

As human use of the ocean increases, more and more whales are getting caught in fishing lines, nets, traps, and other gear or trash.

Entanglement can cause injuries and impair a whale's ability to swim, eat, or surface to breathe, often with fatal results. Four out of five endangered North Atlantic right whales have been entangled at least once, and scientists believe the resulting stress and energy drain is one reason females are

having fewer calves. Humpbacks, gray whales, and others also face serious risks. Researchers have estimated that 300,000 cetaceans die from entanglements every year. Many cases go unseen or unreported. But when reports come in, highly trained experts rush to the scene to try to help.

Rescuing a 40-Ton Animal

Jenn Tackaberry, a research biologist with the Center for Coastal Studies on Cape Cod, Massachusetts, is one of only a couple dozen people in the United States authorized to cut a large whale free.

A young gray whale has a lobster trap line caught in its mouth.

When the trained response team gets on scene, they attach a control line to the entangling gear. Holding onto the line, they keep their small inflatable boat near the whale.

Then they analyze how the gear is configured. "You have to figure out exactly how this animal is wrapped up so you're making the right cuts in the right order," Tackaberry says.

Disentangling enormous whales in distress is dangerous. They can thrash their giant fins and flukes and try to flee. "During a response, I've never gotten the impression the animal knew we were trying to help," Tackaberry says. "They are very large, unpredictable creatures." Responders add buoys to slow the whale down and tire it out, then use knives with hooked blades on long poles to cut the entangling gear.

Tackaberry and her colleagues say they manage to free about 80 percent of the humpback whales they work on. North Atlantic right whales are harder to approach safely, so response missions don't succeed quite as often.

Responders examine each whale's wounds and the retrieved gear to learn what happened, so it can be prevented in the future. "I want to gather the information needed so we can conserve these species," Tackaberry says. With changes like designing ropeless fishing gear, ropes that break more easily, or restricting fishing in areas of heavy whale use, many more whales could be saved.

Nora Nickum lives on an island and works on ocean conservation policy for the Seattle Aquarium. Her middle-grade book *Superpod*—about orcas, her favorite whales—is coming out in early 2023.