

# North Atlantic Right Whale Consortium 2025 Annual Report Card

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## SUMMARY

Started in 1986 as a collaborative data sharing group, the North Atlantic Right Whale Consortium (NARWC) has grown to include more than 200 organizations and individuals representing research and conservation organizations, shipping and fishing industries, technical experts, U.S. and Canadian government agencies, and state and provincial authorities, all of whom are dedicated to the conservation and recovery of the North Atlantic right whale. North Atlantic Right Whale Consortium members agreed in 2004 that an annual “report card” on the status of right whales would be useful. This report card includes updates on the status of the cataloged population, mortalities and injury events, and a summary of management and research efforts that have occurred over the previous 12 months.

The population estimate for 2024 using data as of September 8, 2025 is **384** (+10/-9). Additionally, the estimate for 2023 was recalculated with updated data, resulting in a 2023 estimate of 376 (+4/-3). Eleven mother calf pairs were sighted in 2025, down from 20 in 2024. There were four first time mothers in 2025. Initial analyses detected at least five new entanglement/entrapment events in 2025: one free swimming entrapment in a weir, one event for a whale seen with attached gear, and three with new scarring from entanglement. This latter number will likely increase when all data are processed and the full scar analysis is completed. There were no detected right whale mortalities in 2025. A previously unidentified right whale carcass detected in 2024 that was missing its head was matched to a cataloged whale. Data analyses to date (data are still being received and processed) indicate that surveys and opportunistic sightings in 2024 captured approximately 91% of the living population. Management measures to mitigate vessel strikes and entanglements were implemented in both the U.S. and Canada. Lastly, a subset of publications and reports of interest is provided.

## NORTH ATLANTIC RIGHT WHALE CONSORTIUM BACKGROUND

The North Atlantic right whale (*Eubalaena glacialis*) remains one of the most endangered large whales in the world. Over the past two decades, there has been increasing interest in addressing the problems hindering the recovery of the species by using innovative research techniques, new technologies, analyses of existing databases, and enhanced conservation and education strategies. This increased interest demanded better coordination and collaboration among all stakeholders to ensure that there was improved access to data, research efforts were not duplicative, and that findings were shared with all interested parties. The North Atlantic Right Whale Consortium, initially formed in 1986 by five research institutions to share data among themselves, was expanded in 1997 to address these greater needs. Currently, the Consortium membership is comprised of representatives from more than 200 entities including: research, academic, and conservation organizations; shipping and fishing industries; whale watching companies; technical experts; United States (U.S.) and Canadian Government agencies; and state authorities.

The Consortium membership is committed to long-term research and management efforts, and to coordinating and integrating the wide variety of databases and research efforts related to right whales to provide the relevant management, academic, and conservation groups with the best scientific advice and recommendations on right whale conservation. The Consortium is also committed to sharing new and updated methods with its membership, providing up-to-date information on right whale biology and conservation to the public, and maintaining effective communication with U.S. and Canadian Government agencies, state authorities, the U.S. Southeast and Northeast Right Whale Implementation Teams, the Atlantic Large Whale Take Reduction Team, the Atlantic Scientific Review Group, industry, and members of the U.S. Congress. The Consortium membership supports the maintenance and long-term continuity of the separate research databases and serves as executor for database archives that include right whale sightings and photo-identification data contributed by private institutions, government scientists and agencies, and individuals. Lastly, the Consortium is interested in maximizing the effectiveness of management measures to protect right whales, including using management models from other fields.

The Consortium is governed by an Executive Committee and Board members who are elected by the general Consortium Membership.

North Atlantic Right Whale Consortium members agreed in 2004 that an annual “report card” on the status of right whales would be useful. This report card includes updates on the status of the cataloged population, mortalities and injury events, and a summary of management and research efforts that have occurred over the previous 12 months. The Board’s goal is to make public a summary of current research and management activities, as well as provide detailed recommendations for future activities. The Board views this report as a valuable asset in assessing the effects of research and management over time.

## ESSENTIAL SPECIES MONITORING AND PRIORITIES

In the 2009 Report Card to the International Whaling Commission (IWC), the Consortium Board identified key monitoring efforts that must be continued and maintained in order to identify trends in the species, as well as assess the factors behind any changes in these trends (Pettis, 2009). The key efforts are: (1) Photographic identification and cataloging of right whales in historically and emerging high-use habitats and migratory corridors, which currently include, but are not limited to, the southeast United States, Cape Cod Bay, Gulf of St. Lawrence, Great South Channel, Gulf of Maine, mid-Atlantic, southern New England, and the Scotian Shelf, (2) Monitoring of scarring and visual health assessment from photographic (including drone) data, (3) Examination of all mortalities, and (4) Continue using photo-ID and genetic profiling to monitor species structure and how this changes over time.

The Consortium Board regards the availability of Consortium databases as essential to recovery efforts for the North Atlantic right whale species. In a review of the federal recovery program for North Atlantic right whales, the Marine Mammal Commission agreed with the Board’s sentiment, stating that “both databases play critical roles in right whale conservation” and that the Identification Catalog “is the cornerstone of right whale research and monitoring” (Reeves et al. 2007). The review went on to recommend that both databases (“both” here and above refers to the [Identification and the Sightings/Effort databases](#); there are several other Consortium databases available) be fully funded on a stable basis. Additionally, the Board recognizes the importance that passive acoustic monitoring has played in our understanding of right whale distribution and its potential role in mitigating anthropogenic impacts on the species. The Board strongly supports and encourages efforts to maintain the comprehensive [Passive Acoustics Cetacean Map](#) that serves as an additional resource in conservation and management efforts. The ability to implement such measures is further facilitated by near real-time information on right whale distribution. To this end, the Board strongly supports the efforts to maintain and grow the capacity of the [WhaleMap system](#) for collating and displaying near real-time whale survey and detection results.

Beginning in ~2010, North Atlantic right whale distribution and patterns of habitat use shifted spatially and temporally, and in some cases, dramatically. These shifts have been observed throughout the species range and have direct implications on research and management activities, and on each of the key efforts identified above. As climate driven changes in oceanographic conditions continue to drive changes in right whale distribution, developing nimble and flexible survey effort strategies is critical to our ability to identify and respond to extralimital and new important habitats. These strategies should include efforts to not only locate, both visually and acoustically, and identify individual right whales, but also to ensure that information critical to important monitoring and management efforts (i.e. health, injury, and scarring assessments) is effectively and efficiently collected. **This will require a continued commitment to both aerial and shipboard photo documentation to ensure that information necessary to evaluate individuals and the species as a whole are captured.** The value of photo-identification in our ability to precisely estimate the living North Atlantic right whale population (and by extension documented and undocumented mortalities) and document changes in anthropogenic impacts cannot be overstated. Increasing the scope of monitoring throughout the species range is necessary and will require additional, and likely significant, resources which must include thorough photo-documentation.

The dramatic shifts in distribution observed for North Atlantic right whales over relatively short periods of time underscore the continued need for management efforts that protect right whales not only in habitats/areas where they are currently known to frequent, but also areas to which they may shift, be it ephemeral or more stable use. Discussions and management plans for reducing anthropogenic injuries and mortalities on right whales in both Canadian and U.S. waters are ongoing and the lack of detected mortalities in 2025 suggest that some aspects of these plans may be working as intended. However, with at least one serious injury detected in 2025, PBR (Potential Biological Removal) for the species (0.7) was once again exceeded. Additionally, the sublethal impacts of injuries

on reproduction and health are becoming clearer (Stewart et al., 2021; Knowlton et al., 2022; Moore, 2023; Pirotta, et al., 2023, 2024) and yet are not adequately addressed in current management and recovery plans. The US congressional pause on fisheries regulations, the delay in broad scale implementation of lower breaking strength rope in Canada, and the retraction of proposed modifications to US vessel speed reductions threaten the health and survival of this species and highlight the need for expedited efforts to identify and implement effective mitigation measures outside of traditional regulatory routes. This will require support and adoption across industry and public sectors throughout the range of the species and such efforts should be considered a priority for research, conservation, and management stakeholders.

