



# THE LAST 400

Strategies for Saving North Atlantic  
Right Whales in Canada

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# 28 North Atlantic right whale deaths were reported between 2017 and August 2019 – 20 of them in Canadian waters.

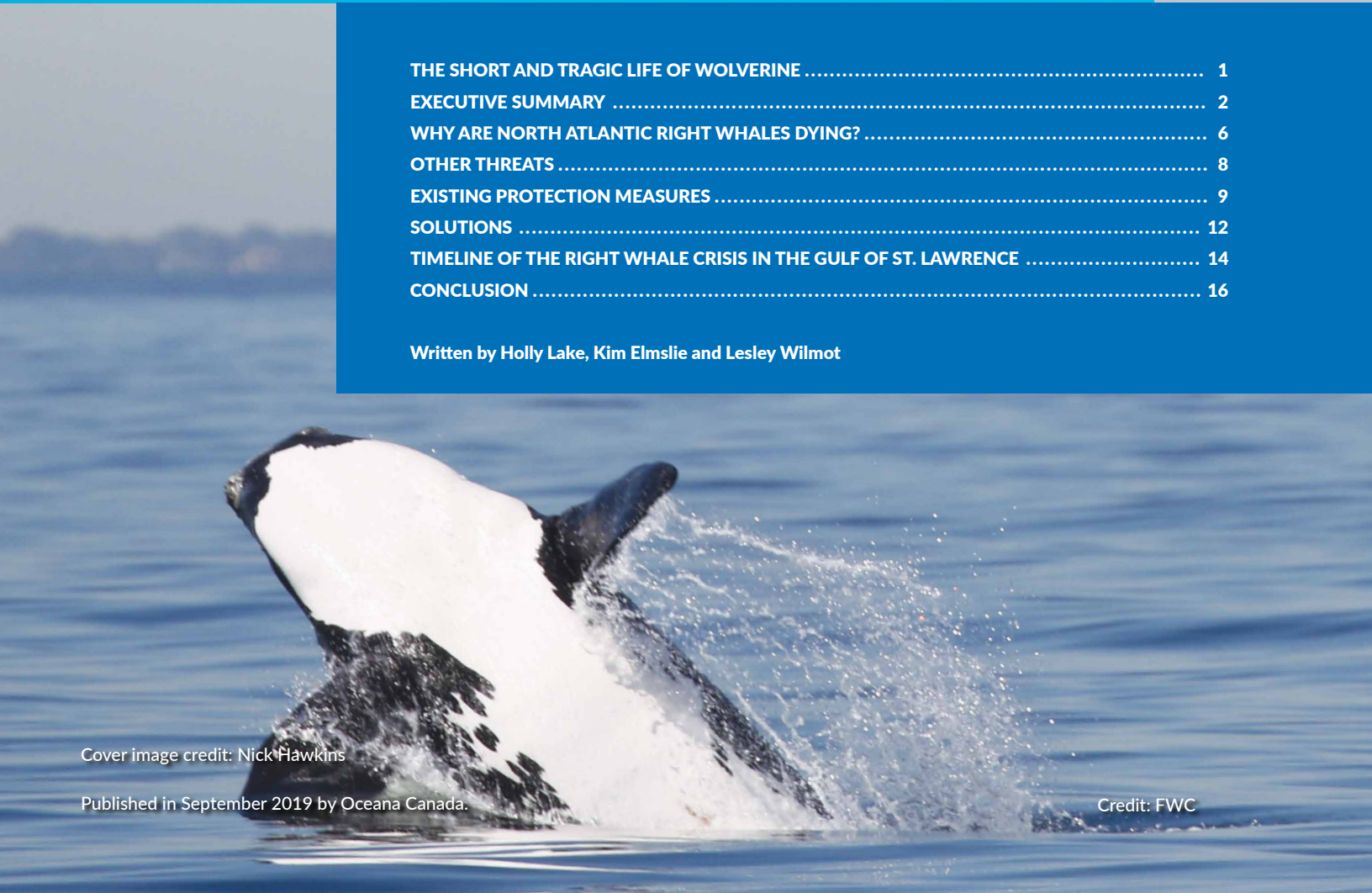
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Credit: FWC



# The Short and Tragic Life of Wolverine

Wolverine got his name from the popular Marvel comic book character. The three distinctive scars on the North Atlantic right whale's tail from a ship's propeller reminded researchers of the mutant character's retractable claws.

He was born in 2010 and was first spotted swimming with his mother off the northeast coast of Florida. After becoming severely entangled in fishing gear, his mother is believed to have died just three years later. In addition to the ship strike, Wolverine was also entangled in fishing gear three times by the time he was five.

Wolverine was first seen in the Gulf of St. Lawrence in 2017. He was spotted many times between June and November of that year, managing to survive a catastrophic season that ended with at least 17 right whales dead – 12 in Canadian waters.

