

North Atlantic Right Whale Report Card

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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. In 2017, five right whale calves were born. There were no first time mothers and the average calving interval was 10.2 years. There were 15 documented right whale mortalities in the last 12 months: three in the United States and 12 in Canada. Causes of death included blunt force trauma (five), entanglement (one), and probable entanglement (one). Cause of death was undetermined for eight whales. Eight new live entanglement cases were documented including three in the United States and five in Canada. There were no new non-lethal vessel strikes documented. Twelve severe injury cases, all of which were entanglement related, were documented since the 2016 report card. Research and management initiatives were varied and will be summarized. The best population estimate for the North Atlantic right whales in 2016 (the most recent year for which photo identification data analyses are deemed complete) is 451 individuals.



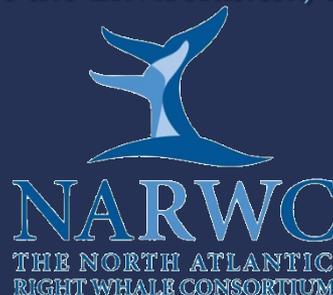
North Atlantic Right Whale Report Card 2017

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North Atlantic Right Whale Identification Database “Catalog”



- Over 73,000 records of 723 (not all currently alive) whales from 1935 to present
- Nearly 500 different contributing organizations/people
- Data accessible via Consortium data access protocol

Reproduction

- age of reproductive females (sexual maturity/senescence)
- age of males at sexual maturity based on paternity data
- no. of reproductive females
- no. of nulliparous/uniparous females
- annual calf number
- inter birth interval
- fecal reproductive hormones
- non Fundy females

Human Impacts

- entanglement scars
- ship strike scars

Genetics

- paternity & maternity
- population sub structuring (along habitat areas & matriline)
- population size and missing whales
- identification of dead whales
- genetic characteristics of nulliparous females
- error rate check of Catalog

Survival

- age of known mortalities
- models of survival and population growth

Catalog Uses

Health

- lesions analyses
- visual health assessment
- photogrammetry
- biotoxin exposure
- pathogens(e.g. protozoa)
- blubber thickness
- fecal and blow stress hormones

Behavior

- mating/social group composition (age/sex)
- weaning time
- associations
- male gunshot sounds
- individual response to sound playback

Habitat use and population sub structuring

- fundy vs. non-Fundy females
- missing whales
- changes in individual habitat use (age and sex)

