

saving the North Atlantic right whale from extinction



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A North Atlantic right whale and calf surfacing in Cape Cod Bay.



“Ensuring the right whale survives and protecting the livelihoods of fishermen are fundamental. It is not a question of ‘either or.’ Whales and fishermen thriving together — that is the end game.”

— Kathleen Collins, Senior Marine Campaign Manager

the plight of the North Atlantic right whale

The North Atlantic right whale has a storied past dating back to the early 1800s. This species received its name from fisherman for being the “right whales to hunt” due to their slowness and thick blubber layer, making them the ideal target. Unfortunately, this unlucky reputation led to a drastic decline in right whale populations from whaling in the 19th century. By the late 1800s, the North Atlantic right whale was nearly hunted to extinction.

It wasn’t until 1935 that the League of Nations (a precursor to the United Nations) issued an incredibly late ban on the hunting of right whales with hopes of giving them a chance to recover. However, even with this safeguard, populations have remained low due to other human-

related threats, primarily accidental entanglement in fishing gear and vessel collisions, as well as underwater noise and climate change impacts.

Now, the North Atlantic right whale is one of the most endangered animals in the world. They are on the brink of extinction, listed as ‘Critically Endangered’ on the IUCN Red List, with an estimated population of 340 and only a quarter of those remaining are reproductive-aged females. In other words, **only 70 are capable of producing more calves.** With a 12-month pregnancy, regrowth of the population is limited and slow. This means the death of even one animal can have a critical impact on the species’ survival.



An entangled whale named Snow Cone, spotted off the coast of Florida with her calf.

Snow Cone’s perilous journey

As the few remaining right whales travel along North America’s East Coast, they must navigate a maze of deadly fishing gear, vertical buoy lines, recreational boaters and industrial shipping zones. Such was the perilous journey for one mother whale, Snow Cone, and her calf. Snow Cone was spotted off the coast of Florida, entangled in new fishing gear wrapped around her tail while still carrying old gear around her

head from a previous entanglement a year earlier.

Snow Cone and many others like her, suffer from severe entanglement which can lead to a slow and drawn-out death. The bad news — these threats are killing off a species integral to the North Atlantic ecosystem. The good news — with prompt action, new technology and committed support from people like you, we can save the North Atlantic right whale. Thank you for all you are doing to champion this cause and more, alongside IFAW.



A North Atlantic right whale 'skim feeding' with baleen clearly visible in Cape Cod Bay.

costly causes

Climate change is a constant threat impacting species around the world. The North Atlantic right whale is no exception. Right whales used to make the perilous trek up the East Coast to the Bay of Fundy. But now, the Gulf of Maine — and in turn, the bay — is one of the fastest-warming water on the planet, becoming a less habitable space for the species. Compounded with climate change, entanglement and vessel strikes have led to 98 mortalities since 2017. That is nearly a third of the already-dwindling population—dead or seriously injured in only six years. To truly understand why entanglement and vessel strikes have wreaked such havoc on right whales, we must examine the impact they have on the animals.

entanglement

Approximately 83% of right whales have experienced entanglement in fishing gear at least once in their lifetime, while entanglement-related deaths have accounted for 85% of diagnosed mortalities since 2010. When these whales first encounter vertical lines, their natural instinct is to roll and tumble causing the gear to constrict around them. Wrapping around the whale's flippers, tail, head or mouth, the line produces deep lacerations and even partial amputations of the flippers, often leading to an inability to feed properly leading to emaciation. The process of entanglement itself causes immediate, traumatic drowning events in some cases and prolonged, painful deaths in others. This process and its subsequent



A North Atlantic right whale surfaces near Song of the Whale in Cape Cod Bay.

effects can best be understood in a visual that can be found at www.ifaw.org/NARW-entanglement.

This graphic was created as a collaboration between IFAW and National Geographic.

vessel strikes and collisions

In addition to entanglement, collisions between vessels and whales are recognized as a serious conservation concern for the North Atlantic right whale. The overlap between areas of busy vessel traffic, critical habitat and shrinking population numbers make vessel strikes one of the leading threats to the species. Although it may seem like they would only happen with large industrial ships, some of the

greatest danger comes from vessels less than 65ft long. Collisions with smaller boats not only jeopardize the life of the whale, but they often cause severe damage to the boat, putting passengers at risk. Serious and even fatal injuries to passengers have occurred following such strikes.

The threats are clear, the solutions, straightforward. IFAW and partners are finding a way to shrink the amount of gear in whale habitat and decrease the number of collisions between boats and whales by reducing ship speeds in geographically important spots to the North Atlantic right whale.



Map of the North Atlantic right whale's previous population. Due to entanglement and vessel strikes, they are now only located on the east coast of the United States.

progress and improvement

Experts are confident the right whale population can grow and the species will be saved from extinction if instances of entanglement and vessel strikes decrease dramatically and immediately. With your help, IFAW has been leading that charge.

To reduce the threat of entanglement, our campaign has had great success in increased adoption of on-demand gear — special gear that fishermen can locate and retrieve without needing to leave vertical lines in the water for extended periods. Though widespread adoption among the fishing community remains an obstacle, we are addressing it with dedicated outreach efforts from trusted voices within the fishing communities themselves. We have spearheaded close, cross-sector collaborations with lobstermen, gear manufacturers, scientists and NOAA representatives to advance gear technology and find solutions that will work for both right whales and lobstermen.

This includes an initiative we launched in coordination with the Acadian Crabbers Association to provide 30 Smart Buoys for the upcoming 2023 fishing season. These buoys will not only improve the accuracy of gear location in rough seas, but also provide real time notifications on abnormal gear movement and GPS tracking — a proactive way to predict an instance of entanglement.

Additionally, IFAW has lobbied state and federal officials to increase funding and regulations that support a transition to on-demand gear. In April, history was made when two fishermen received new technology used to signal the acoustic release of on-demand gear. **Leveraging our work in the field with early adopter lobstermen, we have separated ourselves from other organizations both within the policy sector and the fishing industry as an organization that is taking a holistic approach to solve this dire problem.**



The Song of the Whale research vessel off the coast of Cape Cod.

the Song of the Whale sets sail

We've also made great strides in reducing vessel-related threats to right whales by working on the water with Federal scientists. Together, we are advancing cutting edge science by identifying linkages between a gas emitted by right whale prey (DMS) and corresponding right whale aggregations. There are early indications that DMS levels can be used to predict presence of right whales as they migrate up the US east coast to the Gulf of St. Lawrence in Canada.

Similar efforts were taken in coordination with the research team of the formerly IFAW-owned vessel, Song of the Whale (SOTW) in 2023. The team has been tracking the migration route of mother-calf pairs to address data gaps around presence and habitat use, while measuring DMS concentrations in

key areas and raising awareness in key ports of the plight of right whales.

We can then advocate for slowing vessel speeds in this area — a method already proven effective after NOAA ruled to regulate vessel speed on the East Coast of the United States. **Research has shown that slowing down vessels to 10 knots can reduce right whale deaths from vessel collisions by 80% to 90%.** Slower speeds in conjunction with citizen science via the Whale Alert app can significantly reduce vessel strike risk to right whales. The Whale Alert app, launched by IFAW in partnership with Conserve.io, allows people out on the water to track and share whale sightings with fellow boaters. Boaters can then slow their speed accordingly.



A North Atlantic right whale surfaces at sunset.