## 2025 SPECIES STATUS

The ability to monitor North Atlantic right whale vital rates and anthropogenic impacts is entirely dependent on the North Atlantic Right Whale Identification Database (Catalog), which includes data from more than 800 data contributors and is curated by the Anderson Cabot Center for Ocean Life at the New England Aquarium. As of September 8, 2025, the database consisted of over two million slides, prints, videos, and digital images collected during the 102,887 sightings of 833 individual right whales photographed since 1935. Each year, ~2,000 to 5,000 sightings consisting of 50-250,000 images are added to the identification database.

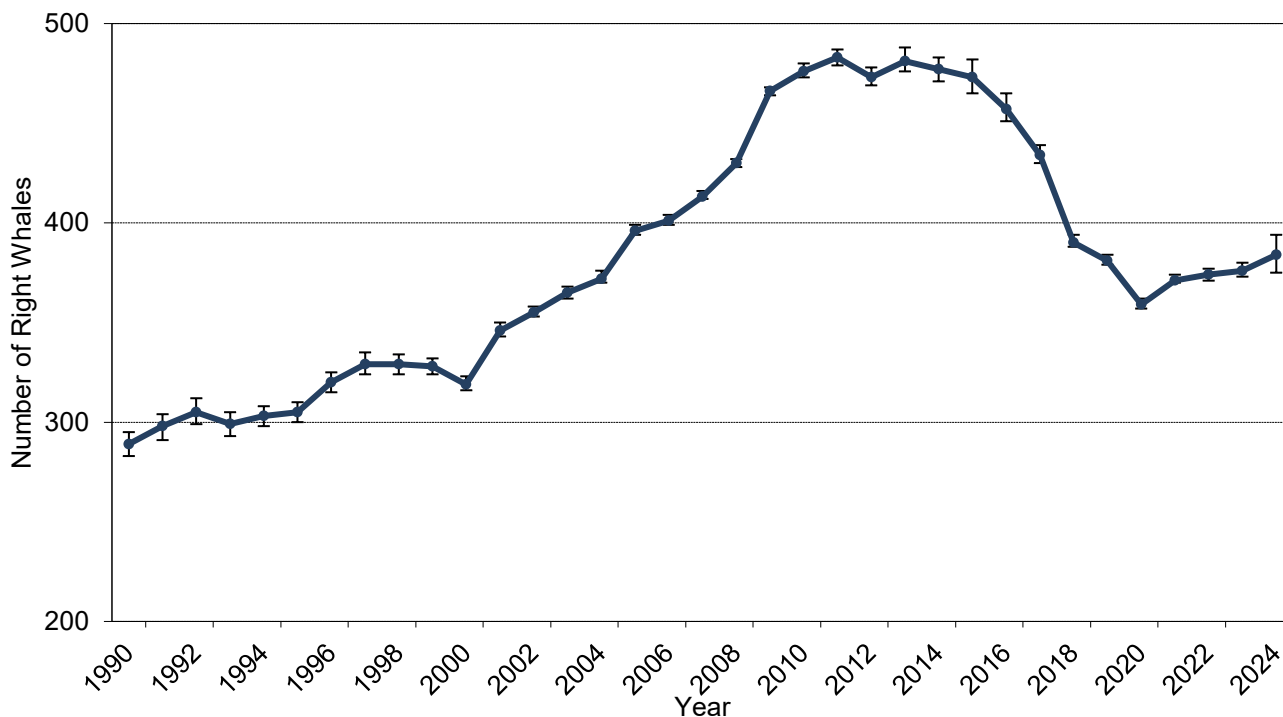
### Right Whale Species Estimate 2024

Since 1990, using Catalog data, a number of methods have been employed to estimate the number of North Atlantic right whales alive annually, including the Catalog Method, Presumed Alive Number, Minimum Number Alive, and most recently, the Pace model (Pace et al., 2017; Pace, 2021). Beginning with the 2021 report card, we only present the single, most accurate assessment method, based on the Pace model. The move to present a single estimate was based on several considerations. First, previous methods suffered from uncertainties that were difficult to quantify and frequently led to public misunderstanding about what those numbers represented. Additionally, several of the previous population estimates, such as the Minimum Number Alive, were known to be less accurate towards the end of the time series (i.e. for the previous year or two).

The Pace model “adapted a state-space formulation with Jolly-Seber assumptions about population entry (birth and immigration) to individual resighting histories and fit it using empirical Bayes methodology.” This model estimate accounts for whales that have not been photographed and the full methodology is available in the paper and subsequent technical memorandum. The model is run annually using updated Catalog data. The population estimate for a given year is an estimate of the number of whales alive at the start of a given year between December (Year-1) and November (Year).

The Pace model estimate for 2024 (December 2023-November 2024) is **384 whales** (95% credible interval +10/-9) using data as of September 8, 2025 (Figure 1, Table 1, Linden, 2025). Additionally, the model estimate run results in slight changes to population estimates for previous years using these updated data. While the sharp population decline observed from 2015-2020 appears to have slowed, annual mortalities and/or serious injuries continue to be above population recovery thresholds. North Atlantic right whales remain red listed as critically endangered by the International Union for Conservation of Nature (IUCN). This designation is made when a species is considered at high risk for global extinction. The North Atlantic right whale is one of only two large whale species on the list.

## Assessment of Living North Atlantic Right Whale Population 1990-2024



**Figure 1. Assessments of the North Atlantic right whale population 1990-2024.** Annual assessments are shown by a point "estimate" along with error bars which represent 95% of the posterior probability. The estimate for 2024 was 384 +10/-9. Data from the North Atlantic Right Whale Catalog as of September 8, 2025.

**Table 1. Summaries of estimated North Atlantic right whale population sizes 1990-2024.** Tabular data presented in Figure 1. Median estimates (graphed above) are bolded for each year, with lower and upper bounds for the 95% credibility range. These numbers are for the right whale year which runs from December 1 (year-1) to November 30<sup>th</sup> (year).

Year	Lower	Median	Upper	Year	Lower	Median	Upper
1990	283	<b>289</b>	295	2008	428	<b>430</b>	432
1991	291	<b>298</b>	304	2009	464	<b>466</b>	468
1992	299	<b>305</b>	312	2010	473	<b>476</b>	480
1993	293	<b>299</b>	305	2011	479	<b>483</b>	487
1994	298	<b>303</b>	308	2012	469	<b>473</b>	478
1995	300	<b>305</b>	310	2013	476	<b>481</b>	488
1996	315	<b>320</b>	325	2014	471	<b>477</b>	483
1997	324	<b>329</b>	335	2015	465	<b>473</b>	482
1998	324	<b>329</b>	334	2016	451	<b>457</b>	465
1999	324	<b>328</b>	332	2017	430	<b>434</b>	439
2000	316	<b>319</b>	323	2018	388	<b>390</b>	394
2001	343	<b>346</b>	350	2019	379	<b>381</b>	384
2002	353	<b>355</b>	358	2020	357	<b>359</b>	362
2003	362	<b>365</b>	368	2021	370	<b>371</b>	374
2004	370	<b>372</b>	376	2022	371	<b>374</b>	377
2005	394	<b>396</b>	399	2023	373	<b>376</b>	380
2006	399	<b>401</b>	404	2024	375	<b>384</b>	394
2007	412	<b>413</b>	416				

## How Well Are We Monitoring?

Table 2 is an annual count of sightings, unique individuals, estimated population size, kilometers of effort that have been submitted to the sightings database at the University of Rhode Island, and percent of the estimated population that is identified each year from 2000 onward (Table 2). Survey effort is from dedicated surveys only (opportunistic sightings do not have associated effort). Additionally, the NARWC does not currently receive effort data for surveys completed by the Department of Fisheries and Oceans Canada or Transport Canada.