He returned to the Gulf of St. Lawrence in 2018, and again for the last time in 2019. On June 4, 2019, an aerial surveillance team spotted his floating body. A whale that should have lived to 70 and fathered many calves was dead at the age of nine.

A necropsy to determine what killed him is so far inconclusive. The area he was found in was closed to fishing as part of the federal government's 2019 measures to try to prevent further losses among a species that is being driven to extinction.

Source: [New England Aquarium's Anderson Cabot Center for Ocean Life](#)



Credit: Top, Sheila McKenney, Marineland Right Whale Project  
Left, Nick Hawkins



## EXECUTIVE SUMMARY

# A Species in Crisis

Tragically, endangered North Atlantic right whales are killed each year in the waters along the Atlantic Coast of Canada and the United States. Between 2012 and 2016, human activity killed an average of 5.6 of them every year.<sup>1</sup> In recent years, more right whales are being spotted in the Gulf of St. Lawrence, likely due to the effects climate change is having on the distribution of their food source,<sup>2</sup> and they have experienced alarmingly high death rates in areas that are busy with commercial fishing activity and shipping traffic.<sup>3</sup>

The summer of 2017 was devastating for the population. A total of 17 North Atlantic right whale deaths were reported – 12 of them in Canadian waters. The first dead whale was found on June 7 that year and by the end of the month, six had been found floating or washed ashore in the Gulf of St. Lawrence.<sup>4</sup>

History has repeated itself in 2019. From June to August, eight right whales were found dead in Canadian waters<sup>5</sup> – including four within 48 hours – and four more were found entangled in fishing gear.<sup>6</sup>

The winter started with much-needed hope and excitement with the birth of seven calves.<sup>7</sup> But given that not every carcass is found,<sup>8</sup> and that the death toll has already exceeded the number of known births, 2019 is yet another year of decline for right whales. What's more, four of the eight deaths were reproductively active females, of which there are fewer than 100 left.<sup>9</sup>

Credit: Nick Hawkins



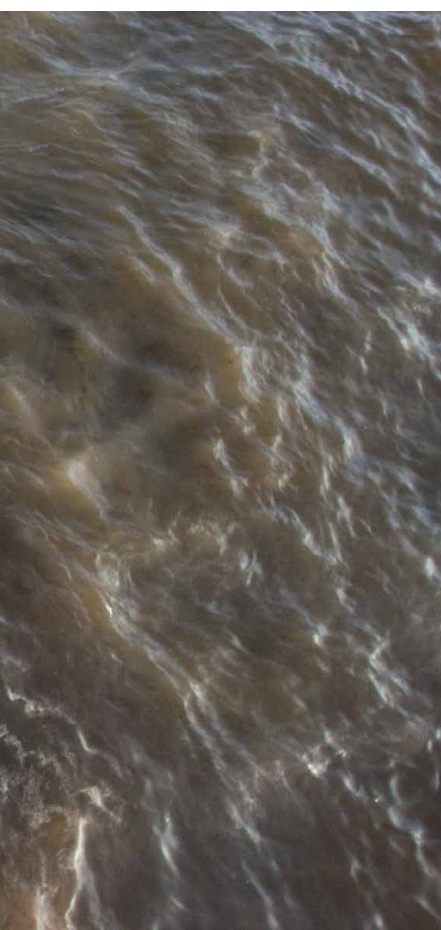
On the surface, these numbers might not seem like much. However, North Atlantic right whales are among the most endangered species on the planet, and 2017 and 2019 have dealt catastrophic blows these animals could have done without. Given that only about 400 of them remain,<sup>10</sup> the loss of 28 right whales over the last three years (17 in 2017, three in 2018 and eight in 2019) amounts to seven per cent of the species' population.<sup>11</sup>

The North Atlantic right whale population is teetering on the brink of extinction. Many of the few remaining animals are dying horrible deaths as a result of ship strikes and entanglements in fishing gear. The whales that manage to survive injury are often left weak and vulnerable.<sup>12</sup> Scientists have long known, and recent research confirms, that humans continue to cause a high rate of right whale deaths.<sup>13</sup>

Every single death deepens the urgency with which we must act to stop the tragedy unfolding in the Atlantic. Many people are working hard to save right whales, but more must be done. The Canadian government must do everything possible to halt this disastrous downturn. If nothing changes, we could witness the extinction of this species.



