

## North Atlantic Right Whale Causes of Death for Confirmed Carcasses

Year	Month	NARW ID	Sex	Location First Observed Dead	Country First Observed Dead	Preliminary Cause of Death
2017	April	#4694	F	Barnstable, MA	USA	Blunt force trauma (vessel strike)
2017	June	#3746	M	Gulf of St Lawrence	Canada	Undetermined; could not be examined
2017	June	Glacier #1402	M	Gulf of St Lawrence	Canada	Suspect blunt force trauma (vessel strike)
2017	June	Panama #3190	M	Gulf of St Lawrence	Canada	Undetermined; advance decomposition
2017	June	Starboard #3603	F	Gulf of St Lawrence	Canada	Acute entanglement (gear present; anchored)
2017	June	Contrail #3512	F	Gulf of St Lawrence	Canada	Undetermined; could not be examined
2017	June	#1207	M	Gulf of St Lawrence	Canada	Probable blunt force trauma (vessel strike)
2017	July	Unk	M	Gulf of St Lawrence	Canada	Probable blunt force trauma (vessel strike)
2017	July	Peanut #2140	M	Gulf of St Lawrence	Canada	Suspect blunt force trauma (vessel strike)
2017	July	Alien #2630	M	Newfoundland	Canada	Undetermined; could not be examined
2017	July	Unk	F	Newfoundland	Canada	Undetermined; could not be examined
2017	July	Mystique #1911	F	Newfoundland	Canada	Undetermined; could not be examined
2017	August	Unk	M	Martha's Vineyard, MA	USA	Probable entanglement
2017	August	Couplet #2123	F	Cape Cod, MA (offshore)	USA	Undetermined; could not be examined
2017	September	#4504	F	Gulf of St Lawrence	Canada	Acute entanglement (gear present)
2017	October	Unk	M	Nashawena Island, MA	USA	Suspect entanglement
2017	November	Picasso #2611	F	Martha's Vineyard, MA	USA	Undetermined; advance decomposition
2018	January	#3893	F	Virginia Beach, VA (offshore)	USA	Chronic entanglement (gear present)
2018	August	#4505	M	Monomoy, MA	USA	Probable entanglement
2018	October	#3515	F	Nantucket, MA (offshore)	USA	Probable acute entanglement

2019	June	Wolverine #4023	M	Gulf of St Lawrence	Canada	Suspect blunt force trauma (vessel strike)
2019	June	Punctuation #1281	F	Gulf of St Lawrence	Canada	Probable sharp force trauma (vessel strike)
2019	June	Comet #1514	M	Gulf of St Lawrence	Canada	Probable blunt force trauma (vessel strike)
2019	June	#3815	F	Gulf of St Lawrence	Canada	Undetermined; not examined
2019	June	#3329	F	Gulf of St Lawrence	Canada	Undetermined; not examined
2019	June	Clipper #3450	F	Gulf of St Lawrence	Canada	Probable blunt force trauma (vessel strike)
2019	June	Unk	U	Cape Breton	Canada	Undetermined; not examined
2019	July	#3421	M	Gulf of St Lawrence	Canada	Undetermined
2019	July	Unk	M	Cape Breton	Canada	Undetermined; not examined
2019	September	Snake Eyes #1226	M	Long Island, NY(offshore)	USA	Probable acute entanglement
2020	June	#5060 (2020 calf of #3560)	M	Elberon, New Jersey (offshore)	USA	Sharp and blunt force trauma (vessel strike)
2020	November	Unk	M	Core Banks, North Carolina	USA	Perinatal mortality
2021	February	2021 Calf of #3230	M	St. Augustine, Florida	USA	Sharp and blunt force trauma (vessel strike)
2021	February	Cottontail #3920	M	off Myrtle Beach, SC	USA	Chronic entanglement (gear present)
2023	January	Unk	M	off Morehead City, NC	USA	Perinatal mortality
2023	February	#3343	M	Virginia Beach, VA	USA	Suspect blunt force trauma (vessel strike)

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## North Atlantic Right Whales Initially Determined to be Seriously Injured (Last Seen Alive)

Year	Month	NARW ID	Sex	Location First Observed	Country First Observed	Initial Serious Injury Determination
2017	January	Ruffian #3530	M	off Cumberland Island, GA	USA	Entanglement
2017	July	#4123	M	off Sainte-Marie Saint-Raphael, New Brunswick	Canada	Entanglement
2017	July	Mayport #4094	F	off Sainte-Marie Saint-Raphael, New Brunswick	Canada	Entanglement
2017	July	Diablo #3139	F	off Nantucket, MA	USA	Entanglement
2017	July	Shelagh #4510	F	off Miscou Island, New Brunswick	Canada	Entanglement
2017	August	Zion #3245	M	off Gaspé, Quebec	Canada	Entanglement
2018	February	#3296	M	off Jekyll Island, GA	USA	Entanglement
2018	July	#3312	M	off Miscou Island, New Brunswick	Canada	Entanglement
2018	July	#3843	M	off Grand Manan, New Brunswick	Canada	Entanglement
2018	August	#3960	M	off Chandler, New Brunswick	Canada	Entanglement
2018	December	#2310	M	off Nantucket, MA	USA	Entanglement
2018	December	#3208	M	off Nantucket, MA	USA	Entanglement
2019	April	Nebula #4423	M	off Orleans, MA	USA	Entanglement
2019	June	Avalanche #4440	M	off Miscou Island, New Brunswick	Canada	Entanglement
2019	July	#3125	M	off Perce, Quebec	Canada	Entanglement
2020	January	2020 Calf of #2360	U	Altamaha Sound, GA	USA	Vessel Strike
2020	January	Quill #4091	F	South of Nantucket, MA	USA	Entanglement
2020	February	Dragon #3180	F	off Nantucket, MA	USA	Entanglement
2020	March	Unk	U	off Georges Bank	USA	Entanglement
2020	October	#4680	M	off Sea Bright, NJ	USA	Entanglement

