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The Right to Live: How North Atlantic Right Whales Are Going Extinct Despite Environmental Protections

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The Right to Live: How North Atlantic Right Whales Are Going Extinct Despite Environmental Protections

Justin Weatherwax*

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I. INTRODUCTION

On February 24, 2020, an endangered North Atlantic right whale was sighted off the coast of Massachusetts, swimming slowly

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with a buoy and rope lodged in her baleen.¹ She was emaciated, pale, and unable to close her mouth.² Aside from the suffering the whale was enduring, scientists were alarmed that one of the last 100 breeding females was close to death, with little that anyone could do for her.³ Largely depleted as a species by commercial whaling, North Atlantic right whales have been protected by the United States and Canada for decades.⁴ Despite this protection, however, North Atlantic right whales are continuing on a slow march towards extinction.⁵

This article will look at the United States and Canadian laws and regulations protecting North Atlantic right whales and analyze why the laws are failing to recover the species. North Atlantic right whales are given some of the strongest environmental protections available to wildlife.⁶ Additionally, their habitat borders two industrially and economically developed nations, and their presence is well known to scientists and the coastal communities they migrate past.⁷ Despite this seemingly opportune set of circumstances, the North Atlantic right whale is one of the most endangered cetacean

¹ *Emaciated Adult Female North Atlantic Right Whale Spotted Entangled off Nantucket*, NOAA FISHERIES (Feb. 28, 2020), <https://www.fisheries.noaa.gov/feature-story/emaciated-adult-female-north-atlantic-right-whale-spotted-entangled-nantucket#:~:text=Emaciated%20Adult%20Female%20North%20Atlantic%20Right%20Whale%20Spotted%20Entangled%20off%20Nantucket,-February%2028%2C%202020&text=The%20whale%2C%20known%20as%20%22Dragon,Nantucket%20on%20February%2024%2C%202020.&text=The%20animal%20is%20emaciated%2C%20its,has%20patches%20of%20whale%20li>
[ce.](https://www.fisheries.noaa.gov/feature-story/emaciated-adult-female-north-atlantic-right-whale-spotted-entangled-nantucket#:~:text=Emaciated%20Adult%20Female%20North%20Atlantic%20Right%20Whale%20Spotted%20Entangled%20off%20Nantucket,-February%2028%2C%202020&text=The%20whale%2C%20known%20as%20%22Dragon,Nantucket%20on%20February%2024%2C%202020.&text=The%20animal%20is%20emaciated%2C%20its,has%20patches%20of%20whale%20li)

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ *North Atlantic Right Whale*, WORLD WILD LIFE, <https://www.worldwildlife.org/species/north-atlantic-right-whale> (last visited Apr. 5, 2021); *see id.*

⁶ *10 Things You Should Know About North Atlantic Right Whales*, NOAA FISHERIES (Oct. 17, 2019), <https://www.fisheries.noaa.gov/feature-story/10-things-you-should-know-about-north-atlantic-right-whales> [hereinafter *10 Things You Should Know*].

⁷ *See North Atlantic Right Whale*, NOAA FISHERIES, <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale> (last visited Feb. 7, 2021) [hereinafter *North Atlantic Right Whale*].

species on the planet.⁸ This is due to a variety of factors, including ship strikes, entanglement in fishing gear, and climate change.⁹ While there are measures that could be taken to protect the species, the actions could harm human communities and the economy.¹⁰

This article will first address the history of the North Atlantic right whales and their interactions with the ever-increasing population of people. It will then discuss the protections put in place for right whales by the United States, Canada, and the international community, including statutes, proposed legislation, and treaties. These protections will then be analyzed through the scope of the recovery plans put in place to guide the species away from the brink of extinction and recent regulatory changes. These United States and Canadian strategies and their implementation will be compared, followed by a discussion of the difficulty in enforcing actions. Finally, this article will address remaining steps and potential cultural shifts needed to preserve the species.

II. BACKGROUND

Before humans began hunting the North Atlantic right whale, an estimated 21,000 right whales lived along the east coast of the modern-day United States and Canada.¹¹ Today, there are approximately 400 individuals remaining.¹² The conservation of the endangered North Atlantic right whale is emblematic of the environmental challenges facing the world, and the responses of the United States and Canada will have ripple effects throughout both the geo-political and ocean environments. This case note will analyze the environmental protections that currently exist for the

⁸ *Id.*

⁹ *Id.*

¹⁰ Nathan Associate Inc., *Economic Analysis of North Atlantic Right Whale Ship Strike Reduction Rule 1*, 18 (Dec. 2012), <https://www.mercatus.org/system/files/0648-BB20-Economic-Analysis-Reduce-the-Threat-of-Ship-Collissions.pdf>.

¹¹ Patrick Mustain, *No Time to Lose: Last Chance for Survival for North Atlantic Right Whales*, OCEANA, INC., 1, 6 (Sept. 2019), https://oceana.org/sites/default/files/north_atlantic_right_whale_campaign_report_doi.pdf [hereinafter *No Time to Lose*].

¹² *Id.*

North Atlantic right whale, the proposed changes meant to save the species, and the potential steps that must be taken to prevent their extinction.

In biological terms, North Atlantic right whales are K-selected species, similar to humans.¹³ This means that they are large, long-lived mammals that mature slowly, care for their young, and reach sexual maturity at a late age.¹⁴ Right whales can live anywhere from seventy to one-hundred years and reach sexual maturity at the age of ten.¹⁵ Around every three years after reaching sexual maturity, under healthy conditions, a female North Atlantic right whale would give birth to a single calf.¹⁶ North Atlantic right whales are oceanic giants, born at around 14 feet in length and growing to be up to 52 feet.¹⁷ With a longer gestation rate than humans and less frequent births, North Atlantic right whales biologically depend upon the low risk of predation to survive.¹⁸

The North Atlantic right whale should be among the most protected species on the planet based on current environmental laws. It is protected in the United States by both the Endangered Species Act and the Marine Mammal Protection Act.¹⁹ In Canada, it is listed under the Species at Risk Act and the Fisheries Act.²⁰ At least six international treaties ostensibly protect the North Atlantic right

¹³ See John P. Rafferty, *K-selected Species*, BRITANNICA, <https://www.britannica.com/science/K-selected-species> (last visited Oct. 28, 2019).

¹⁴ *Id.*

¹⁵ *North Atlantic Right Whale*, *supra* note 7. .

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *See id.*

¹⁹ *Id.*

²⁰ Canada, *Recovery Strategy for the North Atlantic Right Whale (Eubalaena glacialis) in Canadian Waters* 1, 7 (2014), https://www.sararegistry.gc.ca/virtual_sara/files/plans/rs_bnan_narw_am_0414_e.pdf.

whale.²¹ Despite these protections, the species is in decline.²² This is largely due to the rapid increase in human population and the stress the planet is under to support such a massive population.²³

In contrast to the crashing North Atlantic right whale population, humans have been reaching population milestones. In 1800, the human population reached one billion people for the first time.²⁴ By that time, the North Atlantic right whale population had already been commercially depleted.²⁵ By 1927, the human population had doubled, reaching two billion.²⁶ Eight years later, in 1935, the League of Nations banned the whaling of right whales.²⁷ By 1970, environmental awareness led to the creation of landmark environmental laws in the United States and Canada, including the Endangered Species Act.²⁸ Right whales were among the first protected species in both the United States and Canada.²⁹ Four years

²¹ See The International Convention for the Regulation of Whaling, Dec. 2, 1946, 161 U.N.T.S. 72; see United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397; see Convention on International Trade in Endangered Species of Wild Flora and Fauna, Mar. 3, 1973, 993 U.N.T.S. 243; see Organization of American States, Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere, Oct. 12, 1940, 16 U.N.T.S. 229; see Convention of Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79; see Convention on the Conservation of Migratory Species of Wild Animals, June 23, 1979, 1651 U.N.T.S. 356.

²² See *No Time to Lose*, *supra* note 11, at 6.