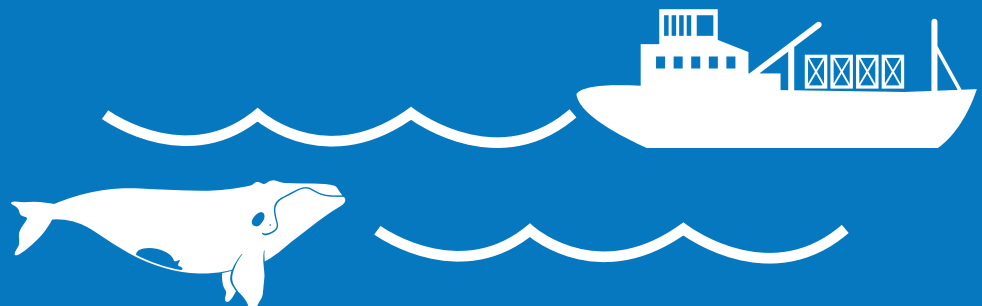
**Oceana Canada is calling on the Canadian government to put enhanced measures in place, including fisheries closures, mandatory ship speed restrictions and improved surveillance in waters where right whales may be present.**



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## Dangerous Waters

A scientific paper released in June 2019 looked at the causes of 70 North Atlantic right whale deaths recorded between 2003 and 2018 in Canada and the U.S.<sup>14</sup> The cause of death could be determined for 43 of the animals. Astoundingly, nearly 90 per cent died due to human-caused trauma from ship strikes and entanglements.







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Of the right whales that remain, fewer than 100 are reproductive-age females.<sup>29</sup>



Females have lower survival rates than males.<sup>33</sup>

## On the Brink of Extinction

North Atlantic right whales are among the largest whales in the world. They can weigh as much as 70 tonnes and grow up to 15 metres long<sup>15</sup> – longer and heavier than a city bus.

Despite their size and strength, they were brought to the brink of extinction by whaling, a practice that continued until 1935, when the League of Nations finally banned killing them.<sup>16</sup>

Although they were once abundant, with population estimates ranging from 9,000 to 21,000,<sup>17</sup> there were fewer than 100 left before the ban was put in place.<sup>18</sup>

North Atlantic right whales are said to have been so named because they were often found near shore, swim slowly and tend to float when killed, which made them the “right” whale to hunt.<sup>19</sup>

Between 1990 and 2010, the population grew slowly, up from 270 to 483, but a 40 per cent decrease in the calving rate saw that growth stall.<sup>20</sup> In contrast to a record 39 calves born in 2009, only five calves were born in the 2016/2017 season.<sup>21</sup> In the 2017/2018 season, no new calves were born.<sup>22</sup> More encouragingly, seven new calves were spotted in the winter of 2018/2019.<sup>23</sup>

Right whales are listed as an endangered species under Canada’s *Species at Risk Act*<sup>24</sup> and were one of the first animals to be listed under the U.S. *Endangered Species Act* in 1970.<sup>25</sup> They are also listed as endangered on the International Union for Conservation of Nature’s Red List.<sup>26</sup>

Although there have been some major efforts to protect right whales in the Bay of Fundy, such as the movement of the shipping lanes in 2003,<sup>27</sup> the federal government did not act on evidence of a growing crisis in the Gulf of St. Lawrence until it became a crisis in 2017.<sup>28</sup>

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**Most females will die before they turn 30.<sup>34</sup>**

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**They only produce one calf after a year-long pregnancy every three-to-five years.<sup>30</sup>**

Of the right whales that remain, fewer than 100 are reproductive-age females.<sup>29</sup> They are slow to mature, taking until the age of 10 to do so, and only produce one calf after a year-long pregnancy. Under natural conditions, they give birth every three-to-five years,<sup>30</sup> however, the trauma caused by chronic fishing gear entanglements and other stressors has now increased the calving interval to 10 years.<sup>31</sup> This makes their recovery even more tenuous. And although right whales can live to be up to 70 years old,<sup>32</sup> females have lower survival rates than males.<sup>33</sup> Most will die before they turn 30, well before reaching their reproductive potential.<sup>34</sup> Many do not get old enough to die from natural causes.

**In the winter of 2017/2018 no new calves were born and only seven were born in the winter of 2018/2019.<sup>22,23</sup>**



# Why are North Atlantic Right Whales Dying?

Sadly, some of what made these whales the “right” species for whalers – that they were often found near shore and swim slowly – continues to put them at risk today. As they inhabit the busy shipping and fishing waters along North America’s Eastern Seaboard,<sup>35</sup> from their feeding grounds in the Gulf of Maine, Bay of Fundy, and now the Gulf of St. Lawrence, to the breeding and calving waters off the U.S. Southeast Coast,<sup>36,37</sup> they are under near-constant threat from ships and fishing gear.



