually moved further offshore and due to sea state, no response was possible.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Two buoys were being towed, one of which had two flags on a long stick, roughly 60' aft of the whale. Gear appeared to submerge/surface with the whale. Point of attachment unknown.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E20-22</b>	<b>Date First Observed Entangled: 9/15/2022</b>
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E20-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Surface system and buoy line
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown surface system and buoy line.		
<u>Gear Description:</u>	The whale was observed and documented from shore with two buoys trailing that submerged as the whale dove.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in a buoy line and surface system of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E21-22</b>	<b>Date First Observed Entangled: 9/17/2022</b>
<b>Location First Observed Entangled:</b> 4.0 NM east of Bridgeport, CT	<b>Latitude/Longitude First Observed Entangled: ~41° 09, -73° 05</b>
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)	

<b>Event Description:</b>
A boater emailed CCS a sighting of an entangled humpback from earlier in the day. Due to the delay in reporting, no response was mounted.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Rope over the back at the dorsal fin and likely trailing aft. Point of attachment unknown, but likely somewhere forward on the body.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E21-22</b>	<b>Date First Observed Entangled: 9/17/2022</b>
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury (Prorated)

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E21-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown rope		
<u>Gear Description:</u>	The whale was documented with rope over the back.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in rope of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E22-22</b>	<b>Date First Observed Entangled: 9/21/2022</b>
<b>Location First Observed Entangled:</b> 16.8 NM south of Nantucket Island, MA	<b>Latitude/Longitude First Observed Entangled:</b> 40° 57.9, -70° 05.4
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> 7/22/2022	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live North Atlantic right whale, #3560, Snow Cone, adult female	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
The NEAq aerial survey team sighted Snow Cone, an open 2021 entanglement case (see E04-21 in the 2021 Atlantic Large Whale Entanglement Report), with additional gear in tow. Due to the time of day and distance from shore, no response was possible.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> In addition to the original 2021 entangling gear, there is now at least one length of rope through the mouth, trailing aft the flukes where there appears to be weighted gear. Some gear may involve the left flipper.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Poor health condition compared to previous sightings. Thin with further discoloration of the rostrum.	<b>Subsequent Descriptions:</b> None



<b>NMFS No: E22-22</b>	<b>Date First Observed Entangled: 9/21/2022</b>
<b>Whale Biology:</b> Live North Atlantic right whale, #3560 - Snow Cone, adult female	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E22-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Unknown
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown rope		
<u>Gear Description:</u>	While the whale was still entangled in an entanglement that was first reported in 2021 a new entanglement was documented on multiple parts of the animal.		
<u>Comments:</u>	Whale was still entangled in 2021 gear - see E04-21 in the 2021 Atlantic Large Whale Entanglement Report.		
<u>Conclusions:</u>	The whale was entangled in rope of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E23-22</b>	<b>Date First Observed Entangled: 9/25/2022</b>
<b>Location First Observed Entangled:</b> 6.3 NM northeast of Allerton, MA	<b>Latitude/Longitude First Observed Entangled:</b> 42° 21.17, -70° 45.25
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Disentangled
<b>Sighting prior to entanglement:</b> Contact CCS	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, 2021 calf, Anole, unknown sex	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

### Event Description:

Recreational boaters reported an entangled whale to USCG, who passed that along to NMFS, then to CCS. The boaters stood by until USCG relieved them, but the whale was lost, and CCS began searching. Another passing vessel found the whale, reported it, and stood by. The CCS team grappled into the entangling rope and deployed the inflatable. The whale was evasive and traveled quickly. By adding floatation and using a long pole with a fixed knife, the team was able to make one cut to the entangling gear. The whale eventually released its grip of the rope through the mouth, and all of the gear was removed from the animal.