**Table 2. Annual counts of photo-ID sightings, unique individuals, presumed living whales, survey effort (in Beaufort conditions  $\leq 4$ ), and the percentage of the population seen.** Survey effort from dedicated surveys only; opportunistic sightings do not have associated effort. Additionally, the NARWC does not currently receive effort data for all dedicated surveys. All reported fields are updated annually with the most available Sighting and Identification/Catalog Databases data using the Right Whale Year (Dec 1 (year-1) – Nov 30 (year)). At the time of reporting, photo-id data for 2024 were still being received, processed, and analyzed. Additionally, there are still several 2023-2024 effort datasets yet to be received. Data as of September 8, 2025.

Year	Sightings	Unique IDs	Population Estimate *	Survey Effort (1,000 km)	% of Estimated Population Seen*
2000	3261	237	319	130	74
2001	4021	283	346	117	82
2002	2629	303	355	228	85
2003	2467	315	365	178	86
2004	1807	286	372	265	77
2005	3381	353	396	359	89
2006	2827	347	401	317	87
2007	3640	379	413	260	92
2008	4111	391	430	258	91
2009	4819	425	466	259	91
2010	3202	422	476	256	89
2011	3588	439	483	233	91
2012	2076	377	473	271	80
2013	2012	303	481	226	63
2014	2372	373	477	198	78
2015	1874	278	473	178	59
2016	2257	330	457	171	72
2017	3120	382	434	180	88
2018	3520	351	390	183	90
2019	5225	365	381	224	96
2020	2213	308	359	172	86
2021	4217	348	371	260	94
2022	3904	345	374	370	92
2023	3882	351	376	403	93
2024	3963	350	384	191	91

\*In previous Report Cards, the population estimate and resulting % presumed alive seen were based on the Catalog Method (see previous report cards for explanation). Starting with the 2020 report card, we used the Pace model results as the population estimate and as the denominator for the calculation of the % estimated population seen. The population estimates are updated annually with a model run using all available data.

## Reproduction

Eleven mother/calf pairs were sighted in the 2025 calving season, down from 20 mother/calf pairs in 2024 (Table 3). There were no detected calf mortalities on the southeast calving grounds in 2025 and all eleven mother/calf pairs were seen on the northern feeding grounds. One of the 11 was only detected on the feeding grounds.

Right whale births remain below what is expected and although the average inter-birth interval remains high (Frasier et al, 2023), the median interval for 2025 calving females was the lowest it has been since 2013. There were four first time mothers of the year matching that of 2024. The average age of these four first time mothers was at least 16 years (two females are of unknown age but at least 14 and 20 years old) underscoring recent findings that declining and delayed recruitment of reproductive females is a contributing factor to the lack of/slowed recovery for this species (Reed et al., 2022).

**Table 3. Summary of mother/calf pairs sighted and associated inter-birth interval times for North Atlantic right whales from 2009-2025.** The number of available cows, defined as females who have given birth to at least one previous calf, were seen in the last 6 years, have not given birth in previous two years, or gave birth in that year, are followed by the percentage of available cows to successfully calve.

Year	Calf Count	Available Cows/ % that calved	Average Interval (yrs)	Median Interval (yrs)	Min/Max Interval (yrs)	First time Moms
2009	39	59/66.1%	4.0	4	2/6	8
2010	19	46/41.3%	3.3	3	2/5	4
2011	22	49/44.9%	3.7	3	2/6	3
2012	7	65/10.8%	5.4	4	4/10	2
2013	20	84/23.8%	4.6	4	2/8	7
2014	11	86/12.8%	4.4	4.5	2/7	1
2015	17	82/20.7%	5.5	6	4/7	4
2016	14*	84/16.7%	6.6	7	4/9	4
2017	5	74/6.8%	10.2	8	7/20	0
2018	0	78/0.0%	-	-	-	-
2019	7	89/7.9%	7	7	3/10	1
2020	10**	80/12.5%	7.6	7	4/11	1
2021	18	72/25.0%	9.2	10	5/11	6
2022	15	56/26.8%	7.7	8	2/13	0
2023	12***	46/26.1%	7.8	7.5	4/12	2
2024	20	55/36.4%	7.3	6.5	2/14	4
2025	11	47/23.4%	6.9	4	4/12	4

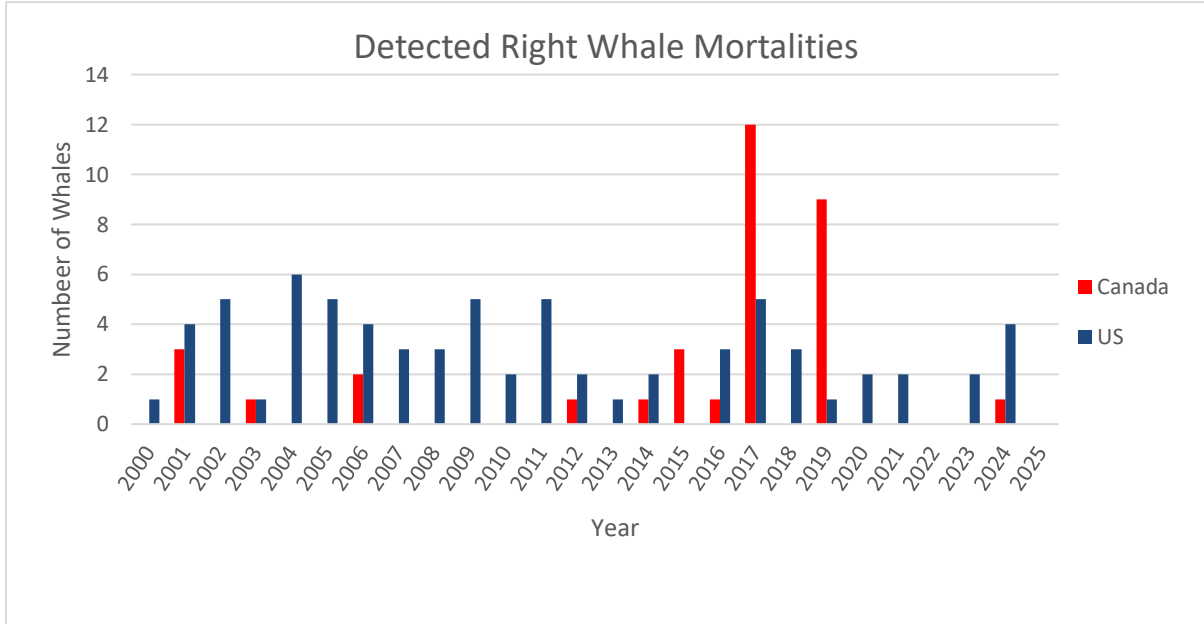
\*There were 14 mothers seen with calves in the 2015/2016 season, however, due to a three-way calf switch that included the presumed loss of one calf that was never photographed, only 13 calves were photographed.

\*\*There was one lone calf observed on December 22, 2020, off of the Canary Island El Hierro. It was not resighted. As the calf was not observed with a mother and the calf was not genetically sampled, it is not included in the table above.