2020	December	Unk	U	off Canary Islands	Spain	Dependent Calf
2021	January	#1803	M	off Georgia/Florida state border	USA	Entanglement
2021	February	Infinity #3230	F	off St. Augustine, FL	USA	Vessel Strike
2021	March	Snow Cone #3560	F	off Cape Cod Bay, MA	USA	Entanglement
2021	July	#4615	M	off Miscou Island, New Brunswick	Canada	Entanglement
2021	December	2022 Calf of #3560	U	off Cumberland Island, GA	USA	Entanglement*
2022	May	Sundog #3823	F	off Gaspé, Quebec	Canada	Entanglement
2022	June	Meridian #1403	M	off Miscou Island, New Brunswick	Canada	Entanglement
2022	August	2021 Calf of #3720	U	off New Brunswick	Canada	Entanglement
2022	August	#4501	M	off New Brunswick	Canada	Entanglement
2023	January	#4904	F	off Rodanthe, North Carolina	USA	Entanglement
2023	January	Argo #1218	M	off Surf City, NC	USA	Entanglement

\* "Dependent Calf – Serious Injury to Mother". Unless additional information proves a dependent calf survives the loss or serious injury of its mother, a confirmed case involving a dependent calf of a dead or seriously injured mother is counted as a serious injury to the calf based upon the injury to the mother (in this case entanglement).

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## North Atlantic Right Whale Morbidity (Sublethally Injured or Ill) Cases

Year	Month	NARW ID	Sex	Location First Observed	Country First Observed	Initial Morbidity (Sublethal Injury/Illness) Determination
2017	April	Iceland #1412	F	Great South Channel	Canada	Entanglement
2017	April	#4146	F	off Truro, MA	USA	Entanglement
2017	June	Cello #1820	M	off Sainte-Marie Saint-Raphael, New Brunswick	Canada	Entanglement
2017	July	Ergo #1317	M	off Miscou Island, New Brunswick	Canada	Entanglement
2017	July	G048	U	off Sainte-Marie Saint-Raphael, New Brunswick	Canada	Entanglement
2017	July	Nantucket #1971	M	off Sainte-Marie Saint-Raphael, New Brunswick	Canada	Entanglement
2017	August	Sirius #3660	M	Gulf of St Lawrence	Canada	Unknown Injury
2017	October	#2145	F	off Mt. Desert Rock, ME	USA	Poor Body Condition
2018	February	#1708	M	Cape Cod Bay, MA	USA	Entanglement
2018	February	Silt #1817	F	Cape Cod Bay, MA	USA	Entanglement
2018	February	#4617	F	Cape Cod Bay, MA	USA	Entanglement
2018	March	Ravine #3142	F	South of Nantucket, MA	USA	Poor Body Condition
2018	April	Bongo #3623	M	Massachusetts Bay	USA	Entanglement
2018	July	Gully #4601	F	off Miscou Island, New Brunswick	Canada	Entanglement
2018	September	Seamount #4457	M	Gulf of St Lawrence	Canada	Entanglement
2018	November	Unidentified whale-2018	U	Stellwagen Bank, MA	USA	Poor Body Condition
2018	November	Champagne #3904	F	South of Nantucket, MA	USA	Entanglement
2019	June	Twister #3510	M	off Perce, Quebec	Canada	Entanglement
2019	July	Lemur #3380	M	Gulf of St Lawrence	Canada	Entanglement
2019	August	Zero #3908	F	Bay of Fundy	Canada	Entanglement
2019	December	#3466	M	South of Nantucket, MA	USA	Entanglement
2020	January	Neptune #3301	M	Cape Cod Bay, MA	USA	Entanglement
2020	February	Aphrodite #1701	F	off Provincetown, MA	USA	Entanglement
2020	February	Batman #1017	M	Cape Cod Bay, MA	USA	Vessel Strike

2020	July	#5001 (2020 Calf of 3101)	U	off Shippagan, New Brunswick	Canada	Unknown Injury
2021	April	Calvin #2223	F	Massachusetts Bay	USA	Entanglement
2022	January	2022 Calf of 1301	U	off Brunswick, GA	USA	Poor Body Condition
2022	May	5012	U	off Georges Bank	USA	Vessel Strike
2023	January	Nimbus #3812*	M	off Jekyll Island, GA	USA	Entanglement
2023	February	#4545	F	off Southern MA	USA	Entanglement

*\*This whale was previously documented with a less severe morbidity injury of unknown cause in July 2019 off Miscou Island, New Brunswick, Canada*

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