### Description of Gear on Whale as Reported:

<b>During Initial Sighting:</b> Buoy near the head with a length of rope caught in the gape of the mouth that twisted back on itself over the dorsal side. Lengths of rope were trailing from this bridle and looped around the peduncle forming a loose wrap, with the tail held down in the water, indicating weighted gear. There was roughly 200' of trailing rope.	<b>Subsequent Descriptions:</b> Whale is now gear free.
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### Description of Wounds/Condition:

<b>During Initial Sighting:</b> Overall good condition, older injuries indicate this was not a fresh entanglement. Traveling quickly and possibly getting jabbed by the broken buoy stick just below the dorsal fin.	<b>Subsequent Descriptions:</b> None
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<b>NMFS No: E23-22</b>	<b>Date First Observed Entangled: 9/25/2022</b>
<b>Whale Biology: Live humpback whale, Anole - 2021 calf</b>	<b>NMFS Serious Injury/Mortality Determination: Non-serious Injury</b>

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E23-22</b>	Gear Recovered (y/n)	Yes
Date Set	Unknown	Date Lost	Unknown
Line Diameter	7/16"	Gear Part	Buoy line, buoy
Fishery Mark Recovered/Documented	Yes	Fishery Mark Origin and Color	Purple - ME state
Target Species	Unknown	Location of set	Unknown
Gear Type	Trap gear from ME state waters, unknown buoy		
<u>Gear Description:</u>	58 fathoms of rope was recovered - 5 fathoms of 7/16" white rope, 19 fathoms of 7/16" green poly float rope with 1 purple marker twine woven in, 34 fathoms of 7/16" of purple poly float rope with 1 purple marker zip tie woven in. The high flyer buoy had no numbers and a broken 600# weak link.		
<u>Comments:</u>	It is unclear if the buoy was associated with the recovered buoy line.		
<u>Conclusions:</u>	The whale was entangled in a buoy line of U.S. trap gear marked for ME state waters. It is unknown if the buoy was from the same set.		

<b>NMFS No: E23-22</b>	<b>Date First Observed Entangled: 9/25/2022</b>
<b>Whale Biology: Live humpback whale, Anole - 2021 calf</b>	<b>NMFS Serious Injury/Mortality Determination: Non-serious Injury</b>

### Gear Images

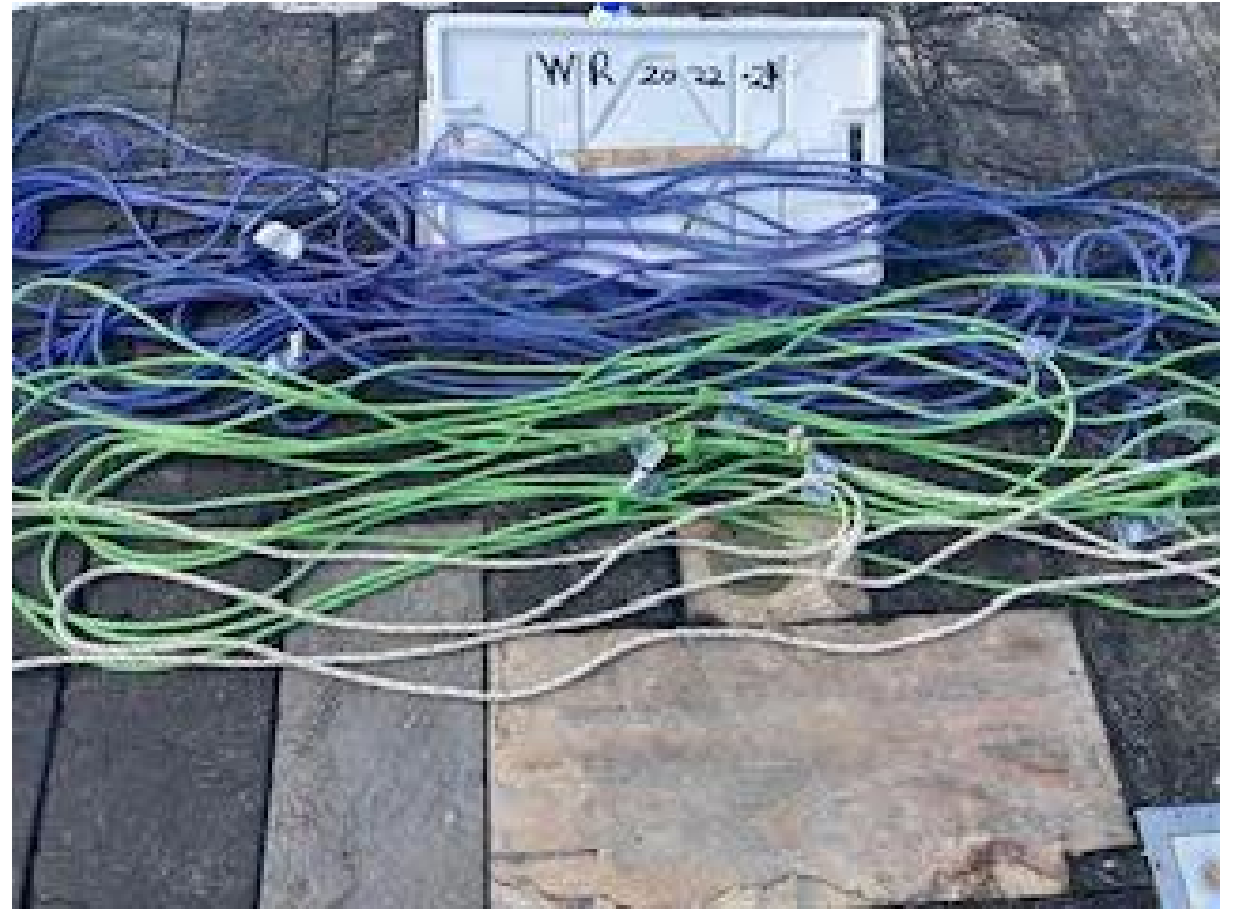
Photo 1: High flyer buoy with 600# broken weak link.