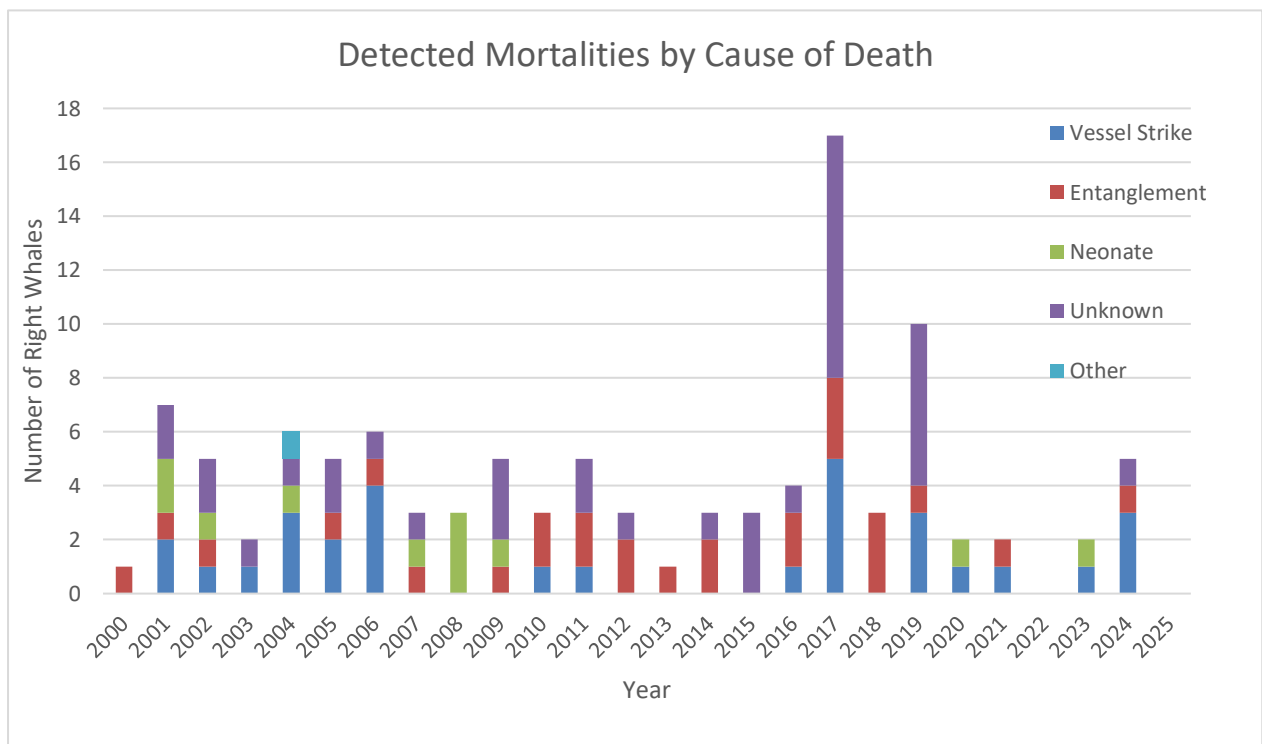
\*\*\*There were 11 mother/calf pairs sighted in 2023. Additionally, a lone calf was sighted alive on January 3, 2023, and subsequently dead on January 7, 2023. All 11 known mothers of the year were excluded as the potential mother of this lone calf. Genetic evidence indicates that the mother of this lone calf was #3194 and this would have been her first known calf.

**Mortalities**

There were **zero** detected right whale mortalities in 2025 (Figures 2 and 3). A previously unidentified right whale carcass detected on 5/12/2024 SE of Nova Scotia and reported in the NARW Report Card for 2024 was matched to right whale #4633, an 18-year-old female. While not relevant in 2025, the Consortium Board reiterates that it recognizes necropsies as significant data collection events that provide valuable information on which management and conservation measures can be (and have been) based. The Board views consistent necropsy response and support (both financial and personnel) as critical to monitor both right whale recovery and the efficacy of management actions.



**Figure 2. Number of right whale mortalities detected by year.** Detections are summarized by the country in which they were made. Detected right whale mortalities represent a fraction of true mortalities (see Pace et al., 2021) and therefore, these annual values are known to be underestimates.



**Figure 3. Cause of death for detected right whale mortalities by year.** Unknown cause of death cases are those either not assessed or assessed but no definitive findings determined. Other includes one fetus.

Pettis, H.M. and Hamilton, P.K. 2026. North Atlantic Right Whale Consortium 2025 Annual Report Card. Report to the North Atlantic Right Whale Consortium.  
[www.narwc.org](http://www.narwc.org)

## Vessel Strikes, Entanglements, and Entrapments

### Vessel Strikes:

There was **one** suspected vessel strike injury documented in 2025 that was not immediately lethal (Table 5, Figure 4). This case requires additional photo documentation to confirm the injury origin and severity.

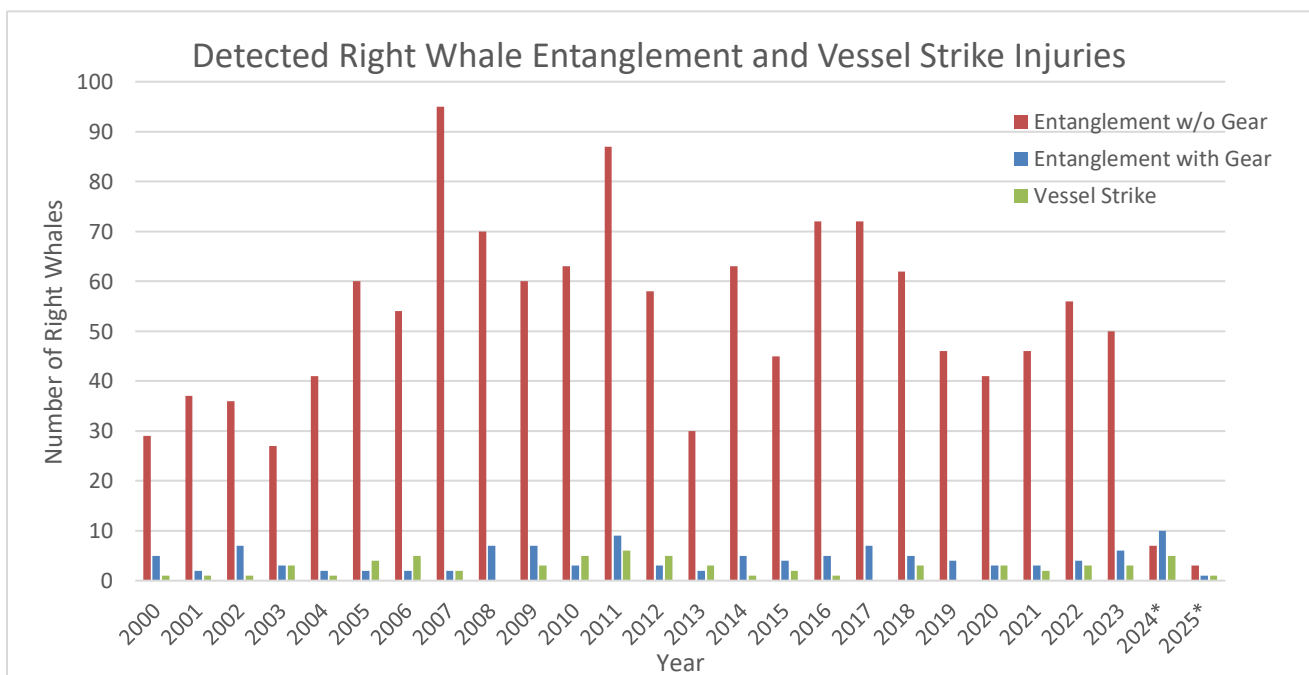
**Table 5. Right whale non-fatal vessel strikes 2025.** Newly reported vessel strikes with whale, location, and injury information. These data include reports received to date and do not include a full assessment of all 2025 sightings as many have not yet been received and/or processed. Dead whales first sighted with vessel strikes are not included here.

