



# Center for Coastal Studies Provincetown

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## The Center for Coastal Studies' Right Whale Emergency Initiative

There are only about 430 North Atlantic right whales left in the world; of those, fewer than 100 are breeding females.

In 2017 only five new calves were born. At the time of writing, on March 5, 2018, researchers have yet to see even one.

In the last year 18 right whales were found dead, including several females.

***The arithmetic is simple. Low birth rates + high mortality rates = extinction.***

### **Background**

Right whales, typically 50 feet long and weighing 100,000 pounds, were once so abundant, it was said a person could cross Cape Cod Bay simply by walking across the black backs of these whales.

These animals became known as the "right" whale to hunt because they were an easy target, slow-moving and feeding at the surface. Slaughtered by commercial whaling, North Atlantic right whales are now rarer than mountain gorillas, black rhinoceroses, and giant pandas.

From 1990 to 2010, their population made a slow recovery, inching up from an estimated 270 to 483 whales. However, in 2010 the numbers began dropping, and deaths are increasing. At least 50 right whales have died since 2010, 18 of those in just the last 10 months.

These animals migrate through an industrialized ocean along the US east coast, and the primary causes of increased deaths are from whales becoming entangled in fishing gear and/or being struck by ships.

Newer, stronger rope since the 1990s catches and kills many more animals.

About 85% of right whales show scars from previous entanglements. Severe injuries, from ropes cutting into blubber, bone, and muscle, are rising. Death by entanglement is slow and painful. Some are anchored in place and drown; others die from infected wounds, or can't feed properly and starve to death. Those that don't die from their injuries show poor health, and limited ability to reproduce, further threatening the remaining population.

This contrasts sharply with right whales in the Southern Hemisphere, which swim through much less congested waters. Since commercial whaling ended they've rebounded to about 15,000 animals.

The death of so many animals this year has prompted a federal investigation into the cause(s). New reports from government, scientific, and conservation sources cite the need to address gaps in science and management, to further reduce ship strikes and entanglements (including tighter, long- overdue restrictions on fishing gear in the animals' territory to reduce these human-caused injuries and deaths).

Our Emergency Initiative was created in concert with these calls to action. It will build on our successful 20-year partnership with the Commonwealth of Massachusetts to increase research and protection efforts, focusing on the right whales' federally-designated Critical Habitat around Cape Cod Bay. Our research has documented this

as the primary winter right whale feeding ground and nursery for calves. Since 2008 the number of right whales using this area has dramatically increased by over 50%.

Our research has been used by management agencies in rerouting shipping lanes, reducing speed limits in right whale migration pathways, and seasonally managing fisheries to remove gear during the whales' use of these waters.

CCS also directs the East Coast whale disentanglement network in partnership with NOAA; our right whale team works with the disentanglement specialists in spotting and standing by rescue efforts.

The RWEI will intensify our efforts in this well-known location of growing right whale presence, and extend to another high-priority location of Jeffreys Ledge, off the Massachusetts and New Hampshire coasts. This location was designated in 2016 as a Critical Habitat for right whales. It also is an area with high shipping and fishing activity, but management efforts lag behind there because of gaps in critical information.

CCS will provide accurate information that can be used by management agencies to reduce mortalities and serious injuries and increase this species' chance for survival.

The initiative combines 1) new research to define population trends, distribution patterns, individual occurrence, health and injuries of animals, with 2) assessing human-related threats, including increase sighting success for entangled whales, providing near-real-time info on whale sightings to mariners through established broadcast systems, and helping to minimize ship collisions; and 3) increased public outreach to build support for right whale protection efforts.

Our research will

- Fill in critical information gaps needed to better understand and protect the critically endangered North Atlantic right whale population.
- Expand surveillance of right whales in key geographic areas especially where they are not well monitored or protected.
- Improve guidance to regulatory agencies to advise mariners of right whale presence, reduce shipping speeds, and divert vessels from animals.
- Reduce the incidence of vessel collisions and entanglements by providing near-real-time whale location to mariners
- Increase reporting of entangled whales, and support efforts of the Center for Coastal Studies-led disentanglement network by providing assistance, documentation and post-disentanglement monitoring.
- Provide evidence-based recommendations for management changes in areas with concentrations of right whales, shipping, fishing, and other activities with potential impact.
- Increase the fisheries, whale watching, and other communities' awareness of the role they can play in stewardship, and partnering in protection efforts.
- **Improve the right whales' chances for survival.**