<b>NMFS No: E23-22</b>	<b>Date First Observed Entangled: 9/25/2022</b>
<b>Whale Biology: Live humpback whale, Anole - 2021 calf</b>	<b>NMFS Serious Injury/Mortality Determination: Non-serious Injury</b>

**Gear Images**

Photo 2: 58 fathoms of recovered buoy line.



<b>NMFS No: E23-22</b>	<b>Date First Observed Entangled: 9/25/2022</b>
<b>Whale Biology: Live humpback whale, Anole - 2021 calf</b>	<b>NMFS Serious Injury/Mortality Determination: Non-serious Injury</b>

### Gear Images

Photo 3: Purple ME state twine marker



<b>NMFS No: E23-22</b>	<b>Date First Observed Entangled: 9/25/2022</b>
<b>Whale Biology: Live humpback whale, Anole - 2021 calf</b>	<b>NMFS Serious Injury/Mortality Determination: Non-serious Injury</b>

### Gear Images

Photo 4: Purple ME state zip tie marker





## 2022 Entanglements

<b>NMFS No: E24-22</b>	<b>Date First Observed Entangled:</b> 10/07/2022
<b>Location First Observed Entangled:</b> 1.3 NM north of Provincetown, MA	<b>Latitude/Longitude First Observed Entangled:</b> ~42° 06.19, -70° 12.44
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
Whale watch vessel spotted an entangled humpback, reported it, and stood by for as long as possible while CCS mounted a response. The whale watch passed off the latest coordinates and had to return to port, so CCS and the NEFSC aerial survey team began searching for the animal. Another whale watch spotted the whale, and CCS attempted a disentangling. Unfortunately, sea conditions were poor, and the whale's increasingly evasive behavior prevented a successful grapple into the gear.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Short length of buoy line in the mouth, with a bitter end on its left side at about the dorsal fin, near a rope marking (or weighted gear). Buoy on top of the right fluke blade with rope running forward. No trailing rope could be seen aft the flukes.	<b>Subsequent Descriptions:</b> None