²³ See Emma Newburger, *Right Whales Are One Step From Extinction as Warmer Waters Push Them Northward into Boat Traffic*, CNBC (July 9, 2020, 1:20 PM), <https://www.cnbc.com/2020/07/09/right-whale-is-one-step-from-extinction-climate-change-pushes-it-north.html>.

²⁴ Andrew D. Hwang, *7.5 Billion and Counting: How Many Humans can the Earth Support*, THE CONVERSATION (July 9, 2018, 6:28 AM), <https://theconversation.com/7-5-billion-and-counting-how-many-humans-can-the-earth-support-98797>.

²⁵ See *North Atlantic Right Whale*, MARINE MAMMAL COMMISSION, <https://www.mmc.gov/priority-topics/species-of-concern/north-atlantic-right-whale/> (last visited Mar. 1, 2021).

²⁶ Hwang, *supra* note 24.

²⁷ *No Time to Lose*, *supra* note 11.

²⁸ *North Atlantic Right Whale*, *supra* note 7; see Monte Hummel & Erin James-Abra, *Environmental Movement in Canada*, THE CAN. ENCYCLOPEDIA, (Oct. 16, 2020) <https://www.thecanadianencyclopedia.ca/en/article/environmental-and-conservation-movements>.

²⁹ See EUGENE H. BUCK, CONG. RESEARCH SERV., RL30907, THE NORTH ATLANTIC RIGHT WHALES: FEDERAL MANAGEMENT ISSUES (2001); see *Species*

later, in 1974, the human population reached four billion.³⁰ Over the next 36 years, the right whale population crept up, reaching as many as 483 individuals in 2010.³¹ In 2011, the human population reached seven billion.³² Since 2010, the right whale population has fallen again, now at an estimated 400 individuals.³³ This is not intended to show causation, but it does illustrate that as the human population continues to grow, we are continuing to encroach upon environments that used to be relatively untouched, leading to the depletion of other species and an increasingly unstable environment.

This point is further demonstrated by the dramatic increase in large ships in the past two centuries.³⁴ A 2001 study on whale strikes determined that “the number of steam and motor vessels greater than 100 gross tons” went from 11,108 to 26,513 between 1890 and 1920.³⁵ Between 1950 and 1980, the number rose significantly again from 30,852 to 73,832.³⁶ While the increase has slowed in the decades since, the size of the fleet is still far larger than it was historically, creating a much higher likelihood of whale strikes.³⁷

Along with the increase in the number of ships, there has been an increase in ship speed.³⁸ The first records of whales being hit by ships appear in the late 1800s and early 1900s, as ships began to attain speeds of over ten knots.³⁹ Once the average speed of merchant ships began to exceed fifteen knots, between 1950 and 1970, the number of collisions increased substantially.⁴⁰ None of the reports of whale collisions identified in the 2001 report occurred with vessels travelling below ten knots, and eighty-nine percent

Profile, North Atlantic Right Whale, GOVERNMENT OF CANADA, https://wildlife-species.canada.ca/species-risk-registry/species/speciesDetails_e.cfm?sid=780 (last visited Feb. 11, 2021) [hereinafter *Species Profile*].

³⁰ Hwang, *supra* note 24.

³¹ *No Time to Lose*, *supra* note 11.

³² See Hwang, *supra* note 24.

³³ *No Time to Lose*, *supra* note 11, at 6.

³⁴ See David W. Laist et al., *Collisions Between Ships and Whales*, 17 MARINE MAMMAL SCIENCE 35, 50 (2001) [hereinafter Laist].

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ See *id.* at 57.

⁴⁰ Laist, *supra* note 34, at 57.

involved vessels travelling over fourteen knots.⁴¹ These changes illustrate the recent nature of the threat to North Atlantic right whales posed by ship speeds and traffic, as opposed to the historic threat posed by whaling.

Over the past 15 years, researchers have not identified a single North Atlantic right whale that has died of natural causes.⁴² Eighty-eight percent of the identified causes of death were the result of being entangled in fishing gear or being struck by a ship.⁴³ This level of mortality is not sustainable, especially since a large number of the right whales succumbing to exhaustion from entanglement are females, already weakened from the energy expended carrying their calves, giving birth, and caring for them.⁴⁴ In 2019, the National Oceanic and Atmospheric Administration found that for right whales to recover, they can afford less than one death per year.⁴⁵

Additionally, climate change is causing increasing difficulties in protecting North Atlantic right whales.⁴⁶ The Gulf of Maine, where right whales are known to congregate, has a surface temperature that is rising faster than almost anywhere else in the world.⁴⁷ The change in temperature appears to be having an effect on the North Atlantic right whales breeding and feeding behaviors.⁴⁸ Additionally, the change in temperatures may be causing more North Atlantic right whales to travel farther into Canadian waters, where they have not traditionally been common and where strong protections have not previously existed.⁴⁹

⁴¹ *Id.*

⁴² Amanda Coletta, *Two Percent of the World's North Atlantic Right Whales Have Died in the Last Two Months*, WASH. POST (Aug. 1, 2019, 6:00 AM), https://www.washingtonpost.com/world/the_americas/two-percent-of-the-worlds-north-atlantic-right-whales-have-died-in-the-last-two-months/2019/07/31/d3de7d1e-ae31-11e9-9411-a608f9d0c2d3_story.html.

⁴³ *Id.*

⁴⁴ *North Atlantic Right Whale*, *supra* note 7.

⁴⁵ *10 Things You Should Know*, *supra* note 6.

⁴⁶ *North Atlantic Right Whale 5-Year Review: Summary and Evaluation*, NOAA FISHERIES SERVICES NORTHEAST REGIONAL OFFICE 1, 1 (Oct. 2017), <https://repository.library.noaa.gov/view/noaa/17809> [hereinafter *5-Year Review Summary and Evaluation* (2017)].

⁴⁷ *Id.*

⁴⁸ *See id.* at 21.

⁴⁹ *Id.*

Currently, both the United States and Canada are working to pass and implement new regulations and laws to save the species. In Canada, powerful new regulations governing shipping speeds and fisheries went into effect in early 2020.⁵⁰ In the United States, the SAVE Right Whales Act was introduced in both the House of Representatives and the Senate during the 116th Congress.⁵¹ If passed, this act would have provided additional funding for research and emergency response to whales trapped in fishing gear.⁵² This note will argue, however, that the United States' conservation efforts have fallen far behind their Canadian counterparts. Saving the North Atlantic right whales will require a more in-depth look at current fishery practices, shipping levels, and human priorities. It may even be necessary to take harsh economic losses in the present to preserve biodiversity and a healthy natural environment into the future. In recent years, the United States has seemed unwilling to take the necessary steps.

III. NORTH ATLANTIC RIGHT WHALE PROTECTIONS

Protections for North Atlantic right whales come from a variety of sources, including the federal, state, and municipal levels in the United States and the federal, provincial, and territorial levels in Canada. The United States and Canada are additionally bound by international treaties that regulate the international responsibilities for endangered species, including marine species. This section will address the protections for North Atlantic right whales in the United States first, then in Canada, and finally in international law.

⁵⁰ *Protecting North Atlantic Right Whales from Collisions with Ships in the Gulf of St. Lawrence*, TRANSPORT CAN. (Mar. 6, 2020), https://www.tc.gc.ca/en/services/marine/navigation-marine-conditions/protecting-north-atlantic-right-whales-collisions-ships-gulf-st-lawrence.html#toc_1 [hereinafter *Protecting North Atlantic Right Whales*]; *2020 Fishery Management Measures*, FISHERIES AND OCEANS CAN. (Mar. 6, 2020), <https://www.dfo-mpo.gc.ca/fisheries-peches/commercial-commerciale/atlarc/narw-bnan/management-gestion-eng.html> [hereinafter *2020 Fishery Management Measures*].

⁵¹ H.R. 1568, 116th Cong. (2019) (introduced); S. 2453, 116th Cong. (2019) (introduced).

⁵² H.R. 1568.