## Entanglements in Fishing Gear

North Atlantic right whales’ 1,600-kilometre journey takes them through busy fishing grounds and shipping lanes twice a year,<sup>38</sup> leaving them susceptible to ship strikes and entanglements. Getting caught in gear has tragically become commonplace, with an estimated 100 right whales entangled each year.<sup>39</sup> Research has found nearly 83 per cent of right whales have been entangled at least once, and more than half have scars from multiple interactions with gear.<sup>40</sup> Of all diagnosed deaths between 2010 and 2016, 85 per cent were a result of fishing gear.<sup>41</sup> What’s more, the odds of entanglement are increasing each year by 6.3 per cent due to right whales’ shifting location and increased exposure to gear.<sup>42</sup>

Any fishing lines in the water can pose a potential threat. Fixed gear fisheries include traps, pots, bottom longlines and gill nets that are anchored to the seafloor, with vertical lines connected to buoys floating on the surface, used to locate and retrieve the gear.<sup>43</sup> These strong ropes can wrap around the whales’ mouths, fins, tails and bodies.<sup>44</sup>

Because they are so strong, some right whales can free themselves from entanglements.<sup>45</sup> For those that cannot, it is a slow, painful death. On average, it takes a large whale six months to die when lethally tangled.<sup>46</sup> The ropes tighten over time, cutting into their flesh and bones and leading to life-threatening infections and hemorrhages, while fins and tail flukes are often totally or partially amputated.<sup>47</sup> This slows the whales down, makes it difficult to swim, mate, find food and, in some cases, breathe. While some starve, others drown.<sup>48</sup>

A 2017 study from the Anderson Cabot Center for Ocean Life at the New England Aquarium found that chronically entangled right whales endure “sky-high hormone levels” that are about 30 times higher than those in a whale swimming freely.<sup>49</sup>



## Ship Strikes

It is difficult for slow-moving whales to avoid colliding with fast-moving ships, particularly in the busy waterways along the continent’s East Coast and Gulf of St. Lawrence. Right whales swim fewer than 10 kilometres per hour (5.4 knots).<sup>50</sup> Container ships move on average at speeds of 16-17 knots (8.6 – 9 km/h) and can go as fast as 24 knots (44 km/h).<sup>51</sup> Modern cruise ships average speeds of 20 knots (37 km/h), with maximum speeds reaching about 30 knots (56 km/h).<sup>52</sup>



At these speeds, ships are unable to maneuver to avoid right whales — even if their dark bodies can be seen at the surface. However, as the speed of a ship decreases, a right whale's odds of surviving a strike increase. Research has shown that mandatory season-long speed limits of 10 knots in certain areas reduced lethal ship collision risk levels by 86 per cent.<sup>53</sup>

Ship strikes can result in non-lethal injuries, like cuts from propellers, or death through blunt force trauma.<sup>54</sup> In 2017, at least five right whales died from trauma consistent with a ship strike, four in Canadian waters and one in U.S. waters.<sup>55</sup> As of August 2019, three more were determined to have likely died from a ship strike.<sup>56</sup> Research has shown that pregnant females and mothers with calves may be more susceptible to strikes, as they spend more time resting at the surface.<sup>57</sup>

## Fatal Passage

In June 2019, the Canadian Science Advisory Secretariat released a report that reviewed right whale sightings and their risk of entanglement and ship strikes. The report found that while mandatory speed restrictions put in place in 2017 reduced the risk of lethal strikes by 56 per cent, the likelihood of a deadly strike just outside of these zones was significantly greater.<sup>58</sup> The reason is that vessels increased their speed before reaching the boundary of the speed reduction zone in anticipation of having to slow down. This resulted in a near 100 per cent chance of a right whale death when a strike occurred.<sup>59</sup>

Credit: Kevin Brine, Shutterstock





## Climate Change

Right whales are one of the biggest animals on the planet, yet they eat one of the smallest creatures, gorging on millions of copepods in a single mouthful.<sup>60</sup> An average-sized right whale eats about 100 million copepods per day.<sup>61</sup> Warming ocean water, however, has these tiny zooplankton, pictured below, on the move. Given their preference for cool water, research shows copepods have moved further north.<sup>62</sup>

For years, right whales returned to feed on copepods in the Gulf of Maine, the Grand Manan Basin in the Bay of Fundy and the Roseway Basin on Nova Scotia's southern shore.<sup>63</sup> However, in recent years, sea surface temperatures in the Gulf of Maine – which reaches from southern Nova Scotia to Cape Cod – have warmed more rapidly than nearly anywhere else in the ocean.<sup>64</sup>

Since 2010, right whales have spent less time in this critical habitat and are appearing with greater frequency in the Gulf of St. Lawrence.<sup>65</sup> While they are finding more of their prey there, right whales are at increased risk of being struck by ships and entangled in gear.<sup>66</sup>



Credit: Nick Hawkins

# Other Threats



## Ocean Noise

In addition to fishing gear entanglements, ship strikes and the impact of climate change, right whales also face threats to their survival from ocean noise, including from ever-increasing vessel traffic, construction projects and seismic testing. Seismic surveys used in oil and gas exploration produce one of the loudest human-made sounds in the ocean.<sup>67</sup> The process involves towing air guns behind ships and shooting pressurized blasts of air into the seafloor to find potential oil and gas deposits that may be buried there. During a survey, airguns release air at high pressure as often as every 10 seconds around the clock for up to months at a time. The sound can travel 3,000 kilometres underwater.<sup>68</sup> In the waters around Newfoundland and Labrador, seismic testing has increased dramatically in recent years,<sup>69</sup> as the province looks to double oil production by 2030.<sup>70</sup> It is also conducted off Nova Scotia's coast.<sup>71</sup>