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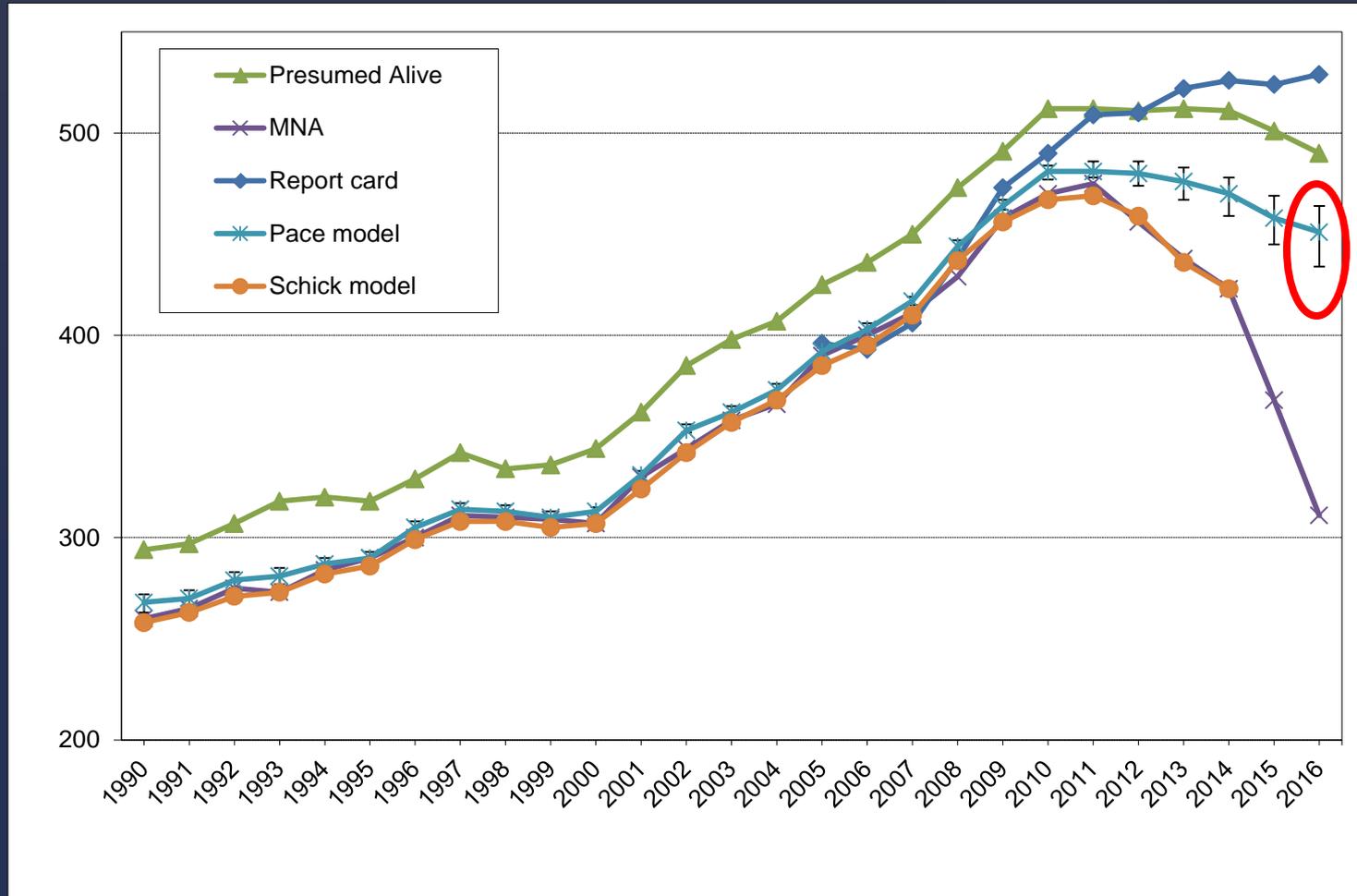
Purpose

- Essential population monitoring and priorities
- Population status
 - Estimate of living population
 - Reproduction
 - Mortalities
 - Live entanglement cases and vessel strikes
- Impact of injury on the health of right whales
- Survey sightings
- Research and management activities
- Right whale publications and reports

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Population status

-Estimate of Living Population in 2016: 451



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Reproduction

- Five calves born
- 0 first time moms
- ~7% available females calved
- 10.2 yrs avg calving interval

Year	Calf Count	Available Cows/ % to calve	Average Interval	Median Interval	First time Moms
2008	23	59/39.0%	3.2	3	7
2009	39	58/67.2%	4.0	4	8
2010	19	45/42.2%	3.3	3	4
2011	22	48/45.8%	3.7	3	3
2012	7	64/10.9%	5.4	4	2
2013	20	83/24.1%	4.6	4	7
2014	11	85/12.9%	4.4	4.5	1
2015	17	80/21.3%	5.5	6	4
2016	14	81/17.3%	6.6	7	4
2017	5	71/7.04%	10.2	8	0