A. *Protections in the United States*

The environmental movement in the United States arguably started in earnest during the 1960s.⁵³ Rachel Carson's groundbreaking book *Silent Spring* was published in 1962 and drew national attention to the dangers of pesticides and their environmental impacts, including weakening the egg shells of birds of prey to the point that the eggs would break when their parents attempted to keep them warm.⁵⁴ The Endangered Species Preservation Act of 1966 was enacted as the first piece of what would become the Endangered Species Act.⁵⁵ In 1968, the crew of Apollo 8 took the first photograph of Earth from outer space.⁵⁶ This picture galvanized the environmental movement and reminded the public that Earth was finite.⁵⁷ Further alarming the public, the Cuyahoga River in Ohio caught fire due to the amount of oil and chemical pollutants, with flames reaching five stories in height.⁵⁸ These moments and many others resulted in a rapid shift in environmental conservation in the United States, with landmark legislation passing including the National Environmental Policy Act of 1970, the Clean Water Act of 1972, the Marine Mammal Protection Act of 1972, and the Endangered Species Act of 1973.⁵⁹ Additionally, new agencies were created, including the Environmental Protection Agency and the National Oceanic and Atmospheric Administration.⁶⁰

The Endangered Species Act of 1973 states that endangered species have “esthetic, ecological, educational, historical,

⁵³ Eliza Griswold, *How 'Silent Spring' Ignited the Environmental Movement*, N.Y.T. MAG. (Sept. 12, 2012), <https://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html>; American Experience, *The Modern Environmental Movement*, PUB. BROADCASTING SERV., <https://www.pbs.org/wgbh/americanexperience/features/earth-days-modern-environmental-movement/> (last visited Mar. 14, 2020) [hereinafter *The Modern Environmental Movement*].

⁵⁴ Griswold, *supra* note 53.

⁵⁵ *The Modern Environmental Movement*, *supra* note 53.

⁵⁶ *Id.*

⁵⁷ *See id.*

⁵⁸ *The Modern Environmental Movement*, *supra* note 53.

⁵⁹ *Id.*

⁶⁰ *Id.*

recreational, and scientific value” for the United States and its people.⁶¹ Accordingly, the United States committed itself to conserving “the various species of fish or wildlife and plants facing extinction.”⁶² North Atlantic right whales were protected in the United States under the Endangered Species Preservation Act in 1970.⁶³ As a practical matter, the Endangered Species Act, which expanded upon the Endangered Species Preservation Act in 1973, is implemented by both the Department of the Interior and the Department of Commerce.⁶⁴ The Department of Interior houses the Fish and Wildlife service, which is responsible generally for terrestrial species.⁶⁵ The Department of Commerce houses the National Oceanic and Atmospheric Administration, which, through the Fisheries Service, is responsible generally for the marine species.⁶⁶

As a protected species, it is illegal to “take” right whales, either in territorial waters or the high seas.⁶⁷ They are also not able to be possessed, sold, delivered, imported, or exported from the United States.⁶⁸ Additionally, under the Endangered Species Act, critical habitat can be established for endangered species to protect “specific areas within the geographical area occupied by the species . . . on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection.”⁶⁹ In 1994, critical habitat was first established for the North Atlantic right whale.⁷⁰ The first protected areas for the North Atlantic right whales were located in the Great South Channel, Cape Cod Bay, and

⁶¹ Endangered Species Act of 1973, 16 U.S.C. § 1531.

⁶² 16 U.S.C. § 1531(a).

⁶³ *North Atlantic Right Whale*, *supra* note 7.

⁶⁴ CONG. RESEARCH SERV., R45265, U.S. FISH AND WILDLIFE SERVICE: AN OVERVIEW 15 (2018).

⁶⁵ *Id.* at U.S. Fish and Wildlife Service: An Overview.

⁶⁶ *Id.*

⁶⁷ Endangered Species Act of 1973, 16 U.S.C. § 1538(a)(1)(B)-(C); § 1532(19) (defining “take” as a term meaning “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”).

⁶⁸ Endangered Species Act § 1538(a)(1)(D).

⁶⁹ Endangered Species Act § 1532(5)(A)(i)(ii).

⁷⁰ Dep’t of Com., 50 C.F.R. 226 (NOAA 1994) [hereinafter Dep’t of Com.].

the Southeastern United States between Georgia and Florida.⁷¹ In 2016, the protected areas were increased to include a large foraging area in the northeastern United States off of the coast of Massachusetts, New Hampshire, and Maine, and an even larger calving area from the southern coast of North Carolina to the middle of Florida.⁷²

The Endangered Species Act is widely considered to be one of the strongest conservation statutes in the United States.⁷³ Since the creation of the Endangered Species Act, roughly ninety-eight percent of all endangered and threatened species listed have been prevented from going extinct.⁷⁴ This includes bringing multiple species, such as the California condor, the black-footed ferret, the peregrine falcon, and the bald eagle, back from the brink of extinction.⁷⁵ The Endangered Species Act certainly has the potential for improvement, however.⁷⁶ Promptly listing threatened species under the Endangered Species Act, protecting their critical habitat, and creating specific, dedicated recovery plans for the species has been shown to increase the chances of success.⁷⁷ Unfortunately, these actions are not always taken, as is shown by the twenty-three-year gap between North Atlantic right whales being listed as endangered and having critical habitat designated.⁷⁸ Additionally, the Endangered Species Act has been under attack for decades.⁷⁹ The listing program has long been underfunded with efforts made to prevent economically costly species from being listed.⁸⁰

⁷¹ *Id.*

⁷² Nat'l Marine Fisheries Serv. & Dep't of Com., 50 C.F.R. 226 (NOAA 2016), <https://www.federalregister.gov/documents/2016/01/27/2016-01633/endangered-and-threatened-species-critical-habitat-for-endangered-north-atlantic-right-whale>.

⁷³ *Defining Success Under the Endangered Species Act*, U.S. FISH AND WILDLIFE SERV., <https://www.fws.gov/Endangered/news/episodes/bu-04-2013/coverstory/index.html> (last updated July 12, 2013).

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ See generally Martin F. J. Taylor et al., *The Effectiveness of the Endangered Species Act: A Quantitative Analysis*, 55 *BIOSCIENCE* 360, 360-67 (2005).

⁷⁷ *Id.* at 366.

⁷⁸ *Id.*; *North Atlantic Right Whale*, *supra* note 7; Dep't of Com., *supra* note 70.

⁷⁹ See Taylor et. al., *supra* note 76, at 366.

⁸⁰ *Id.*

In 2019, the Fish and Wildlife Service and the National Oceanic and Atmospheric Administration announced major rollbacks to the Endangered Species Act.⁸¹ These rollbacks included considering economic factors when analyzing whether to list a species under the act⁸² and no longer providing the same protections to threatened species as endangered species.⁸³ These rollbacks came simultaneously with the United Nations Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services report that established “that around 1 million animal and plant species are now threatened with extinction, many within decades, more than ever before in human history.”⁸⁴ While these particular rollbacks do not directly impact the North Atlantic right whale, as it is already listed as endangered, they do illustrate the reduced interest in conservation in the United States and the increasing role of economic factors in the decision-making processes regarding conservation.

Aside from protections under the Endangered Species Act, North Atlantic right whales are also protected under the Marine Mammal Protection Act.⁸⁵ While the Marine Mammal Protection Act protects all marine mammals, it largely offers the same protections as the Endangered Species Act.⁸⁶ Notable among these protections is the prohibition on taking or harassing marine mammal species.⁸⁷

In the 116th Congress, the Scientific Assistance for Very Endangered North Atlantic Right Whales Act of 2019 (SAVE Right Whales Act) was introduced to both the United States House of Representatives and the Senate.⁸⁸ The bill was intended to provide “support for the conservation of North Atlantic right whales

⁸¹ *Trump Administration Improves the Implementing Regulations of the Endangered Species Act*, U.S. FISH AND WILDLIFE SERV. (Aug. 12, 2019), https://www.fws.gov/news/ShowNews.cfm?ref=trump-administration-improves-the-implementing-regulations-of-the-&_ID=36443.