Whale #/Name	Date of First Injury Sighting	First location	Sex	Age (2025)	Comments
3504	1/12/2025	Jeffreys Ledge	M	20	Wound on right flank. Suspect vessel strike.

### Entanglement and Entrapments

There were **four** active entanglement/entrapment cases reported between January 1 and December 31, 2025. Of these, one was a weir entrapment case (#4146), one was a new entanglement with attached gear (#5217), and two were re-sightings of known events (#5110 and #5132). (Table 6, Figure 4). The entrapped whale was freed without incident and both #5110 and #5132 are presumed to still be entangled. On 1/27/2026, #5217, was sighted dead off of North Carolina and that mortality will be represented in the 2026 Report Card.

Whales with attached gear or observed entrapment events tell only part of the entanglement story. Annual assessments of scarring show that interactions with fishing gear often occur without detection of the actual entangling gear/interaction. Ongoing efforts to monitor anthropogenic injuries to right whales in near real time provide an assessment of the minimum number of new entanglement events seen annually without attached gear but with injuries of concern. While still in preliminary analyses, there were at least **three** additional entanglement events in Canadian and U.S. waters in 2025 resulting in notable wounds/scars, highlighting the ongoing nature of this anthropogenic threat to the species throughout its range and the shortcomings of current management strategies. While the precise location for these events cannot be determined, the locations of, and timeframe between, pre-injury sightings and injury detections do provide useful information on the area/region where events may have occurred (Table 7, Figure 4).



**Figure 4. Number of detected entanglement and vessel strike injuries by year.** Data are still being received and processed for 2024 and 2025 and therefore, detections in those two years, particularly entanglements without attached gear, are likely **significant underestimates**. This graph excludes fatal injuries that are included in Figure 3.

**Table 6. Right whale active entanglements and status updates 2025.** Newly reported active entanglements (carrying gear) and updates to previously reported entanglements are in **bold**. Dead whales first sighted entangled at death are not included here. However, whales sighted alive as entangled and later dead are included.

Whale #/Name	Date of First Entanglement Sighting	First location	Sex	Age (2025)	Comments
5110	12/09/2024	Southern New England	M	4	Last seen gear free 7/22/2024 in southern New England. Whale observed with green rope around rostrum and around body. Not trailing line or bitter end(s) visible. Unclear how tight the head wrap is and whether there is penetration into the skin. Entanglement is considered life threatening. Partial disentanglement on 4/10/25. Small amount of gear removed but lethal portion remains. An additional disentanglement attempt was made on 4/24/2025 but the whale evaded all approaches. The whale was last seen still entangled on 04/24/2025 in Cape Cod Bay. <b>#5110 was resighted on multiple dates in April 2025 in Cape Cod Bay. Disentanglement attempts were made and some trailing line was retrieved.</b>
5132	12/16/2024	North Carolina	M	4	Last sighted gear free 10/21/2024 in the Bay of Fundy. Very complex entanglement with numerous passes of line over the head and line likely through the mouth. Initial documentation suggests that the whale may not fully be able to open its mouth due to the entanglement configuration. There is a large poly ball positioned behind the blowholes and a second smaller one, likely part of the same surface system, on the right side near the flipper. It is hard to determine at this time what involvement the flippers have but the tail stock and flukes are clear of gear. A bitter end can be seen trailing about four whale lengths aft of the animal and observers noted that the trailing gear remained at the surface for a few moments after the whale dove. The whale was last resighted still entangled on 4/24/2025 about 75 miles south of Montauk, NY. <b>Whale resighted, still entangled, on 05/27/2025 in the St. Lawrence River estuary. Entanglement configuration appears to have changed, but poor quality images preclude full assessment of attached gear and whale's condition. This whale was last sighted off PEI on 6/17/2025. The entangling gear was determined to be active gear from Lobster Fishing Area 38 (LFA 38, Bay of Fundy) based on photographs and discussions with the harvester.</b>
4146	8/13/2025q	Grand Manan, Bay of Fundy	F	14	<b>Right whale #4146 was reported free swimming but entrapped in a herring weir near Grand Manan, NB on 8/13/2025. The Campobello Whale Rescue team monitored the whale while the weir owner and Conservation &amp; Protection responded to the area. Stakes along the weir were cut and the whale swam free. The weir was reassembled and researchers from the Grand Manan Whale and Seabird Research Station monitored the area after #4146 was released. The whale was not resighted in the area.</b>
5217/Division	12/03/2025	North Carolina	M	4	<b>Whale sighted with attached gear, with line wrapping the rostrum, including a section embedded forward on the rostrum and a section that cut into the blowholes. A disentanglement response successfully cut the line of the blowholes and attached a telemetry buoy to remaining line. The whale was tracked traveling north via the telemetry buoy and was visually resighted on 12/16/2025 southeast of Nantucket. The telemetry buoy continued to provide data on the whale's movement off of southern New England and then south. The whale was resighted on 1/13/2026 south of New Jersey and again on 1/22/2026, still entangled and in declining condition. The carcass of #5217 was sighted off North Carolina on 1/27/2026. This whale's mortality information will be included in the 2026 Report Card.</b>

**Table 7. Newly detected right whale entanglement events evidenced by wounds/scars only.** These cases represent a **minimum** number of new events detected in 2025 and are meant to inform near real time monitoring efforts for injury impacts on right whale health, stock assessment reports, and morbidity information for the Unusual Mortality Event. A full injury analysis of all right whale sightings for the year will be completed once all data are received and processed.

Whale #/Name	Pre-Injury Date	Pre-Injury Location	Injury Detection Date	Injury Detection Location	Sex	Age (2025)
3391	05/25/2024	VA	03/11/2025	CCB	M	>22
3714	05/01/2025	CCB	11/18/2025	NC	M	18
2025Calf03540	05/01/2025	CCB	12/24/2025	FL		Calf

**AERIAL AND VESSEL-BASED SIGHTING SUMMARY: 2024**

Prior to the 2017 Report Card, sighting information was reported for the time period following the previous NARWC Annual Meeting. However, that reporting included the current year for which not all data has necessarily been received and/or processed. Therefore, beginning with the 2017 Report Card, sighting summaries will be presented for the *previous* calendar year. Cataloged sighting information for the year 2024 (data as of September 8, 2025) is summarized below (Table 8) and includes survey, research, and opportunistic sightings. Months with sightings, survey types, and major contributing organizations (>10% total sightings for region) are listed.

*Major Contributing Organizations (\*Indicates individual contributor)*

- |  |   |
|--|---|
| CCS: Center for Coastal Studies                      | GDNR: Georgia Department of Natural Resources |
| CMARI: Clearwater Marine Aquarium Research Institute | HDR: HDR Environmental                        |
| CWI: Canadian Whale Institute                        | NEAq: New England Aquarium                    |
| DFO: Fisheries and Oceans Canada                     | NEFSC: Northeast Fisheries Science Center     |
| FWRI: Florida Fish and Wildlife Research Institute   | WHOI: Woods Hole Oceanographic Institution    |

**Table 8. Summary of 2024 right whale sightings by habitat region as defined in the North Atlantic Right Whale Identification/Catalog Database.** Analyses for 2024 data are ongoing and therefore the data presented here should not be considered complete. Not all data from 2024 have been submitted and/or analyzed.