Researchers have found significant elevations of hormones, indicating high levels of stress, in right whales exposed to elevated ocean noise, similar to levels found in whales that have been chronically entangled in fishing gear.<sup>72</sup> The first evidence of the chronic stress caused by exposure to low-frequency ship noise came about unexpectedly after the terrorist attacks of September 11, 2001. With reduced shipping traffic in the Bay of Fundy, researchers found that less underwater noise correlated with significant decreases in baseline levels of stress hormones in the whales' fecal matter.<sup>73</sup> Given the stress they are already under, any additional stressors will likely have dire impacts on the survival of these whales.

New mothers and calves vocalize to each other in the nursing grounds during the early stages of life, using quieter calls to stay together than those used between adults.<sup>74,75</sup> Seismic blasting could drown out these calls, which could increase the likelihood of separation.<sup>76</sup>



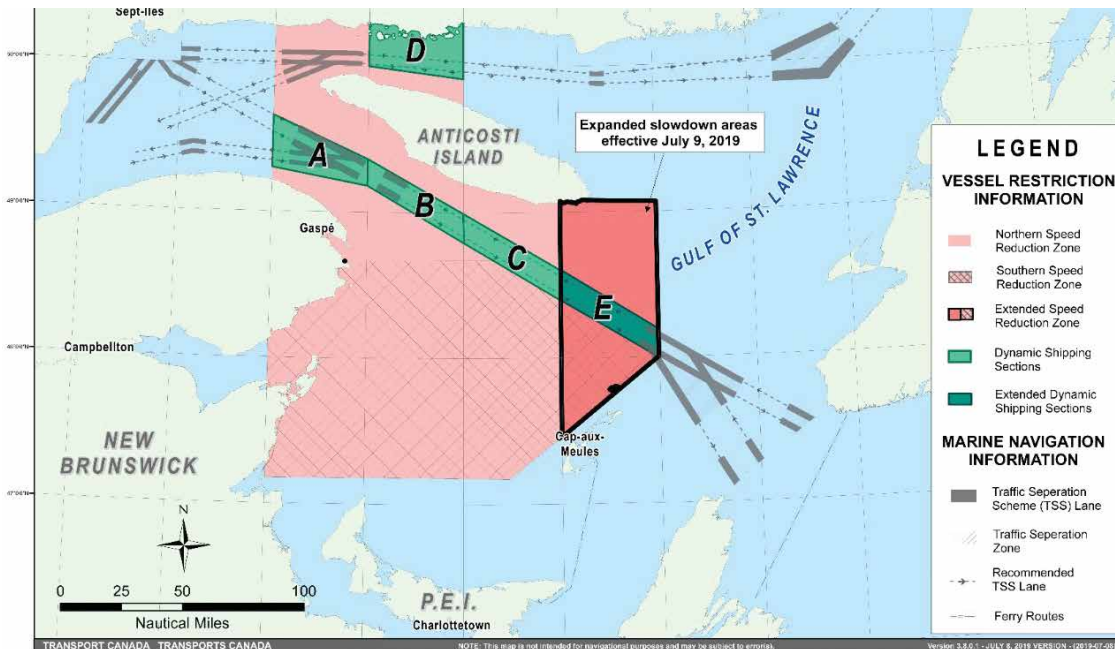
# Existing Protection Measures

North Atlantic right whales were designated as endangered by the Committee on the Status of Endangered Wildlife in 2003 and received protection under the *Species At Risk Act (SARA)* in 2005.<sup>77</sup> At that time, right whales congregated in the Roseway and Grand Manan Basins each year, which were declared critical habitat under SARA.<sup>78</sup> Despite this, fishing and shipping traffic was not limited in these areas.<sup>79</sup>

After a great effort by researchers, non-governmental organizations, Fisheries and Oceans Canada (DFO) and Transport Canada, the International Maritime Organization moved shipping lanes in the Bay of Fundy to skirt an area where the majority of right whales were congregating at that time.<sup>80</sup>

After the spate of right whale deaths in the Gulf of St. Lawrence in 2017, the federal government implemented a series of measures to reduce the chances of the whales being entangled in fishing gear or struck by ships.<sup>81</sup> With no deaths reported in Canadian waters in 2018, they seemed to be working. However, by 2019 the deaths started stacking up again. More can and must be done.