⁸² Fish and Wildlife Serv., 50 C.F.R. 424 (NOAA 2019).

⁸³ 50 C.F.R. 17 (2019).

⁸⁴ Press Release, IPBES, *Nature’s Dangerous Decline ‘Unprecedented’; Species Extinction Rates ‘Accelerating’* (on file with author).

⁸⁵ See Marine Mammal Protection Act, 16 U.S.C. §1361.

⁸⁶ Marine Mammal Protection Act §1371.

⁸⁷ *Id.*

⁸⁸ See generally H.R. 1568; see generally S. 2453.

(*Eubalaena glacialis*).⁸⁹ Specifically, it requires the Department of Commerce to provide financial assistance for the conservation of such whales.⁹⁰ In addition, Commerce must conduct surveys of plankton on an ongoing basis using a continuous plankton recorder.”⁹¹ Even though this bill would have been a step in the right direction for right whale conservation, it stalled in Congress and was not enacted into law.⁹² Since the bill stalled, multiple right whales have been injured, including a calf that was struck by a ship just days after birth⁹³ and an emaciated mother that had a buoy entangled in her mouth.⁹⁴ As of April 8, 2021, it remains to be seen whether or not the 117th Congress will champion the protection of North Atlantic right whales.

B. *Protections in Canada*

While Canada has a long history of conservation, the less extensive and less dense settlement of the country led to lower amounts of concern over environmental degradation for much of the 1900s.⁹⁵ In the 1960s, Canadians became increasingly concerned about pollution of the air and water and were encouraged to act by Rachel Carson’s *Silent Spring*.⁹⁶ The federal and provincial governments formed environmental ministries and departments in response and passed environmental and species protection acts.⁹⁷ The push for more stringent environmental protections in Canada received backing from the 1973 Speech from the Throne, which

⁸⁹ H.R. 1568.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.* (this bill has not progressed as of Mar. 14, 2020); S. 2453. .

⁹³ *North Atlantic Right Whale Calf Injured by Vessel Strike*, NOAA FISHERIES (Jan. 13, 2020), <https://www.fisheries.noaa.gov/feature-story/north-atlantic-right-whale-calf-injured-vessel-strike>.

⁹⁴ Caroline Enos, *Entangled Right Whale Found Near Death off Nantucket*, BOS. GLOBE (last updated Feb. 28, 2020), <https://www.bostonglobe.com/2020/02/28/metro/entangled-right-whale-found-suffering-near-death-south-nantucket>.

⁹⁵ Monte Hummel & Erin James-Abra, *Environmental Movement in Canada*, THE CAN. ENCYCLOPEDIA (October 16, 2020), <https://www.thecanadianencyclopedia.ca/en/article/environmental-and-conservation-movements>.

⁹⁶ *Id.*

⁹⁷ *Id.*

promised wildlife protections in Canada in accordance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora.⁹⁸ In 1978, the Committee on the Status of Endangered Wildlife in Canada was established to identify threatened and endangered species.⁹⁹ It was not until 2002, however, that the Species at Risk Act fulfilled the promise from the 1973 Speech from the Throne and received Royal Assent, going into effect in 2003.¹⁰⁰ The goal of the Species at Risk Act is to “prevent wildlife species from being extirpated or becoming extinct [and] to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity.”¹⁰¹

The Species at Risk Act is administered by several agencies.¹⁰² The Committee on the Status of Endangered Wildlife in Canada continues to make recommendations on which species need protections.¹⁰³ These recommendations are given to the Canadian Endangered Species Conservation Counsel, which is composed of representatives from the federal, provincial, and territorial governments.¹⁰⁴ The Canadian Endangered Species Conservation Counsel then provides direction to the Committee on the Status of Endangered Wildlife in Canada while coordinating the actions of the various levels of government and the National Aboriginal Counsel on Species at Risk.¹⁰⁵ The Department of Environment and Climate Change, the Department of Fisheries and Oceans, and the Parks Canada Agency coordinate additionally at the federal level.¹⁰⁶

The North Atlantic right whale was listed as endangered in Canada prior to the creation of the Species at Risk Act, being listed by the Committee on the Status of Endangered Wildlife in Canada in 1980.¹⁰⁷ Under the Species at Risk Act, animals that are listed as extirpated, endangered or threatened cannot be killed, harmed,

⁹⁸ Nadine Hoffman, *Species at Risk Act: A Comprehensive Inventory of Legislative Documents 1973-2017*, CAN. INST. OF RESOURCES L. 1, 1 (2018).

⁹⁹ Hummel et al., *supra* note 28.

¹⁰⁰ Hoffman, *supra* note 98.

¹⁰¹ Species at Risk Act, SC 2002, c 6 (Canada).

¹⁰² Hoffman, *supra* note 98, at 2.

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Species Profile*, *supra* note 29.

harassed, captured, or taken.¹⁰⁸ Additionally, the Act prohibits people from possessing, collecting, buying, selling, or trading any such species.¹⁰⁹ In 2005, the North Atlantic right whale was officially added to the Species at Risk Act.¹¹⁰ The right whales are additionally protected by Marine Mammal Regulations under the Fisheries Act.”¹¹¹

C. *International Protections*

The International Convention for the Regulation of Whaling was signed in 1946 as a means of sustainably harvesting whales.¹¹² Even in 1946, however, many species had already been severely depleted.¹¹³ Accordingly, the International Whaling Commission continued the ban on hunting right whales that began in 1935 with the League of Nations.¹¹⁴ Over time, as the International Whaling Convention has monitored the health of whale populations, it has shifted its focus from sustainable harvesting to conservation.¹¹⁵ While this shift has led to conflict with certain countries, such as Japan and Russia, it is not a particularly contentious issue with the United States and Canada.¹¹⁶

The United Nations Convention on the Law of the Sea also regulates the international community’s obligations to whales.¹¹⁷ The Convention requires that countries cooperate to conserve marine mammals, “and in the case of cetaceans shall in particular work through the appropriate international organizations for their

¹⁰⁸ Species at Risk Act, c 32(1).

¹⁰⁹ Species at Risk Act, c 32(2).

¹¹⁰ *Species Profile*, *supra* note 29.

¹¹¹ *Id.*

¹¹² *International Whaling Commission*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/topic/International-Whaling-Commission> (last visited Mar. 14, 2019).

¹¹³ *Right Whales*, INTERNATIONAL WHALING COMMISSION, <https://iwc.int/right-whale> (last visited Mar. 14, 2019).

¹¹⁴ *Id.*

¹¹⁵ *International Whaling Commission*, *supra* note 112.

¹¹⁶ Rachel Fobar, *Japan Will Resume Commercial Whaling. Get the Facts*, NAT. GEO. (Dec. 26, 2018), <https://www.nationalgeographic.com/animals/2018/12/japan-considers-leaving-international-whaling-commission/>.

¹¹⁷ United Nations Convention on the Law of the Sea art. 65, Dec. 10, 1982, 1833 U.N.T.S. 397.

conservation, management and study.”¹¹⁸ This convention, which Canada is a party to, has not been ratified by the United States.¹¹⁹ The United States does, however, view the United Nations Convention on the Law of the Sea as an expression of customary international law and largely follows its tenants, while holding skepticism about the seabed mining and mineral rights provisions.¹²⁰ None of the United States concerns seem to be particularly related to the requirements to conserve marine mammals, which is already a requirement under domestic law.¹²¹

The Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES) seeks to prevent the depletion of endangered wildlife through international trade.¹²² Whales in general are protected under CITES.¹²³ North Atlantic right whales are classified as Appendix 1 listed species as they are threatened with extinction.¹²⁴ Because of the risk to the species, trade in North Atlantic right whales would be permitted only in exceptional circumstances.¹²⁵

IV. RECOVERY PLANS

Under both the Endangered Species Act and the Species at Risk Act, it is required that the United States and Canada, respectively, monitor the health of endangered species and create recovery plans to guide their efforts to protect the species.¹²⁶ The recovery plans for North Atlantic right whales, as will be discussed below, are broadly similar in their identification of the risks posed

¹¹⁸ *Id.*

¹¹⁹ *Declarations and Statements*, U.N. OCEANS & L. OF THE SEA (Dec. 2, 2020) https://www.un.org/depts/los/convention_agreements/convention_declarations.htm.

