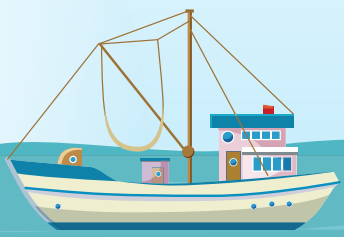


# On-Demand Fishing Gear

## Improved with industry input

### WHAT IS ON-DEMAND GEAR (AKA ROPELESS/BUOYLESS GEAR)?

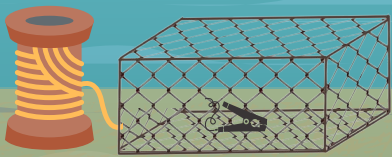
#### NO BUOY LINES IN THE WATER COLUMN



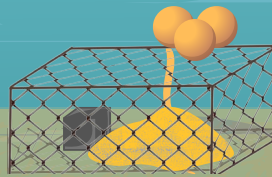
A universal gear location system would allow anyone fishing to see where gear was set, preventing them from setting or towing over it



Inflatable Lift Bag



Buoyant Spool



Pop-Up Buoy

A fishermen could choose:

#### BOTTOM STOWED LINE

- 1: The buoy line is coiled with the fishing apparatus
- 2: A fishermen "calls" the Buoyant Spool or Pop-Up buoy to the surface using an acoustic release or

#### NO BUOY LINES

- 1: The fishing gear is attached to an Inflatable Lift Bag on the ocean floor
- 2: An acoustic trigger cues the bag's inflation, allowing the trap to float to the surface

### WHY IS ON-DEMAND GEAR NECESSARY?

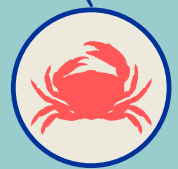
#### CURRENTLY

Fixed gear fisheries set traps, pots, barrels, or nets on the ocean bottom marked with lines attached to surface buoys or floats- It may be hours, days, or weeks before retrieval

#### CONSEQUENCE

Protected species may become entangled causing fishermen to lose gear and face increased regulatory restrictions as well as closures of rich fishing grounds

~ **1.2 MILLION** buoy lines fished along the US coast



~ **\$630 MILLION** Ex-vessel value of American lobster fishery in 2019



### BENEFITS ENDANGERED WHALES



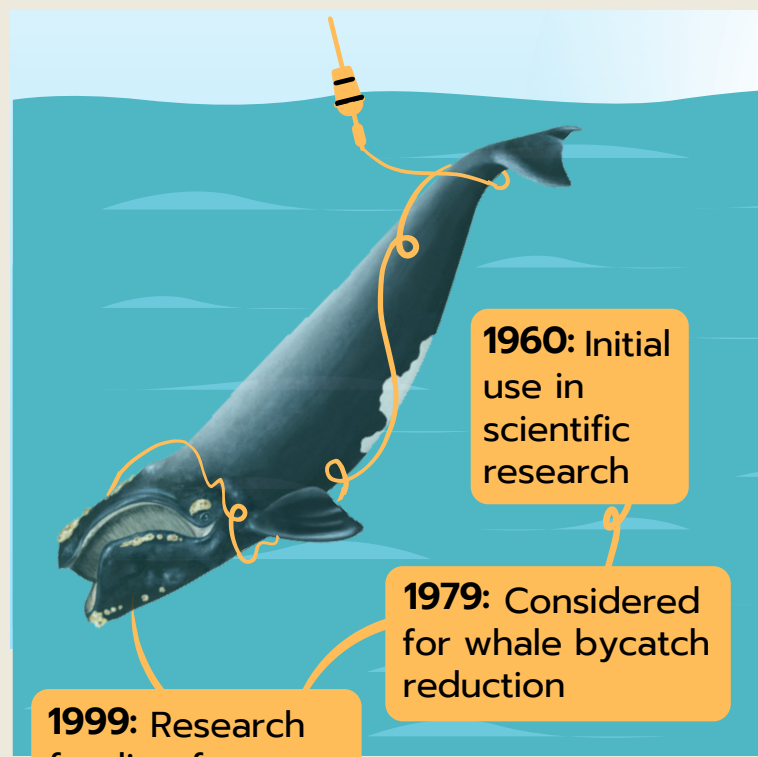
< **370** Remaining North Atlantic right whales



> **86%** of North Atlantic right whales have been entangled at least once



> **67** North Atlantic right whales accidentally killed by US fisheries since 2010



**1960:** Initial use in scientific research

**1979:** Considered for whale bycatch reduction

**1999:** Research funding from National Oceanic and Atmospheric Administration

### TRIAL RESULTS

#### Initial trials indicate

- Acoustic retrieval systems work
- Mechanical interruptions, including snags in lines, are being addressed with fishing industry feedback
- Initial testing suggests gear loss may be reduced as on-demand gear is less likely to move in storms
- Training is key to success

**2019:** Gear location Apps are developed and at sea trials begin

**2018:** Ropeless Consortium established and Canadian lobster and crab fisheries start testing gear

**2020:** Testing expands to US lobster fishery while Canadian fisheries begin commercial use of on-demand gear

#### FINAL STEPS TO COMMERCIAL USE

- Development of a universal gear detection system
- Establishment of training programs
- Implementation of mass production to realize economies of scale
- Investment by government and private sector for development and subsidies



Get started at [Ropeless.org](https://Ropeless.org)