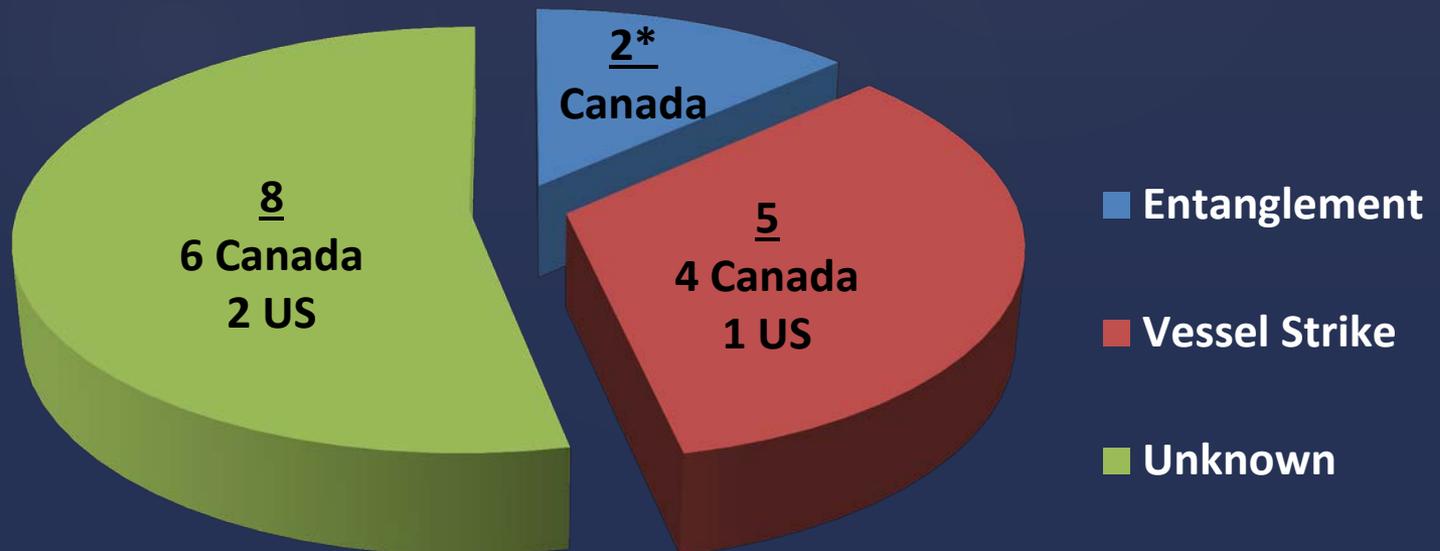
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Mortalities

- 15 deaths documented

6 Females, 9 Males

2017 Right Whale Mortalities by Cause and Location

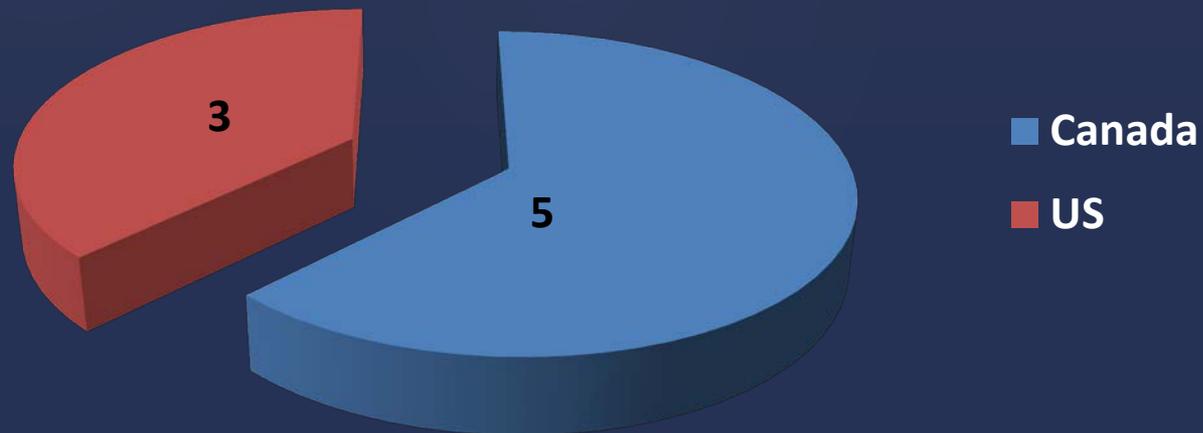


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Entanglements & Vessel Strikes

- 8 live entanglement cases
 - 3 Females, 4 Males, 1 unknown
- 0 non-fatal vessel strikes