## SHIPPING MEASURES IN THE GULF OF ST. LAWRENCE\*



\*As of August 2019. Source: <https://www.canada.ca/en/transport-canada/news/2019/07/government-of-canada-introduces-new-additional-measures-to-protect-the-north-atlantic-right-whale.html>

For a map of the latest fishing closures, visit: <https://www.dfo-mpo.gc.ca/fisheries-peches/commercial-commerciale/atl-arc/narw-bnan/index-eng.html>.

## Fishing Gear Entanglements

In response to the crisis unfolding in Canadian waters, the government put fishing restrictions in place in 2017 to reduce the chances of right whales encountering fishing gear.<sup>82</sup> A “static” area – an area closed to certain fishing gear during the season when right whales are present – was put in place where many right whales had been found. This was closed to all crab, lobster and non-tended fixed gear, which posed the greatest threats to right whales – although only once almost 98 per cent of the snow crab quota had been caught.<sup>83,84</sup> The government also implemented dynamic areas, where fishing was allowed, but gear had to be temporarily removed if a right whale was detected nearby.<sup>85</sup>

In 2018, the government put in place a broad static area at the beginning of the season.<sup>86</sup> In 2019, however, it reduced the size of the area by 63 per cent to cover the area where 90 per cent of whales had been observed during the peak fishing season in 2018. This was based on the assumption<sup>87</sup> that right whales would return to the exact location they were seen the year before. The dynamic area was maintained.<sup>88</sup>

## Ship Strikes

Similar to the measures put in place for fisheries in 2017, the government created a mandatory speed restriction zone for ships. This zone was initially created as a voluntary measure in the western Gulf of St. Lawrence, but later in the season, all vessels 20 metres or longer were required to reduce their speeds to 10 knots (18.5 km/hour) at all times.<sup>89</sup> In 2018, a dynamic area was created for shipping lanes that bisected the static area, with speed restrictions triggered when a single whale was seen in the shipping lane.<sup>90</sup>

In late June 2019, six right whales were found dead, four floating in the shipping lanes, and the necropsies of three found that they died from ship strikes.<sup>91</sup> In response to this, the government announced that the shipping lanes were once again under a mandatory 10-knot speed restriction,<sup>92</sup> but then lifted the restriction just a few weeks later.<sup>93</sup> In early July, the speed restriction was expanded from vessels 20 metres and larger to include all vessels 13 metres and larger, and the speed restriction zone was extended further east.<sup>94</sup>

Credit: Barbara Cartwright/IFAW, the International Fund for Animal Welfare





# Surveillance and Monitoring

Aerial surveys are instrumental for triggering the measures that are meant to protect whales from ship strikes and entanglements in fishing gear. They also allow scientists to count how many whales are in an area and to take photographs of individual whales for identification and to assess their health. However, there are limitations: airplanes move quickly and cover a lot of ground but can only stay out for six to eight hours at a time. Observers are also only looking at a narrow stretch of the ocean at a time, so it's easy to miss things, and planes are grounded in the event of bad weather.<sup>95</sup>

## Saving Entangled Whales

Response groups work with DFO to determine what can and should be done to disentangle a right whale.<sup>96</sup> They are up against unpredictable weather and the challenge of finding the entangled whale,<sup>97</sup> which – given their speed and power – is not always easy, despite the animal being weighed down with gear. Dozens of right whales and other whales have been given a second chance by being freed from ropes that have the potential to kill them.<sup>98</sup>



## Whale Rescue: A Dangerous Calling

While all involved would prefer that the issue be dealt with through prevention, responding to an entangled right whale is sometimes a necessary – and complicated – undertaking. There are only two teams on the entire East Coast of Canada that legally can be involved in a disentanglement: Campobello Whale Rescue Team and Newfoundland and Labrador Whale Release and Strandings (formerly Tangly Whales).

Disentangling is dangerous work, as a right whale caught in fishing rope is distressed and unpredictable. In the summer of 2017, Joe Howlett, who had saved two dozen whales in the previous 15 years with the Campobello team, died after being struck by a whale he'd freed moments earlier.<sup>99</sup>

# Solutions



## Preventing Fishing Gear Entanglement

**DFO must improve existing static and dynamic fishing measures. Because right whale movements are becoming more unpredictable, fishing measures must be flexible so that the protections follow the whales.**

The static fishing area in the Gulf of St. Lawrence – the area closed to lobster, snow crab and non-tended fixed-gear fishing during the entire season when whales are in Canadian waters – should cover the area where right whales can be expected with high probability, not just where they were seen in the previous year.

When putting measures in place, all previous right whale sightings, combined with predictive modelling, must be used to determine the areas. If the season begins and it is determined that large numbers of right whales are found outside of the set static area, DFO must review and adjust the boundaries to reflect the actual location of the right whales.

Dynamic fishing areas – where fishing is allowed until a right whale is spotted – must be expanded to the entire Gulf of St. Lawrence and be triggered by the presence of a single right whale. Both the static and the dynamic areas must be created through ongoing consultation with all relevant rights-holders and stakeholders. Additionally, DFO should continue to invest in fishing gear innovations with the fishing industry, such as ropeless gear.