Region	# Sightings	Sighting Months	Survey types/activities	Organizations
Bay of Fundy	182	Jul-Nov	Opportunistic, Aerial and vessel surveys, Drone photogrammetry	DFO, NEFSC
East (East of Mainland US (Azores, Nova Scotian Shelf, Spain, Bermuda, Canary Islands)	1	Jun	Aerial survey	DFO
Gulf of Maine	89	Jan-Feb, Apr, Jun-Sep, Dec	Whale watch, Aerial surveys	CCS, NEAq, NEFSC
Great South Channel	205	Jan-Apr	Aerial surveys	NEAq, NEFSC
Mid-Atlantic (includes south of Cape Cod)	752	Jan-Aug, Nov-Dec	Aerial and vessel surveys	CMARI, HDR, NEAq, NEFSC
New England (Massachusetts Bay/Cape Cod Bay)	1261	Jan-May, Dec	Aerial and vessel surveys, biopsy and habitat sampling, drone photogrammetry, opportunistic	CCS, NEAq, NEFSC, WHOI

**Table 8 cont'd. Summary of 2024 right whale sightings by habitat region as defined in the North Atlantic Right Whale Identification/Catalog Database.** Analyses for 2024 data are ongoing and therefore the data presented here should not be considered complete. Not all data from 2024 have been submitted and/or analyzed.

Region	# Sightings	Sighting Months	Survey types/activities	Organizations
North (North of latitude 46 degrees including Newfoundland, Gulf of St. Lawrence, Iceland)	1014	May-Oct	Aerial and vessel surveys, drone photogrammetry, opportunistic biological sampling	CWI, DFO, MICS, NEAq, NEFSC
Roseway Basin	34	May, Oct	Aerial surveys	DFO, NEFSC
Southeast United States	457	Jan-Mar, Nov-Dec	Aerial and vessel surveys, biopsy and drone sampling	CMARI, FWRI, GDNR, NESFC

## MANAGEMENT AND MITIGATION ACTIVITIES

The following management summaries were submitted by the National Marine Fisheries Service (NMFS), Department of Fisheries and Oceans Canada (DFO), and Transport Canada (TC) for inclusion in the 2025 NARWC Annual Right Whale Report Card.

### NMFS Submission for the North Atlantic Right Whale Consortium Report Card 2025

#### NOAA Fisheries' Submission for the North Atlantic Right Whale Consortium Report Card 2025

Following the recent North Atlantic right whale (*Eubalaena glacialis*) population estimate, the National Marine Fisheries Service (NOAA Fisheries) is cautiously optimistic: the species abundance is increasing, and the sharp increase in mortalities over the last decade appears to have slowed. However, the species continues to experience human-caused mortalities and serious injuries. NOAA Fisheries recognizes that it is important to focus on the longer term population trend, and we remain dedicated to our science and management activities and providing the public with the latest information on our efforts. We continue to focus on implementing technological solutions to [reduce vessel strikes](#) and [entanglements](#) and are promoting a sustainable coexistence between thriving marine industries and North Atlantic right whales.

NOAA Fisheries' *North Atlantic Right Whale Road to Recovery* describes our ongoing efforts and encapsulates all of our work across the agency, in collaboration with our partners and stakeholders. The framework is built on the foundation of the statutory requirements under the Endangered Species Act and the Marine Mammal Protection Act, and it complements the [North Atlantic Right Whale 2021-2025 Priority Action Plan](#). Through the *Road to Recovery* strategy, NOAA Fisheries is demonstrating and communicating progress on major activities and associated milestones to help conserve and recover the North Atlantic right whale population. To view the latest North Atlantic right whale updates from NOAA Fisheries you can visit our [Road to Recovery webpage](#).

### DFO and TC Submission for the North Atlantic Right Whale Consortium Report Card 2025

Please find below the submission from Fisheries and Oceans Canada (DFO) identifying management measures enacted for the protection and recovery of the North Atlantic right whale. General information on what DFO is doing is available online [here](#).

- Since 2017, Canada has implemented targeted management measures with the objective of protecting and recovering the North Atlantic right whale (NARW). The NARW is listed as Endangered under Canada's *Species At Risk Act*. Canada's Budget 2023 provided \$151.9 million over three years to Fisheries and Oceans Canada, Transport Canada, Environment and Climate Change Canada, and Parks Canada to continue to protect endangered whales and their habitats. This includes targeted funding for NARW protection.
- Since 2018, DFO has enacted fishing gear entanglement prevention measures that include changes to the opening and closing date of fisheries to avoid interactions, and the implementation of closure protocols that can apply any time of the year. During peak 'whale season' (approximately May to November), the Gulf of St. Lawrence, Bay of Fundy and Roseway Basin dynamic closures apply where and when right whales are

Pettis, H.M. and Hamilton, P.K. 2026. North Atlantic Right Whale Consortium 2025 Annual Report Card. Report to the North Atlantic Right Whale Consortium.

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detected. Additionally, in the Gulf of St. Lawrence (GSL) where aggregations have been occurring more frequently, season long closures also apply. Elsewhere in Atlantic Canada and Quebec, and during off peak 'whale season', closure protocols apply year round, with individual area closures to fisheries occurring on a case-by-case basis with special consideration for aggregations of three or more individuals and mother and calf pairs. During the peak 'whale season', these closures are supported by a comprehensive whale monitoring and detection regime which includes flights, vessels, acoustic devices, and an online interactive mapping tool called [Whale Insight](#) which allows users to visualize NARW detections in near-real time. DFO Conservation and Protection conducts year-round surveillance flights are over all active fisheries and are observing for NARW. While their primary focus is fisheries monitoring, they also report any North Atlantic right whale (NARW) sightings when possible. Closure areas, some of which remain in place for several months, are adaptive and occur in areas where whales are persisting or have formed aggregations.

- Starting in 2025, the DFO's Shallow Water Protocol was updated by revising the 10 and 20 fathom management lines, and adding additional 5 and 15 fathom management lines. These changes allowed for more targeted closures of shallow waters, and better reflected the bathymetry of shallow water zones. Fishing prohibitions continued to be implemented based on a single right whale detection between shallow water management lines in dynamic management areas (Gulf of St. Lawrence and Bay of Fundy). The closure duration in waters less than the 20 fathom management line in the dynamic zone is 7 days for all non-tended fixed gear fisheries, including snow crab, rock crab, and lobster.
- In 2024-2025, the Department implemented a series of whalesafe gear pilots in Lobster Fishing Areas (LFAs) 36, 38 and shallow water areas. Harvesters in pilot areas had the option to voluntarily participate in the pilots. Participation in the pilot required harvesters to implement a series of specific whalesafe modifications as per their conditions of licence in order to continue fishing when right whales were detected. The whalesafe gear modifications included a requirement to substantially reduce the number vertical buoy lines by removing all second endlines per trap set and increasing the number of traps per trawl. This requirement removed more than half of all vertical lines for participating harvesters. All remaining vertical lines were required to use low breaking-strength gear (LBS) modifications. Harvesters not participating in the pilot were required to comply with fishing prohibitions and remove gear from the closed area for the duration of the fishing prohibition. For all whalesafe gear pilot areas, any detection of 3 or more right whales or a mother and calf pair resulted in a full fishing prohibition meaning no fishing in the implicated area would be permitted for both pilot and non-pilot harvesters.
- In addition to entanglement prevention measures, DFO requires gear colour marking for all non-tended fixed gear, trap and pot fisheries in Atlantic Canada and Quebec, mandatory lost gear reporting, and mandatory reporting of interactions between vessels or fishing gear and marine mammals.
- From April to December of 2025, the DFO Science aerial surveillance platforms accumulated a total of 602 hours and 37 minutes of flight time surveying for right whales. From April to November 15, 2025 (end of GSL protocol), the DFO Conservation and Protection branch conducted 334 flights, totaling 758 hours and 45 minutes in flight time for right whales.
- During the 2025 season, from April to December, temporary and season-long closures triggered by single whale detections, covered a total 60,256 km<sup>2</sup> within Canadian waters. A total of 774 verified NARW sighting events were recorded during this time, with 1,025 whales sighted (including duplicates). There were 136 days of acoustic detection with a total of 8,853 definite acoustic detections from right whales.
- New for 2025, the Department now posts records of NARW incidents since 2017 online at: [North Atlantic right whale - Incidents and mortalities](#). In 2025, there was one ongoing entanglement case, an entrapment, and further information developed in relation to the case from 2024:
  - North Atlantic right whale #5132 was sighted on May 27, 2025, in the Saguenay St. Lawrence Marine Park, near Tadoussac, QC. #5132 was sighted again on June 16, 2025, off Morell, PEI. Despite efforts on both occasions, the whale was not relocated. This whale was first observed entangled in the US in December 2024. Based on photographs from this incident, DFO conducted a gear analysis and concluded that the gear photographed originated from a Canadian fishery, Lobster Fishing Area 38, and was equipped with a weak link that was broken, likely during the entanglement event. DFO published the [gear analysis](#) earlier this year.
  - North Atlantic right whale #4146 was reported free swimming but entrapped in a herring weir near Grand Manan, NB on August 13, 2025. The Campobello Whale Rescue Team, Grand Manan Whale and Seabird Research Station, the owner of the weir, and local Conservation & Protection worked to successfully free the whale.
  - Further analysis of photos from the half-carcass found in 2024 revealed it was NARW #4633.