2017 Live Right Whale Entanglements



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Summary

Population in decline

Mortalities ↑ while Reproduction ↓

Calving intervals 3x expected

Entanglements and Vessel Strikes ↑

“Alone we can do so little; together we can do so much”

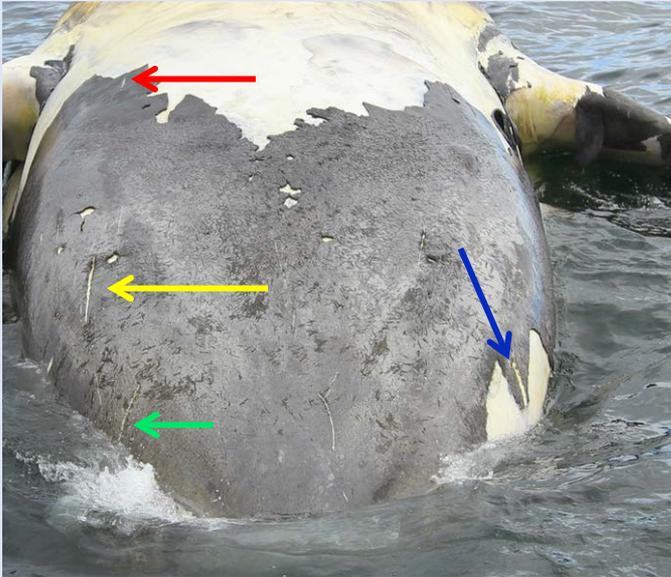
— Helen Keller



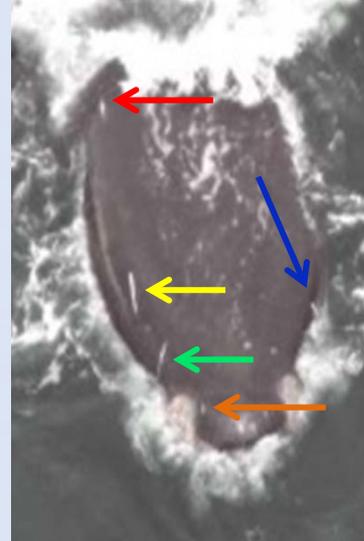
Please submit your sightings to the NARWC Photo-ID database (Catalog)

The Identification database contains all known photographed sightings of right whales since 1935.

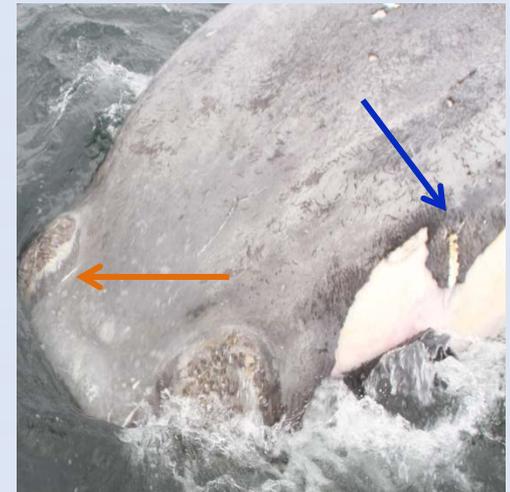
All sightings and all images are extremely important. Unless you submitted to RWDData@neaq.org, don't assume that NEAq has all the images and data. NEAq was able to match five of the nine floating carcasses in the Gulf of St. Lawrence this past summer because of small marks, scars or features from the ventral head, flippers and bodies.



Matches like these can only be accomplished when all aspects of a whale is photographed and catalogued. This includes photographs that are obscure, distant or even out of focus).



Catalog #3512 alive in 2011
Photo Credit: FWC



Catalog #3512 floating dead on July 6, 2017
Photo Credit: MARS

Catalog #3512 floating dead on July 6, 2017 Photo Credit: MARS

We only need (at a minimum) date, time and accurate location data in addition to photos for sightings to be incorporated.

Submitting is easy – contact rwdData@neaq.org

Thumb drives and return envelopes for submissions available today!