¹²⁰ David B. Sandalow, *Law of the Sea Convention: Should the U.S. Join*, BROOKINGS (Aug. 19, 2004), <https://www.brookings.edu/research/law-of-the-sea-convention-should-the-u-s-join/>.

¹²¹ *Id.*

¹²² *What is CITES?*, CITES, <https://www.cites.org/eng/disc/what.php> (last visited Mar. 14, 2020).

¹²³ Convention on International Trade in Endangered Species of Wild Flora and Fauna, *supra* note 21, at app. I-III.

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ Species at Risk Act, c 29.

to the right whales and in their perception of the general steps needed to staunch the species' decline. The implementation of the plans, however, is vastly different between the United States and Canada, with the United States repeatedly seeking to delay additional conservation measures while Canada is increasingly moving forward with steps designed to save the species.

A. *United States Recovery Plan*

In 2012, the United States National Oceanic and Atmospheric Administration (NOAA) published a five-year review of North Atlantic right whale recovery.¹²⁷ It established a list of criteria that would need to be met in order for it to be possible to move right whales from endangered to threatened.¹²⁸ These included: (1) the population ecology indicates the population is increasing; (2) the population has increased for 35 years at a rate of at least two percent per year; (3) none of the known threats to right whales are limiting the population's growth rate; and (4) the right whales have at most a one percent chance of extinction in 100 years.¹²⁹ The known threats listed for right whales under the above list included: (A) the ongoing or potential destruction, modification, or restriction of the species' range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease of predation; (D) inadequate regulations; and (E) other factors affecting their continued existence.¹³⁰ Of all of these factors, the only one that had been adequately addressed was the limitation on overutilization for commercial, recreational, scientific, or educational purposes, as North Atlantic right whales cannot be harvested.¹³¹ In 2017, the five-year review found that none of the other factors had been sufficiently addressed.¹³²

¹²⁷ *North Atlantic Right Whale 5-Year Review: Summary and Evaluation*, NOAA FISHERIES SERVICES NORTHEAST REGIONAL OFFICE 1, 1 (Aug. 2012), <https://repository.library.noaa.gov/view/noaa/17038> [hereinafter *5-Year Review Summary and Evaluation* (2012)].

¹²⁸ *Id.* at 2.

¹²⁹ *Id.* at 4-7.

¹³⁰ *Id.* at 5-6.

¹³¹ *Id.*

¹³² *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 1.

In 2012, the review found that oil and gas exploration would pose a significant risk to right whales because of “vessel movements, noise, spills, or effluents.”¹³³ There was a ban in place on drilling in federal waters effective through 2017, but seismic testing was still allowed.¹³⁴ The elevated levels of noise in the ocean, from seismic testing to ship traffic noise to military and commercial sonar, are known to cause stress in right whales and cetaceans in general.¹³⁵ This increase in noise impacts right whale communication and likely reduces growth, immune system responses, and reproduction.¹³⁶

Additionally, the 2012 review listed actions that were taken to reduce the number of right whales hit by ships.¹³⁷ These actions included establishing speed restrictions for vessels 65 feet or greater in seasonal management areas where right whales are known to congregate.¹³⁸ This National Marine Fisheries Service rule set the speed limit at ten knots.¹³⁹ This effort was paired with increased public notification of speed restrictions and whale movements, slight adjustments to shipping lanes, large-ship mandatory reporting, surveys, and alerts.¹⁴⁰ Even in the 2012 report, NOAA knew that the compliance with the speed restrictions was low.¹⁴¹ By the 2017 report, studies had shown that compliance had increased notably primarily in response to public enforcement actions being brought against violators.¹⁴² NOAA’s awareness of the lack of compliance with speed restrictions makes the decision to implement “dynamic management areas”, where voluntary speed restrictions are established around three or more sighted right whales,

¹³³ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 11.

¹³⁴ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 11; *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 15.

¹³⁵ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 12; *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 15-16.

¹³⁶ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 12; *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 15-16.

¹³⁷ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 16-18.

¹³⁸ *Id.* at 16.

¹³⁹ *Id.*

¹⁴⁰ *Id.* at 16-18.

¹⁴¹ *Id.* at 18.

¹⁴² *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 18.

particularly obscure.¹⁴³ By August 2017, NOAA had implemented 156 dynamic management areas.¹⁴⁴ In the same paragraph of the report, NOAA acknowledges that studies had found “compliance with the voluntary speed restrictions within DMAs [to be] poor, with vessels showing a very modest reduction in speed that was unlikely to reduce ship strike risk significantly.”¹⁴⁵

Addressing an additional risk to North Atlantic right whales, NOAA assessed the impacts of entanglement in fishing gear and the best ways to reduce the entanglement in its 2012 report.¹⁴⁶ Starting in 1997, NOAA began working to reduce the number of North Atlantic right whales injured and killed by entanglement in fishing gear.¹⁴⁷ Despite the longevity of the program to reduce entanglement, eighty-three percent of right whales have scars from being entangled.¹⁴⁸ Efforts to reduce entanglements have included gear modifications, seasonal closures and reductions, and millions of dollars in payments to fishery industry participants to encourage gear shifts.¹⁴⁹

A final major factor addressed in both the 2012 and 2017 report is climate change.¹⁵⁰ The shifting ocean temperature around the globe has changed the dispersal and concentration of right whale prey.¹⁵¹ Furthermore, the Gulf of Maine, a location with high levels of recent right whale activity, is changing temperatures at a higher than average rate.¹⁵² The changing temperatures are also changing the locations where right whales are found, both making it harder to establish protected areas and moving them into Canadian waters where they were not common previously.¹⁵³

¹⁴³ *Id.*

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 18-20.

¹⁴⁷ *Id.* at 18.

¹⁴⁸ *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 18.

¹⁴⁹ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 19.

¹⁵⁰ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 20-21; *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 21.

¹⁵¹ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 20-21; *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 21.

¹⁵² *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 20-21; *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 21.

¹⁵³ *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 20-21; *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 21.

B. *Canadian Recovery Plan*

North Atlantic right whales were listed as endangered under the Species at Risk Act in 2003, and a recovery plan for the species was put in place in 2009.¹⁵⁴ In 2016, the Canadian government released a five-year review detailing the progress on recovery between 2009 and 2014.¹⁵⁵ In addition to many of the similar strategies taken by the United States, such as reducing speeds and changing fishing gear,¹⁵⁶ the Canadian government has put into effect habitat protections for a significant portion of the species' Canadian range.¹⁵⁷ A 2017 critical habitat order enacted subsection 58(1) of the Species At Risk Act, which prohibits the destruction of any part of the North Atlantic right whales' critical habitat.¹⁵⁸ As a result, anyone conducting activity in the critical habitat zones would be banned from capturing or removing prey species, shipping, industrial activity, seismic surveys, sonar, tidal energy development, or dumping pollutants.¹⁵⁹ For any of these activities to be conducted, it would need to be proven that all reasonable alternatives were considered, the best solutions to the harmful activities were adopted, the impact was minimized as much as feasibly possible, and it would not jeopardize the species' survival or recovery.¹⁶⁰ Furthermore, the Canadian government acknowledged that small population shifts were not a significant indicator of improved health for the population, noting:

Right Whales are long-lived and reproduce slowly, which presents a challenge for understanding their

¹⁵⁴ Recovery Strategy Report Series, *Report on the Progress of Recovery Strategy Implementation for the North Atlantic Right Whale (*Eubalaena glacialis*) in Canadian Waters for the Period 2009-2014*, FISHERIES AND OCEANS CANADA, i (2016).

¹⁵⁵ *Id.* at ii.

¹⁵⁶ *Id.* at 36-37.