Fisheries closures are only effective if they are in place when and where right whales are present. Given the highly unpredictable movements of right whales in recent years, along with the difficulty in detecting and tracking their movement in real time, static fisheries closures should be expanded to include all areas with a high probability of whales being present, using observations from all sources and the best predictive modelling available.



## Preventing Ship Strikes

**Transport Canada must expand the speed restriction zone to cover the entire Gulf of St. Lawrence for the entire right whale season.** The existing mandatory speed restriction of 10 knots for all vessels over 13 metres and greater must be maintained.

**The speed restriction must be strictly enforced, with fines sufficient to act as a significant deterrent issued to all vessels that violate the law.** Information about convicted vessels should be made publicly available.

It is not possible to place devices on individual whales to track their movements without causing tremendous stress and harm. Fortunately, while we can't track the whales, we can track where vessels are, and their speed, through the Automatic Identification System (AIS), a public tracking system that transmits ship locations, bearing and speed.<sup>100</sup> Understanding where and when whales and vessels overlap is essential to reducing the risk of ship strikes. Unfortunately, all fishing vessels in Canada are exempted from broadcasting AIS.<sup>101</sup> In the U.S., all vessels above 65 feet (19.8 metres) are required to broadcast AIS.



Credit: FWC



## Improving Surveillance and Monitoring

To date, dynamic measures have been based on visual sightings only. However, it is possible to detect the presence of right whales before they're spotted visually by using acoustic monitoring. Autonomous platforms like acoustic gliders and buoys can detect the presence of right whales in real-time when equipped with recorders connected to computers that analyze sound.<sup>102</sup>

**DFO must expand its use of aerial and acoustic monitoring throughout the Gulf of St. Lawrence.** Used together, this provides much more information about when whales are present.



## Understanding What is Killing Whales

When a right whale is found dead, DFO grants permission to conduct a necropsy and the province grants permission to use their shoreline. A whale is towed ashore by the Canadian Coast Guard, where a team of up to 30 people, including pathologists, technicians, veterinarians and heavy equipment operators, get to work.

Their work begins on the outside, where there are sometimes obvious signs of what happened, but not always. The central question of every necropsy is "how did the animal die?" Was it an entanglement, a ship strike or a different reason that experts knew nothing about?

While challenging on many fronts, necropsies are a vital part of the puzzle but unfortunately, are underfunded for species other than right whales. Necropsies must be conducted on all whale carcasses so that patterns of threats and disease can be determined.<sup>103</sup>

**The government should commit to long-term funding for necropsy work so that teams can build their capacity, respond quickly and conduct the most thorough research possible.**



## Ocean Noise

Seismic airgun blasting and expanding offshore oil and gas drilling is adding additional stress to an already struggling right whale population. In Atlantic Canada, no seismic activity should occur in right whale habitat.

**The Canadian government should review new industries with respect to how their expansion would affect right whales.**

# Timeline Of The Right Whale Crisis In The Gulf Of St. Lawrence

## June 2017

Six dead right whales are found floating or washed ashore.<sup>104</sup>

## August 2017

Transport Canada creates a mandatory speed restriction zone in the western Gulf.<sup>107</sup>

Five more right whales are found dead.<sup>108</sup>

## May 2018

The first right whale is spotted swimming in the Gulf. It went undetected by aerial surveillance for several days.<sup>110</sup>

## July 2017

Joe Howlett, member of the Campobello Whale Rescue Team, dies after being struck by a whale he had rescued moments earlier.<sup>105</sup>

## September 2017

The twelfth whale of the year is found dead.<sup>109</sup>

## April 2018

Transport Canada reinstates the mandatory speed restriction zone in the western Gulf with a dynamic zone for the shipping lanes. The maximum fine is \$25,000.

Transport Canada calls for a voluntary slowdown for ships 20 metres or longer.<sup>106</sup> DFO closes the snow crab fishery two days early.

DFO implements static and dynamic fisheries closures in place in the western Gulf. Crab gear is required to be out of the water two weeks early and the number of crab traps (mid-shore fleet) is reduced.



Credit: Nick Hawkins



Credit: FWC



### July 2019

Canadian and U.S. non-governmental organizations call on the Canadian government to do more to protect right whales.<sup>116</sup>

Transport Canada and DFO announce further measures, including expanding the shipping slowdown zone further east, applying the slowdown to all vessels 13 metres and greater (previously 20 metres) and tripling aerial surveillance.<sup>117</sup>

Two more right whale carcasses are found.<sup>118</sup>

### November 2018

No right whales were found dead in Canadian waters during the 2018 season, however, three were found in the U.S. entangled in Canadian snow crab gear.<sup>111</sup>

### May 2019

The first right whale is spotted in the western Gulf. It went undetected by aerial surveillance for several days.<sup>113</sup>

### April 2019

DFO announces a new static fisheries closure area that is 63 per cent smaller than the area in 2018, as well as a new dynamic area exempting waters less than 37 metres deep.