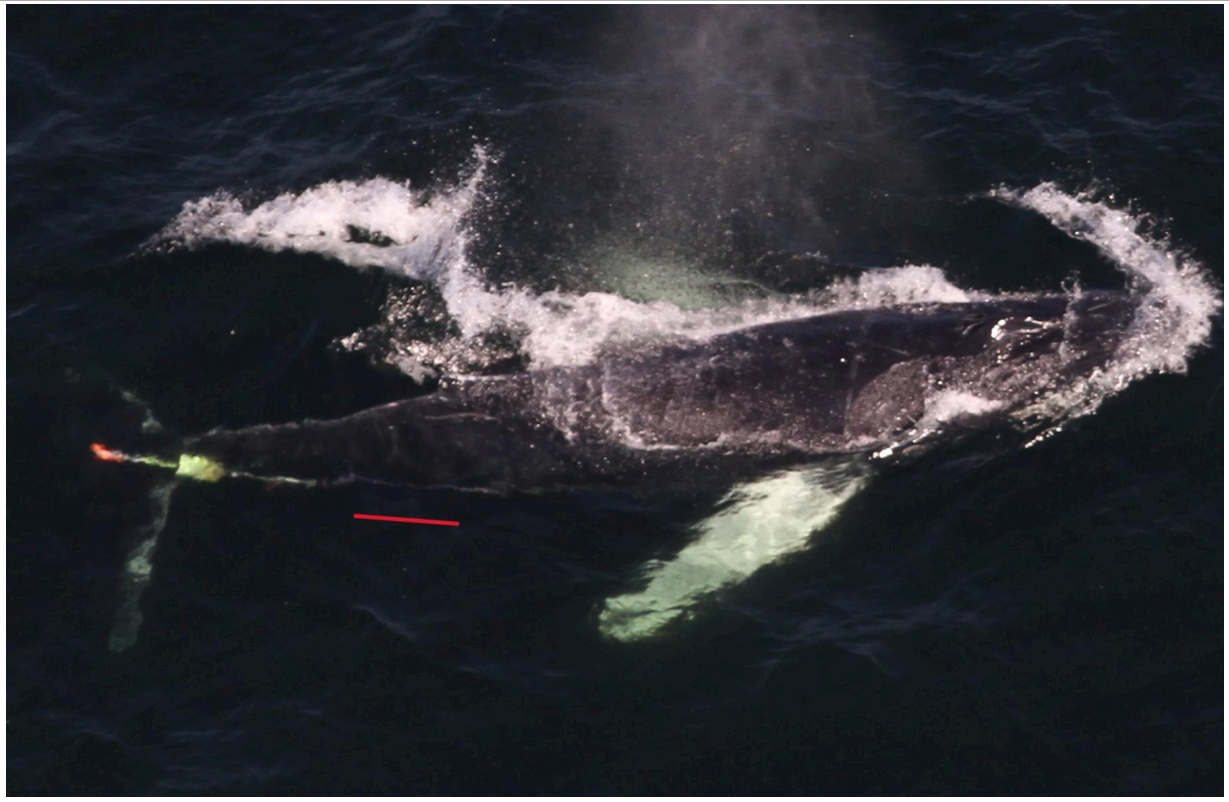
<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Whale was small in size but reasonably good condition. Entanglement wounds present throughout the body, indicating the entanglement configuration had been more complex prior to this sighting.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E24-22</b>	<b>Date First Observed Entangled:</b> 10/07/2022
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E24-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Buoy line, buoy
Fishery Mark Recovered/Documented	Yes	Fishery Mark Origin and Color	Purple - Maine
Target Species	Unknown	Location of set	Unknown
Gear Type	Trap gear from Maine		
<u>Gear Description:</u>	Gear was not recovered, but photo analysis showed a 3 foot purple mark on buoy line.		
<u>Comments:</u>	Multiple large whale entanglement experts and fishermen reviewed the photos showing the 3 foot mark and the majority concluded it was purple in color compared to the other 3 foot required colors.		
<u>Conclusions:</u>	The whale was entangled in a buoy line with a Maine state waters trap gear mark. It is unknown if the gear was from state or federal waters.		

<b>NMFS No: E24-22</b>	<b>Date First Observed Entangled:</b> 10/07/2022
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

Photo 1: Three foot purple buoy line marker above the added red line to highlight the location of the purple mark next to the whale. Color clarity in the report may differ from the actual photograph due to viewing monitor traits or personal vision sensitivity; no color or contrast editing was done to the photograph.



### 2022 Entanglements

<b>NMFS No: E25-22</b>	<b>Date First Observed Entangled:</b> 10/11/2022
<b>Location First Observed Entangled:</b> 9.3 NM north of Race Point, Provincetown, MA	<b>Latitude/Longitude First Observed Entangled:</b> 42° 13.03, -70° 15.58
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Monitor
<b>Sighting prior to entanglement:</b> Contact CCS	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, Rocker, adult male	
<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury	