¹⁵⁷ *Recovery Strategy for the North Atlantic Right Whale (*Eubalaena glacialis*) in Atlantic Canadian Waters, Species at Risk Public Registry*, GOV'T OF CAN. (Feb. 10, 2010),

<https://www.sararegistry.gc.ca/default.asp?lang=En&n=88D01216-&offset=12&toc=show>.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

population dynamics within human timeframes. Recent population increases cannot be assumed to translate into long-term population success. The increase in the number of Right Whales in turn increases the risk of whales encountering human activities that may injure them. Thus an increase in the population can be accompanied by an increased risk until the threats themselves are reduced.¹⁶¹

Despite controlling a relatively small portion of the right whales' range, the Canadian response to the right whales' plight has been comparatively swift since the listing of the species in 2003.¹⁶² The increase in shipping restrictions, fishery controls, and protective measures from 2009 to the present is a positive step towards saving the species. Unfortunately, studies indicated that the efforts on behalf of both the United States and Canadian governments have not been sufficient to lower the rate of mortality caused by human activity.¹⁶³ Since 2017, however, Canada has significantly increased protections for North Atlantic right whales through protection measures enforced by Transport Canada and Fisheries and Oceans Canada.¹⁶⁴

In August of 2017, Transport Canada required all vessels 65 feet or longer to reduce speeds to ten knots or less in the western Gulf of St. Lawrence.¹⁶⁵ In 2019, Transport Canada removed the speed restrictions around Magdalen Island and between Anticosti Island and the mainland as long as right whales had not been sighted to reduce impacts on the marine transport industry.¹⁶⁶ Transport Canada, however, also made significant adjustments to protect right whales in 2019.¹⁶⁷ These included creating precautionary mandatory speed restrictions in the western Gulf of St. Lawrence in parts of shipping lanes around Anticosti Island between June and August for

¹⁶¹ Recovery Strategy Report Series, *supra* note 154 at 43.

¹⁶² *Id.* at i.

¹⁶³ *Id.* at 41.

¹⁶⁴ *Protecting North Atlantic Right Whales, supra* note 50; *2020 Fishery Management Measures, supra* note 50.

¹⁶⁵ *Protecting North Atlantic Right Whales, supra* note 50.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

ships sixty-five feet in length or longer, removing the restrictions only after aerial surveys demonstrated that right whales were no longer present.¹⁶⁸ In July of 2019, Transport Canada extended speed restrictions to include vessels forty-two feet in length or longer, expanded slowdown zones, and increased aerial surveillance.¹⁶⁹

In 2020, Canada expanded protections yet again for North Atlantic right whales, using a combination of static speed reduction zones, temporary speed reduction zones, seasonal management areas, restricted areas, and a voluntary slowdown period.¹⁷⁰ If a single right whale is sighted in the managed areas, this plan would require vessels 42 feet in length or longer to reduce their speed to ten knots or less within the area for 15 days so long as no right whales are detected in the area after the 15 day period.¹⁷¹ Certain areas will simply be closed to vessels where right whales congregate to feed.¹⁷² If a vessel is determined to have violated these regulations without a valid excuse regarding the safety of the vessel, Transport Canada may fine the vessel owner between \$6,000 and \$25,000.¹⁷³ These regulations dramatically alter the dangers posed to North Atlantic right whales.

Additionally, Fisheries and Oceans Canada placed strict regulations on fisheries that may come into contact with right whales during the 2020 season.¹⁷⁴ These measures included seasonal closures of fisheries until November 15 if whales are sighted in an area within the Gulf of St. Lawrence more than once during a 15-day period.¹⁷⁵ Temporary closures were enacted for at least 15 days for non-tended fixed gear fisheries if a right whale was seen in the area.¹⁷⁶ Additional protections were put in place for shallow waters.¹⁷⁷ As an added precaution and in an effort to move towards accountability, Fisheries and Oceans Canada now requires markings on fishing gear to identify the region and fishery the gear came

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ *Protecting North Atlantic Right Whales, supra* note 50.

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ *2020 Fishery Management Measures, supra* note 50.

¹⁷⁵ *Id.*

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

from.¹⁷⁸ For the lobster and crab fisheries, which pose an increased risk to right whales, Fisheries and Oceans Canada requires the marks to additionally identify the specific fishing area.¹⁷⁹ Finally, Fisheries and Oceans Canada established an \$8.3 million ghost gear fund to help remove lost, dangerous fishing gear from the oceans.¹⁸⁰

V. COMPARISON OF STRATEGIES AND EFFECTIVENESS

Both the United States and Canada are working to reduce the harm to North Atlantic right whales while minimizing the amount of economic damage. While both the United States and Canada have the same goal, the Canadian response in recent years has been far superior. The response to the decline of the North Atlantic right whale in the past five years is particularly telling. In early 2020, the United States delayed regulations to protect North Atlantic right whales yet again, bowing to pressure in opposition of regulations from the fishing industry,¹⁸¹ despite having acknowledged in the 2017 Five-Year Review that right whale mortality was five times greater than the sustainable amount.¹⁸² This might be exacerbated by the inherent conflict of interests within the Department of Commerce to both preserve endangered species and harvest fishery resources to the maximum sustainable yield.¹⁸³ Either way, this lack of movement on behalf of the United States government has resulted in no new regulations to protect right whales within protected

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *2020 Fishery Management Measures*, *supra* note 50.

¹⁸¹ David Abel, *Federal Regulations to Protect Right Whales are Delayed*, BOSTON GLOBE (Jan. 29, 2020), <https://www.bostonglobe.com/2020/01/29/metro/federal-regulations-protect-right-whales-are-delayed/#:~:text=By%20David%20Abel%20Globe%20Staff,%2C%202020%2C%205%3A17%20p.m.&text=After%20months%20of%20pressure%20from,until%20at%20least%20this%20summer>.

¹⁸² *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 17.

¹⁸³ Endangered Species Act of 1973, 16 U.S.C. § 1531 (requiring the protection of endangered species and their critical habitat); Magnuson-Stevens Fishery Conservation and Management Act (MSA), 16 U.S.C. § 1802, 104-297(33) (defining the optimum in regards to fishery yields as the “maximum sustainable yield”).

habitats being implemented since 2014.¹⁸⁴ Additionally, with the new regulations' publication for review being delayed until at least the summer of 2020,¹⁸⁵ any new regulations proposed would not be in effect until 2022 or later.¹⁸⁶

In contrast, Canada has consistently increased regulatory protections in 2017, 2018, 2019, and 2020 with additional plans in place for the future.¹⁸⁷ These actions included expanding protected areas, implementing mandatory closures for certain fisheries and mandatory speed reductions for large vessels upon sighting a right whale, increasing aerial and acoustic monitoring, requiring fishing gear identification markings, and providing funding to remove dangerous, lost fishing gear.¹⁸⁸

Another shortcoming is the United States' decision to implement dynamic management areas with only voluntary speed reductions.¹⁸⁹ These dynamic management areas are only put in place once it is known that North Atlantic right whales are present, but dynamic management areas only establish a voluntary speed restriction.¹⁹⁰ The National Oceanic and Atmospheric Administration acknowledges that voluntary speed restrictions are rarely followed, noting that a recent study had "concluded that compliance with the voluntary speed restrictions within [dynamic management areas] was poor, with vessels showing a very modest reduction in speed that was unlikely to reduce ship strike risk significantly."¹⁹¹ As the voluntary speed restrictions are rarely followed, this system essentially allows for vessels to continue

¹⁸⁴ Peter Baker & Katherine Deuel, *Latest Right Whale Entanglement in Fishing Gear Shows Urgent Need to Protect Species*, PEW (Mar. 12, 2020), <https://www.pewtrusts.org/en/research-and-analysis/articles/2020/03/12/latest-right-whale-entanglement-in-fishing-gear-shows-urgent-need-to-protect-species>.

¹⁸⁵ Abel, *supra* note 181.

¹⁸⁶ Baker & Deuel, *supra* note 184.

¹⁸⁷ *Protecting North Atlantic Right Whales*, *supra* note 50; 2020 *Fishery Management Measures*, *supra* note 50.