- In 2019, Fisheries and Oceans Canada launched the Ghost Gear Program to address the growing issue of abandoned, lost, and discarded fishing gear (ALDFG, or ‘ghost gear’) in our oceans. Since work began in 2020, the Department has supported the retrieval of more than 43,300 units of gear, accounting for over 2,540 tonnes of marine debris and ghost gear, as well as more than 970 km of rope from Canada’s Atlantic, Arctic and Pacific coasts. The Ghost Gear Program has targeted areas where NARW are known to occur, such as the Gulf of St. Lawrence and the Bay of Fundy. DFO is now developing a Canadian Ghost Gear Action Plan to address long-term prevention and mitigation of ghost gear. Developed in collaboration with industry, partners and stakeholders, the Action Plan will outline how regulatory tools and gear management practices will be integrated in the regular sustainable operations of fisheries in Canada, helping to limit entanglement risks from ghost gear.
- Launched July 2021, the Fishing Gear Reporting System (FGRS) allows commercial harvesters to conveniently input a description of their lost gear, the cause of loss, and its location from any online device. This makes it easier for harvesters to comply with mandatory lost gear reporting requirements. In August 2024, the Fishing Gear Reporting System was updated to include an offline reporting feature. The FGRS allows for increased reporting of lost gear which helps DFO to generate accurate [gear loss hotspots maps](#) and trends, guiding more effective retrieval efforts and identifying high-priority areas. To date, over 19,941 lost gear reports have been submitted, reporting 76,733 units of gear, 38 km of nets, and 907 km of rope lost.
- In February 2025, DFO hosted the [2nd International Fishing Gear Innovation Summit](#) in Moncton. The event brought together global experts, including Indigenous and non-Indigenous harvesters, to address the challenges of fishing gear loss and whale interactions and explore innovative solutions that support sustainable and prosperous fisheries and communities. A [“What We Heard” report](#) summarizing feedback and discussions held at the summit is available online.
- In 2024 and 2025, DFO conducted engagement with Canadian harvesters, Indigenous groups and stakeholders to inform the development of the five-year Whalesafe Gear Strategy, for finalization in early 2026. The strategy will provide a process to develop and support the implementation of whalesafe fishing gear in fisheries across Canada. Whalesafe gear includes on-demand gear (without a fixed vertical line) low breaking strength gear and other various fishing gear modifications designed to reduce the risk of harm to whales from entanglement in fishing gear. The Strategy has been developed through feedback from Canadian harvesters, industry, Indigenous groups and First Nations, whale experts and NGOs. Whalesafe gear implementation continues, including through whalesafe gear pilots underway in select fisheries in Eastern Canada (see above).
- DFO has continued its annual investment of \$1 million for marine mammal response organizations, and support for necropsies. DFO has also delivered \$8.3 million over eight years to build capacity across Canada for safe and effective marine mammal incident response, and this work continues this year. These funds are used for equipment, gear and training needs to ensure safe response to distressed marine mammals, including response to large whales in distress (i.e., NARW), to build capacity among local Indigenous communities, and to address geographic gaps in marine mammal response, in particular the Gulf of St. Lawrence. With this funding, a new large whale disentanglement team in Shippagan, NB is being set up with equipment and training. The Large Whale Disentanglement Advisory Committee has also been created to discuss actions underway and planned by DFO and disentanglement experts regarding the disentanglement of large whales, and to allow participants to provide advice on government decision-making, such as disentanglement training and succession planning. Additionally, DFO will continue to publish analyses of gear and rope retrieved from entangled North Atlantic Right Whales, to provide clarity on the origins of entanglements when possible.
- On September 24, 2025, the Department held a NARW Technical Working group to review and discuss fisheries management measures and whalesafe gear pilots. The Technical Working Group membership is comprised of technical leaders from the fishing industry, Indigenous community, non-government organizations and DFO. The Technical Working Group provides DFO with technical advice from a fishing industry and scientific perspective to inform decision making on NARW management.
- On November 4/5, 2025, DFO held the annual North Atlantic Right Whale Advisory Committee meeting with Indigenous groups, the fishing industry, provinces, and marine mammal experts. The advisory committee meeting and other discussions with harvesters and Indigenous groups, non-government organizations and academic institutions plays an important role in advising the Minister of Fisheries on Canada’s measures to protect right whales and to support sustainable fisheries for 2026 and beyond.

- DFO continued to support the maintenance of the North Atlantic Right Whale Consortium’s genetic database, which is curated by Dr. Tim Frasier of St. Mary’s University. Funding has supported sample management, DNA extraction and analysis, bioinformatics, and other applications. In part, the information generated through genetic analyses contributes to population monitoring and an increased understanding of reproductive success.
- On August 13, 2025, DFO posted the “Report on the Progress of Recovery Strategy Implementation for the North Atlantic Right Whale (*Eubalaena glacialis*) in Canada for the Period 2015 to 2020” on the Species at Risk Public Registry.
- On November 27, 2025, DFO published an updated “Recovery Potential Assessment for the North Atlantic Right Whale (*Eubalaena glacialis*)”. The Recovery Potential Assessment (RPA) will support the development of an amended recovery strategy that reflects the best available information for the species in Canada. Recovery strategies are prepared in cooperation and consultation with other federal government departments, provincial governments, Indigenous organizations, and others as per section 39 of SARA. Additional feedback is sought through a 60-day public comment period when the Proposed version is published on the Species at Risk Public Registry. DFO is establishing targets and timelines for completing the amended recovery strategy.
- On November 19/20, 2025, DFO held a meeting of the Right Whale Recovery Network, which includes members from federal and provincial government departments (as well as U.S. NOAA), Indigenous organizations, industry (fishing, shipping, energy), researchers, and non-government organizations. The purpose of this network is to advance the implementation of the SARA action plan by identifying and progressing the steps required to complete recovery measures that require partnership or leadership from external organizations.