Transport Canada announces the speed restriction zone in the western Gulf and once again allows for dynamic management of the shipping lanes that bisect it.<sup>112</sup>

### June 2019

Six whale deaths are reported, four of which are reproductive females and four of which are found in the static shipping area. Three right whales are entangled in fishing gear (including one that was seen entangled in fishing gear in the U.S. in April).<sup>114</sup>

Transport Canada announces that shipping lanes will be included in the static zone and that surveillance will increase for a trial one-week period.<sup>115</sup>

### August 2019

A fourth whale is found entangled in the Gulf.



Credit: Nick Hawkins

**The Canadian government must do everything possible to halt this disastrous downturn. If nothing changes, we could witness the extinction of this species.**

# Conclusion

Oceana Canada is committed to helping change the fate of North Atlantic right whales from extinction to recovery. Protecting them from human activity is critical to their survival.

Alongside other non-governmental organizations, right whale experts and industry allies, Oceana Canada is working to address this urgent issue with the Canadian government. We are focused on the key threats to right whales' survival at this critical time for the species: fishing entanglements and ship strikes. Our goal is to prevent every single avoidable death.

**We are calling on DFO and Transport Canada to:**

- **Implement broad static and dynamic fisheries closures** that can be refined throughout the season based on the presence of rights whales and using the best science available from all experts;
- **Expand and enforce speed restrictions zones** to cover the entire Gulf of St. Lawrence;
- **Expand surveillance techniques**, including comprehensive aerial and acoustic monitoring;

- **Create an emergency response task force** comprised of scientists, researchers, environmental organizations, industry groups and government decision-makers to jointly develop adaptive solutions and provide ongoing analysis and response to manage the crisis;
- **Secure long-term funding for necropsy work** so that teams can build their capacity, respond quickly and conduct the most thorough analysis possible; and
- **Update laws, regulations, policies and fishing licenses** so that right whales are protected in the long term.

Enhancing current efforts is crucial to preventing all avoidable North Atlantic right whale deaths. Even a single death a year is one too many.

Visit [oceana.ca/RightWhaletoSave](https://oceana.ca/RightWhaletoSave) to get involved and add your name to a petition urging officials to act swiftly to stop all right whale deaths. Together, we can help change their fate.



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## Boomerang: Hope for the Future

In 2019, 24-year-old Boomerang, named after the shape of a scar on her tail, had her fourth baby.<sup>119</sup> This is the latest birth in Boomerang's well-documented and prolific lineage. Her mother, Trilogy, was last seen in 2010 and is presumed to have died from an entanglement at the age of 25.<sup>120</sup> Her grandmother, Baldy, is known for her many chin scars and is still believed to be alive. Together, these four generations have added at least 23 whales to the population.<sup>121</sup>

Since 2015, Boomerang has spent her summers feeding in the Gulf of St. Lawrence. In 2018, she was seen in the busy shipping lanes off the coast of Anticosti Island. What researchers didn't know

at the time was that she was pregnant, which they discovered when the mother-calf pair was first seen off the coast of Georgia, close to the Florida border.

Boomerang and her family are facing a gauntlet of threats as they search for food in heavily fished waters busy with shipping traffic. We know from experience the current measures in place are not enough to protect them, and that their survival is at great risk. We must do everything we can to protect them and help rebuild this endangered population.

Source: <https://www.hakaimagazine.com/news/north-atlantic-right-whales-very-important-mothers-day/>

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- <sup>115</sup> Source: <https://www.canada.ca/en/transport-canada/news/2019/06/statement-by-minister-garneau-regarding-actions-taken-to-address-the-recent-deaths-of-north-atlantic-right-whale.html>
- <sup>116</sup> Source: <https://www.oceana.ca/en/press-center/press-releases/north-atlantic-right-whale-statement>
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- <sup>118</sup> Source: <https://www.andersoncabotcenterforoceanlife.org/blog/two-more-right-whale-deaths/>
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Credit: Nick Hawkins

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Note: All photos of living North Atlantic right whales were taken under permits from Fisheries and Oceans Canada or NOAA.



Oceana Canada was established as an independent charity in 2015 and is part of the largest international advocacy group dedicated solely to ocean conservation. Oceana Canada has successfully campaigned to end the shark fin trade, make rebuilding depleted fish populations the law, improve the way fisheries are managed and protect marine habitat. We work with civil society, academics, fishers, Indigenous Peoples and the federal government to return Canada's formerly vibrant oceans to health and abundance. By restoring Canada's oceans, we can strengthen our communities, reap greater economic and nutritional benefits and protect our future.