¹⁸⁸ *Protecting North Atlantic Right Whales*, *supra* note 50; 2020 *Fishery Management Measures*, *supra* note 50.

¹⁸⁹ *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 18.

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

travelling at dangerous speeds near an endangered species with the permission of the United States government.¹⁹²

Meanwhile, Canada has created temporary mandatory speed restrictions in multiple shipping lanes that go into effect if North Atlantic right whales are sighted or detected with underwater acoustic devices.¹⁹³ The vast majority of Canadian waters that are frequently visited by North Atlantic right whales have mandatory speed restrictions that go into effect if right whales are present.¹⁹⁴ Some conservation organizations have expressed frustration that Canada is only implementing a trial voluntary speed restriction in the Cabot Strait, the strait North Atlantic right whales must pass through to enter or exit the Gulf of St. Lawrence,¹⁹⁵ but the Canadian protections are still far beyond the measures in place in the United States.¹⁹⁶

There are instances of North Atlantic right whales being saved by minimizing risks posed from ship strikes. For example, in 2011 the Port of Jacksonville temporarily halted ship traffic because a North Atlantic right whale had wandered into the St. Johns River.¹⁹⁷ The whale entered the busy harbor at around ten a.m. and left at around six p.m.¹⁹⁸ While the ferry being temporarily shut down and the area being closed to commercial and navy vessels was an inconvenience for the harbor, it allowed the right whale to safely exit the port and continue safely along its way.¹⁹⁹ In a similar incident, a right whale named Clipper and her calf entered the

¹⁹² *Id.*

¹⁹³ *Protecting North Atlantic Right Whales*, *supra* note 50.

¹⁹⁴ *Id.*

¹⁹⁵ Eric McCarthy, *Oceana Canada Wants Assurance Government is Prepared to Respond to Whale Deaths*, J. PIONEER (Mar. 2, 2020, 8:10 AM), <https://www.journalpioneer.com/news/provincial/oceana-canada-wants-assurance-government-is-prepared-to-respond-to-whale-deaths-418090/>.

¹⁹⁶ Peter Baker & Katherine Deuel, *Latest Right Whale Entanglement in Fishing Gear Shows Urgent Need to Protect Species*, PEW (Mar. 12, 2020), <https://www.pewtrusts.org/en/research-and-analysis/articles/2020/03/12/latest-right-whale-entanglement-in-fishing-gear-shows-urgent-need-to-protect-species>.

¹⁹⁷ Timothy J. Gibbons, *Right Whale Shuts Down Traffic on the St. Johns*, JACKSONVILLE.COM (Jan. 24, 2011), <https://www.jacksonville.com/article/20110124/news/801258629>.

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*

Sebastian Inlet and stayed for two days.²⁰⁰ They were monitored and safely left the inlet.²⁰¹ Unfortunately, Clipper was one of the whales that died in a ship collision in 2019.²⁰²

In regards to North Atlantic right whales getting entangled in fishing equipment, some progress has been made in improving the fishing equipment and reducing its lethality for whales, but the progress has been made at a glacial pace.²⁰³ Until early 2020, lobster and crab fishing equipment, which is often responsible for entangling whales, was largely left in place while efforts were slowly undertaken to test their efficiency.²⁰⁴ Canada has now changed these regulations, requiring fishermen to remove equipment for varying lengths of time in response to the presence of right whales. Additionally, they require fishermen to mark their equipment so that it can be properly identified if it becomes entangled around a whale.²⁰⁵ The United States has not implemented these changes and has delayed updating its regulations.²⁰⁶ Additionally, both the United States and American fishermen are largely blaming Canada for the harm to right whales, increasingly refusing to take accountability for the damage being caused in both countries.²⁰⁷

A significant difference between the United States' and Canadian responses to the need to protect North Atlantic right whales is found in the use of seismic surveys to search for oil and gas below the sea floor. The United States still allows for seismic

²⁰⁰ Jim Waymer, *Endangered Whales Exit Sebastian Inlet After a Few Days There*, FLA. TODAY (Feb. 9, 2016, 5:00 PM), <https://www.floridatoday.com/story/news/local/environment/2016/02/08/endangered-whales-enter-sebastian-inlet/80011382/>.

²⁰¹ *Id.*

²⁰² Jim Waymer, *Right Whale Once Seen with Calf at Sebastian Inlet Has Been Killed in Canada*, FLA. TODAY (July 24, 2019, 1:13 PM), <https://www.floridatoday.com/story/news/local/environment/2019/07/24/sebastian-inlet-whale-clipper-killed-ship-canada/1813308001/>.

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ 2020 *Fishery Management Measures*, *supra* note 50.

²⁰⁶ Peter Baker & Katherine Deuel, *supra* note 196.

²⁰⁷ Penelope Overton, *Maine Lobstermen to Federal Regulators: We're Not Killing Whales*, PRESS HERALD (Mar. 9, 2020), https://www.pressherald.com/2020/03/08/maine-lobstermen-to-feds-were-not-killing-right-whales/#goog_rewarded.

surveys despite the fact that it is known to impair right whale communication and is believed to reduce growth, immune system responses, and reproduction.²⁰⁸ It is notable, however, that the Biden-Harris administration reduced the amount of seismic testing on the first day of the new administration and may change the policy going forward.²⁰⁹ Canada, in contrast, has already banned seismic surveys in North Atlantic right whale habitat.²¹⁰ Seismic surveys pose a significant threat not only to North Atlantic right whales, but many other marine species.²¹¹ As such, the disregard for the dangers posed by these activities would demonstrate the continued pursuit of economic gain at the expense of endangered species within the United States.

VI. DIFFICULTY IN ENFORCING ACTION

Enforcing changes that could save right whales is a difficult challenge in both the shipping and fishing industries. The shipping industry is challenging because there is a lack of oversight and enforcement, and because there are a large number of foreign vessels unfamiliar with the local rules that come and go from the right whales' habitat.²¹² This is demonstrated in both the 2012 and the 2017 five-year reviews, detailing that even when a slight shift in behavior was noted in American vessels once enforcement was publicized, there was no change in the behavior of foreign vessels.²¹³

Forcing change in fishing industries is difficult as well. Often, there is a strong sense of tradition and custom among the fishing communities, and they are reluctant to having environmental

²⁰⁸ *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 15.

²⁰⁹ See Exec. Order No. 13990, 86 Fed. Reg. 7037 (Jan. 20, 2021)

<https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/>.

²¹⁰ *Seismic Blasting Efforts Halted in Atlantic Ocean*, DEFENDERS OF WILDLIFE (Oct. 1, 2020), <https://defenders.org/newsroom/seismic-blasting-efforts-halted-atlantic-ocean>.

²¹¹ Letter from 75 Marine Scientists to the President of the United States (Mar. 5, 2015) (on file with usa.oceana.org).

²¹² *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 18; *5-Year Review Summary and Evaluation* (2012), *supra* note 127.

²¹³ *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 18.

scientists come in with new regulations and methods.²¹⁴ Increasingly, there is also a common trend between United States fishermen and Canadian fishermen of blaming the fishermen from the other country for harming the whales.²¹⁵ This is also seen in the noticeable shift in blame within NOAA documents regarding right whales between the 2012 and 2017 status reports.²¹⁶ While the 2012 status report showed that Canada was having relatively little impact on right whales relative to the United States, the 2017 report took a much different stance, despite the rapid increase in Canadian protections.²¹⁷ For example, the 2017 report noted:

Right whales are a transboundary natural resource for which recovery efforts require complementary conservation measures in both US and Canadian waters. However, there is currently a disparity between efforts undertaken by the governments of the US and Canada in addressing right whale entanglement risks associated with commercial fishing operations. We are currently engaged in long-term efforts to collaborate with Canadian authorities to work collaboratively in developing transboundary conservation measures. This has included classifying Canadian fisheries as part of the draft 2017 List of Foreign Fisheries under the MMPA (82 FR 39762, August 22, 2017). This classification stems from the 2016 MMPA “import rule” requiring fish and fish product imports into the US to be harvested with conservation measures comparable to those implemented in the US (81 FR 54389, August 15, 2016). Foreign nations have until January 1, 2022 to apply for and receive a comparability finding for

²¹⁴ Overton, *supra* note 207.