Please find below the submission from Transport Canada identifying management measures implemented in 2025 for the protection and recovery of the North Atlantic right whale.

- To reduce the risk of vessel collisions with North Atlantic right whales, Transport Canada has been implementing a large, mandatory static speed restriction zone covering much of the Gulf of St. Lawrence, as well as dynamic speed restriction zones in the main shipping lanes north and south of Anticosti Island. These measures, which have been similar since 2020, cover over 65,000 km<sup>2</sup>, apply to all vessels longer than 13 m, and were in force from April 16 to November 15, 2025.
  - Additionally, Transport Canada implemented Seasonal Management Areas from April 16 to June 24, 2025, which temporarily expanded the static speed restriction zone during part of the season when right whales travel to the Gulf of St. Lawrence.
- To protect aggregating North Atlantic right whales in and around the Shediac Valley, a mandatory restricted area covering 4,000 km<sup>2</sup> was in effect from June 16 to September 26, 2025. The area was closed to all vessels longer than 13 m, with exceptions for fishing vessels and certain other activities. Vessels permitted to transit through the restricted area were limited to speeds of no more than 8 knots over ground.
- Transport Canada has been implementing a voluntary seasonal slowdown in Cabot Strait since 2020. In 2025, the Spring period remained similar to previous years, in place from April 16 to June 24, while the Fall period was extended by three weeks, from September 3 to November 15.
- In 2024, Transport Canada enhanced its protection measures for North Atlantic right whales by requesting vessels to voluntarily slow down via direct radio communications from the Canadian Coast Guard when whales were detected in the Bay of Fundy. In 2025, radio coverage was significantly expanded to include the shipping lanes.
- Transport Canada continues to use acoustic and visual surveillance platforms. In 2025, three acoustic underwater gliders were deployed to detect North Atlantic right whales in three separate dynamic shipping zones. This technology complemented surveillance flights conducted by Transport Canada’s National Aerial Surveillance Program (NASP). Both platforms informed active management of dynamic vessel speed restrictions in the Gulf’s main shipping lanes.
- Transport Canada has been engaging with the marine transportation industry, fishers, scientists, and other stakeholders to consider new information and review measures annually.

## 2025 NORTH ATLANTIC RIGHT WHALE PUBLICATIONS/REPORTS

Reports and publications that utilized NARWC databases in 2025 and/or those of general interest to the right whale community are listed and hyperlinked (when available) below.

### 2025 reports and Publications

[Baumgartner, M., 2025. Efficacy of real-time passive acoustic monitoring near wind energy industrial activities for mitigating risks to right whales. \*Endangered Species Research\*, 57, pp.413-430.](#)

[Blondin, H., Garrison, L.P., Adams, J.D., Roberts, J.J., Good, C.P., Gahm, M.P., Lisi, N.E. and Patterson, E.M., 2025. Vessel strike encounter risk model informs mortality risk for endangered North Atlantic right whales along the United States east coast. \*Scientific Reports\*, 15\(1\), p.736.](#)

[Cole, A. and Brilliant, S., 2025. Quantifying entanglement risk reduction to North Atlantic right whales from time-area closures in the southern Gulf of St. Lawrence snow crab fisheries. \*Endangered Species Research\*, 57, pp.143-159.](#)

[Crum, N.J., Gowan, T.A., Hostetler, J.A., Schick, R.S., Knowlton, A.R., Pettis, H.M., Hamilton, P.K. and Rolland, R.M., 2025. Unobserved individual and population level impacts of fishing gear entanglements on North Atlantic right whales. \*Animal Conservation\*, 28\(5\), pp.675-685.](#)

[Davis, G.E., Tennant, S.C. and Van Parijs, S.M., 2025. Upcalling behaviour and patterns in North Atlantic right whales, implications for monitoring protocols during wind energy development. \*ICES Journal of Marine Science\*, 82\(4\), p.fsad174.](#)

[Evans, T.C., Record, N.R., Ross, C.H. and Thorne, L.H., 2025. Beyond Calanus: changes to the copepod community in the northeast USA and implications for North Atlantic right whale foraging energetics. \*Endangered Species Research\*, 56, pp.1-17.](#)

[Ganley, L.C., Sisson, N.B., McKenna, K.R. and Redfern, J.V., 2025. Perspectives on using Protected Species Observer \(PSO\) data to fill knowledge gaps about marine species distributions and habitat use. \*ICES Journal of Marine Science\*, 82\(3\), p.fsae076.](#)

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[Johnson, O.H., Plourde, S., Lehoux, C., Ross, C.H., Tupper, B., Orphanides, C.D., Walsh, H.J. and Record, N.R., 2025. Suitability of foraging habitat for \*Eubalaena glacialis\* under future climate scenarios in the Northwest Atlantic. \*Elem Sci Anth\*, 13\(1\), p.00044.](#)

[Jones, L.S., Howe, K.R., Johnson, H.D., Knowlton, A.R., Lockwood, D.J., McPherson, K.D., Nielson, S.M., Pettis, H.M., Mahone Robinson, K., Warren, A.M., Zani, M.A., Hamilton, P.K., 2025. Maintenance of the North Atlantic Right Whale Catalog, Scarring and visual health databases, WhaleMap, annual anthropogenic injury case studies and near real time matching. Final report to the National Marine Fisheries Service, Woods Hole, MA. 158pp. 1305M3-22-C-NFFM-0049.](#)

[Kenney, R.D., Hamilton, P.K. and Frasier, T.R., 2025. North Atlantic Right Whale \*Eubalaena glacialis\* \(Müller, 1776\). In \*Handbook of the Mammals of Europe\* \(pp. 1-38\). Cham: Springer Nature Switzerland.](#)

[Linden, D.W., 2025. Using known births to account for delayed marking in population estimation of North Atlantic right whales. \*Ecology and Evolution\*, 15\(3\), p.e71035.](#)

[Linden, D., Pace, R., Garrison, L., Hostetler, J., Knowlton, A., Lesage, V., Williams, R. and Runge, M., 2025. A multistate capture-recapture model to estimate reproduction of North Atlantic right whales. \*Endangered Species Research\*, 57, pp.91-102.](#)

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- [Miller, C.A., Pirotta, E., Grim, S., Moore, M.J., Durban, J.W., Tyack, P.L., Fearnbach, H., Leander, S.G., Knowlton, A.R., Warren, A.M. and Zani, M.A., 2025. Respiratory microbiomes reflect whale health. \*The ISME Journal\*, 19\(1\), p.wraf231.](#)
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- [Reamer, M. and Rivera, E., 2025. Following the issue-attention cycle of North Atlantic right whale science, conservation, and policy in six US newspapers: 2023 and 2024. \*Environmental Research Communications\*, 7\(7\), p.071006.](#)
- [Schultz, M., Ganley, L.C., Rice, A.N., Ryder, M., Campbell, C., Spooner, I., Redfern, J.V., Aquarium, N.E. and US, L., 2025. Resolving Protected Species Space-Use Conflicts in Wind Energy Areas.](#)
- [Solway, H., Worm, B., Wimmer, T. and Tittensor, D.P., 2025. Assessing changing baleen whale distributions and reported incidents relative to vessel activity in the Northwest Atlantic. \*Plos one\*, 20\(1\), p.e0315909.](#)
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- [Themudo, G.E., Rey-Iglesia, A., dos Santos, I.M., Netels, R.L., López, A., Matínez-Cedeira, J., da Fonseca, R.R. and Campos, P.F., 2025. Historic Overexploitation, Genetic Erosion and Local extinction: Palaeogenomic Insights into the Decline of \*Eubalaena glacialis\* in the Northeast Atlantic. \*bioRxiv\*, pp.2025-11.](#)
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