<b>Event Description:</b>
The CCS response team while on a survey sighted Rocker with monofilament line trailing.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Monofilament line coming off the right fluke blade.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Behaving normally.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E25-22</b>	<b>Date First Observed Entangled:</b> 10/11/2022
<b>Whale Biology:</b> Live humpback whale, Rocker, adult male	<b>NMFS Serious Injury/Mortality Determination:</b> Non-serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E25-22</b>	Gear Recovered (y/n)	No
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Monofilament line
ALWTRP Mark Recovered/Documented	No	ALWTRP Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Monofilament line		
<u>Gear Description:</u>	The whale was documented with a monofilament line over the fluke with an unknown attachment point.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in a monofilament line of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E26-22</b>	<b>Date First Observed Entangled:</b> 10/31/2022
<b>Location First Observed Entangled:</b> 7.5 NM east of Appledore Island, ME	<b>Latitude/Longitude First Observed Entangled:</b> 42° 59 49.5, -70° 26 28.7
<b>Initial Movement (Anchored/Free):</b> Anchored	<b>Status:</b> Entangled
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
Commercial fishermen encountered an anchored humpback whale entangled in a nearby gear set. They made one cut, and the whale swam off with gear in tow. The crew found the whale again later that day and made another cut. The whale swam off again still with some gear tight on the body. They reported the sighting once they had cell service, and NMFS and Maine Marine Patrol were notified. USCG conducted a brief helicopter search while they were returning from an operation, but did not relocate the animal.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Rope tight across the back, as well as a go deep and bullet buoy with a six foot stick and flag next to the body. Also had rope wrapping the peduncle before descending. Point of attachment unknown.	<b>Subsequent Descriptions:</b> None

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> None noted.	<b>Subsequent Descriptions:</b> None

<b>NMFS No: E26-22</b>	<b>Date First Observed Entangled:</b> 10/31/2022
<b>Whale Biology:</b> Live humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E26-22</b>	Gear Recovered (y/n)	Yes
Date Set	Unknown	Date Lost	Unknown
Line Diameter	Unknown	Gear Part	Buoy line, surface system
Fishery Mark Recovered/Documented	No	Fishery Mark Origin and Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown		
<u>Gear Description:</u>	The whale was described as a high flyer and multiple buoys near the body and tight rope over the body.		
<u>Comments:</u>	None.		
<u>Conclusions:</u>	The whale was entangled in a buoy line and surface system of unknown origin.		

## 2022 Entanglements

<b>NMFS No: E27-22</b>	<b>Date First Observed Entangled:</b> 12/05/2022
<b>Location First Observed Entangled:</b> Buxton, NC	<b>Latitude/Longitude First Observed Entangled:</b> Unknown exact location
<b>Initial Movement (Anchored/Free):</b> Free-swimming	<b>Status:</b> Deceased
<b>Sighting prior to entanglement:</b> Unknown	<b>Re-sightings Post-entanglement:</b> None
<b>Whale Biology:</b> Dead humpback whale, unknown ID and life history	
<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury	

<b>Event Description:</b>
A moderately decomposed carcass washed ashore with gear embedded around the tailstock and a bundle of rope.

<b>Description of Gear on Whale as Reported:</b>	
<b>During Initial Sighting:</b> Multiple wraps around the tail with a bundle of rope trailing. One section of rope leads up to the mouth forming a bridle.	<b>Subsequent Descriptions:</b> None.

<b>Description of Wounds/Condition:</b>	
<b>During Initial Sighting:</b> Moderately decomposed carcass with embedded trauma on the tailstock.	<b>Subsequent Descriptions:</b> None.



<b>NMFS No: E27-22</b>	<b>Date First Observed Entangled: 12/05/2022</b>
<b>Whale Biology:</b> Dead humpback whale, unknown ID and life history	<b>NMFS Serious Injury/Mortality Determination:</b> Serious Injury

<b>FISHERY INTERACTION GEAR ANALYSIS</b>			
NMFS No.	<b>E27-22</b>	Gear Recovered (y/n)	Yes
Date Set	Unknown	Date Lost	Unknown
Line Diameter	7/16"	Gear Part	Unknown
ALWTRP Mark Recovered/Documented	No	ALWTRP Color	N/A
Target Species	Unknown	Location of set	Unknown
Gear Type	Unknown rope.		
<u>Gear Description:</u>	Recovered rope was approximately 150 feet of 7/16" poly float. In a few locations there are a few pieces of #10 braided rope tucked in the poly float rope. There appears to be colored markings also in the rope (photo 2).		
<u>Comments:</u>	Colored marking does not match any current legal U.S. or Canadian fishing marking scheme.		
<u>Conclusions:</u>	The whale was entangled in a rope of unknown origin.		