²¹⁵ *Id.*; see also Greg Mercer, *Frustration as Single Right Whale Prompts Fishing Ban at Canadian Island*, THE GUARDIAN (July 6, 2018), <https://www.theguardian.com/environment/2018/jul/06/canada-grand-manan-ban-fishing-endangered-whale>.

²¹⁶ *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 16; *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 20.

²¹⁷ *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 16; *5-Year Review Summary and Evaluation* (2012), *supra* note 127, at 20.

each of its export and exempt fisheries on the List of Foreign Fisheries to continue to export fish and fish products from those fisheries to the United States.²¹⁸

It is notable that there is little evidence to indicate a heightened strain to right whales coming exclusively from Canada, and, furthermore, the Canadian protections have dramatically outpaced those of the United States as of 2020.²¹⁹ If the United States and Canada enter into a period of blame shifting, then North Atlantic right whales will have a much-diminished chance of survival.

VII. REMAINING STEPS AND CULTURAL SHIFTS

Moving forward, it will be necessary to continue to build upon the progress that has already been achieved. Continuing to conduct research, limit ship speeds and harmful fishing gear, and monitor the population provides an opportunity to allow the species to recover. At present, North Atlantic right whales are still frequently entangled in fishing gear and struck by vessels, but there is good news.²²⁰ In 2020, ten calves had been spotted as of the 16th of February.²²¹ That was already more than were born in 2019 when seven calves were born, and it was certainly more than 2018, when no newborn calves were observed.²²² This cycle of years with a few calves and years with more calves is speculated by scientists to be a result of potential mothers having calves less often due to environmental stressors, but it still affirms that the species is viable and reproducing.²²³

Due to the rapid increase in human population, the dramatic increase in global expectations for standard of living and access to resources, and the as-of-yet unmitigated changes in the climate, it is

²¹⁸ *5-Year Review Summary and Evaluation* (2017), *supra* note 46, at 20.

²¹⁹ Baker & Deuel, *supra* note 184.

²²⁰ Sarah Morin, *Why More Right Whales Have Been Spotted This Year Compared with Last 3 Years*, CBC (Feb. 16, 2020, 9:00 AM), <https://www.cbc.ca/news/canada/new-brunswick/north-atlantic-right-whales-injured-whale-1.5464050>.

²²¹ *Id.*

²²² *Id.*

²²³ *Id.*

likely that significant changes will have to be made to allow for species like the North Atlantic right whale to continue coinhabiting the planet alongside humans.²²⁴ Animals need space to live, and our oceans are becoming increasingly crowded.²²⁵ Between ships, nets, fishing lines, lobster traps, military tests, and energy resource exploitation, there is little room left for oceanic giants like the North Atlantic right whale. This should not be seen as a simple passing from one age of earth's history to the next, however, as right whales are a part of the complex ocean ecosystem people heavily rely upon.

The marine ecosystem supports a staggering amount of human life. The Food and Agriculture Organization of the United Nations established that fish alone make up 20 percent of the animal protein in 3.2 billion people's diets around the world.²²⁶ Humans took a staggering 81.2 million tons of fish from the ocean in 2015 and an additional 79.3 million tons in 2016.²²⁷ Once blocks of these intricate ecosystems begin to disappear, the risk of the system as a whole failing grows more severe.²²⁸ Even from an economic sense, "the total first sale value of fisheries and aquaculture production in 2016 was estimated at USD 362 billion."²²⁹ By gambling with complex systems that even scientists struggle to comprehend, humanity is risking environmental and economic disaster. This is not to say that if North Atlantic right whales go extinct, fisheries will fall apart, but the North Atlantic right whale is a massive canary in a much larger coal mine. We know where they are. We know they are in danger. Now is the time to test whether it is possible to save them, and, in order to do so, we will be forced to make significant steps and assess our cultural priorities.

While right whales do play a role in the marine environment upon which humans rely, they have been so depleted for so long that it is unclear what cost their extinction would truly pose to the

²²⁴ See *supra* note 5.

²²⁵ Laist et al., *supra* note 34.

²²⁶ *The State of World Fisheries and Aquaculture 2018 - Meeting the Sustainable Development Goals*, FAO 1, 2 (2018), <http://www.fao.org/documents/card/en/c/I9540EN/>.

²²⁷ *Id.* at 4.

²²⁸ See generally *id.*

²²⁹ *Id.* at 2.

environment.²³⁰ Right whales play an important role in distributing nutrients through the water column, which in turn increases phytoplankton that convert carbon dioxide to oxygen.²³¹ Additionally, whales can provide nutrients to thriving seafloor communities for decades upon their death.²³² These environmental rationales are not, however, the best reasons for saving the North Atlantic right whale. Rather, they are centered on an anthropocentric view of conservation, largely evaluating a species worth in relation to its service to humanity.²³³ Instead of viewing the right whale as a limited tool to a healthier environment for humans, it is more useful to view their worth more broadly.²³⁴ The Norwegian philosopher Arne Naess summarized this position succinctly, stating “the well-being of non-human life on Earth has value in itself. This value is independent of any instrumental usefulness for limited human purposes.”²³⁵

To make the cultural shift necessary to save the endangered North Atlantic right whale, and endangered species in general, Western society needs to shift away from viewing nature as a means to an end. This shift towards ecocentrism is not a radical shift to something new, but, instead, is a return to humanity’s original understanding of the natural world to which we were once more closely tied.²³⁶ In this sense, it should not be necessary to explain why the right whale should be protected, in the same way that it is not necessary to explain why people should be protected. If the culture within the United States and Canada can shift to accept that certain fishing practices will need to change and economic losses will need to be borne to preserve something with inherent value, much of the conservation work would become much less controversial.

²³⁰ *Species Directory, North Atlantic Right Whale: In the Spotlight*, NOAA FISHERIES, <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale#spotlight> (last visited Mar. 14, 2020).

²³¹ *Id.*

²³² *Id.*

²³³ Paul Cryer et al., *Why Ecocentrism is the Key Pathway to Sustainability*, 1 THE ECOLOGICAL CITIZEN 35, 39 (2017), <https://www.ecologicalcitizen.net/pdfs/v01n1-08.pdf>.

²³⁴ *Id.* at 40.

²³⁵ *Id.* at 35-36.

²³⁶ *Id.* at 39-40.

VIII. CONCLUSION

North Atlantic right whales are on the brink of extinction. Unlike many endangered species, humanity has a long, complicated history with these whales. Their decline is almost exclusively a result of direct human action, and their extinction would be the result of our inaction. North Atlantic right whales represent an interesting question for humanity going forward: what is our responsibility to the species with which we share the planet? The United States and Canada are currently offering two different paths forward in response to this question.

The United States is largely continuing forward, business as usual. Effective and efficient shipping and fishing industries are prioritized more heavily than the commitment to biodiversity. Canada, on the other hand, is actively working to implement new strategies to both allow right whales to have a place in the world's oceans and continue to be a part of a complex international marketplace. This continuous reevaluation results in a frequent process of trial and error, with regulations changing from year to year as strategies change and evolve to best fit the parties and shareholders involved. While this may cause difficulty for certain individuals and entities, it is a fair price to pay to ensure the environmental stability of the oceans going forward.

The global, environmental challenge that right whales demonstrate, however, is that one country making an effort is not enough on its own. Relative to other environmental concerns, such as climate change, ocean acidification, deforestation, and mass extinction, the effort involved in protecting right whales is quite limited. Furthermore, it only involves two nations, not the global community. In this instance, however, blame shifting and petty differences between two allied nations are creating an increasingly hostile environment where neither country wants to accept responsibility, and the environment suffers in response. If the United States and Canada cannot work together to save one species that is so visible and so well known, what chance is there that the global community can address the other crises looming on the horizon? To set an example going forward, the United States and Canada must both push forward in their pursuit of environmental conservation.

Canada is doing its part, and it is time for the United States to catch up.