<b>NMFS No: E27-22</b>	<b>Date First Observed Entangled: 12/05/2022</b>
<b>Whale Biology: Dead humpback whale, unknown ID and life history</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

### Gear Images

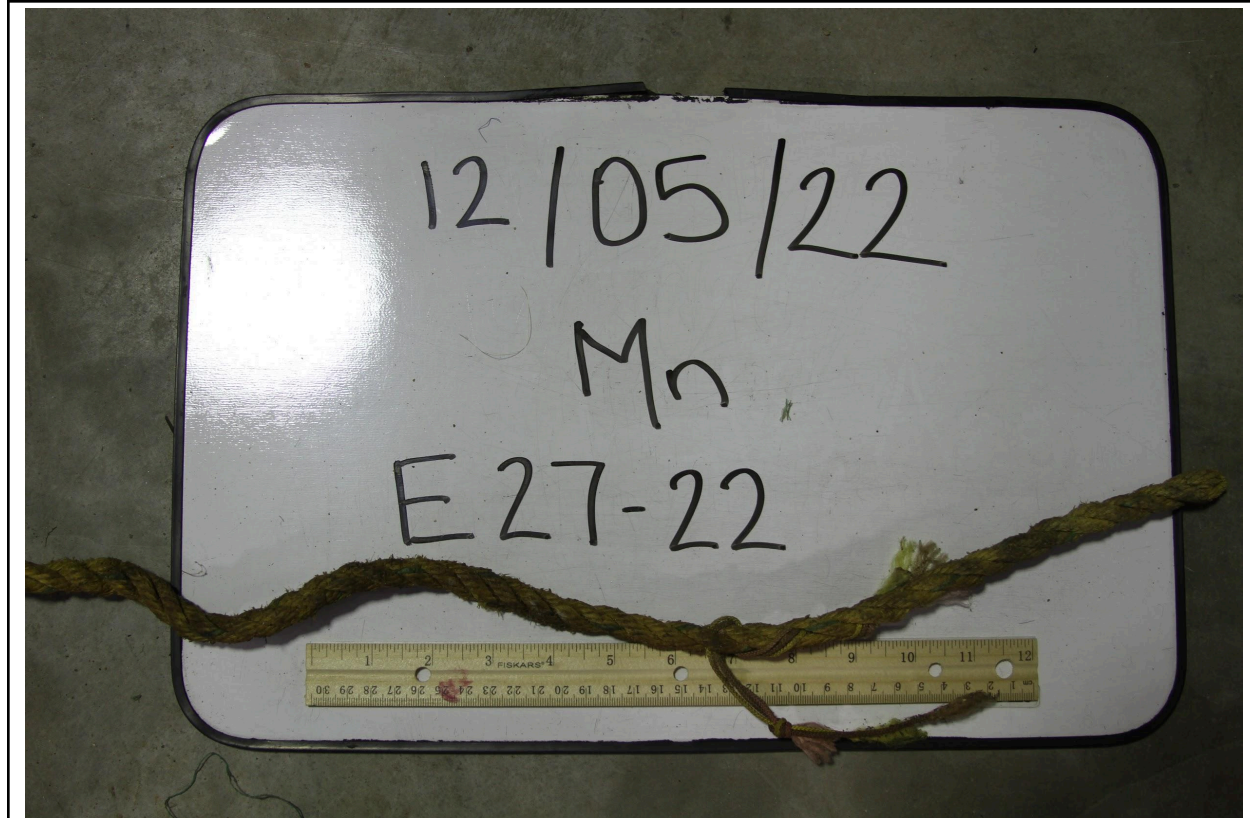
Photo 1: Recovered gear. Photo from NOAA Fisheries.



<b>NMFS No: E27-22</b>	<b>Date First Observed Entangled: 12/05/2022</b>
<b>Whale Biology: Dead humpback whale, unknown ID and life history</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

### Gear Images

Photo 2: Portion of gear with red, brown and yellow twine marker. Photo from NOAA Fisheries.





<b>NMFS No: E27-22</b>	<b>Date First Observed Entangled: 12/05/2022</b>
<b>Whale Biology: Dead humpback whale, unknown ID and life history</b>	<b>NMFS Serious Injury/Mortality Determination: Serious Injury</b>

### Gear Images

Photo 3: Portion of gear with tucked unknown marker. Photo from NOAA Fisheries.

