

*Liz Fox:*

Hi, this is Positively Ocean, where we celebrate the ocean and look at what's working well. I'm Liz Fox. While the continental United States tries to keep warm through this frigid winter, it's whale birthing season in Hawaii. An estimated ten thousand humpback whales have returned to the warm waters at the Hawaiian Islands Humpback Whale National Marine Sanctuary to give birth and make more babies. That means that whale watch boats are busy, but so are rescuers like Ed Lyman. He's the whale entanglement response coordinator at the sanctuary. Whales can get caught in equipment that improves our lives like moorings, fishing nets, and communications and research instruments. Entangled whales can drag ropes, cables, metal cages, that can weigh hundreds of pounds, and that makes feeding and breathing in their annual migration of up to six thousand miles nearly impossible. Researchers and rescuers like Lyman study how whales get stuck, what they tow, and how to safely remove the dangling and dragging debris. Lyman is working with extra precaution this year after one of his colleagues and whale rescue pioneer Joe Howlett died in July. Howlett had successfully disentangled a right whale in the Bay of Fundy when the giant animal made a sudden and unexpected flip. As a result, NOAA temporarily suspended all whale rescues until officials reviewed their safety guidelines for this dangerous work. Although Howlett lived and worked half a world away, globally the whale entanglement responders make up a tight community that meets yearly to discuss what they've learned about whale entanglements and how to improve their responses and safety. Lyman says the keys to successful disentanglement are a wide network of educated hands maintaining a safe distance and also using tools that keep the rescuers and animals safe. When boaters report an entangled whale, Lyman instructs them to track the whale from a safe distance while his land-based team drives to the harbour, loads the boats, and buzzes across the channel. Here's what Lyman said when I spoke to him at his office overlooking the sanctuary last spring.

*Ed Lyman:*

So we need standby support from that community. And the whale watch vessels now, the captains, they totally organize themselves in that monitoring a whale, you know, standing by so we don't lose it, and that always brings a smile to my face, when you've got a community working with you so well like that.

*Liz Fox:*

Like historic whaling crews on the hunt, Lyman and his team use a large boat to get to the whale's general area then launch a small, swift boat to get closer. They hook a bright orange polypropylene ball to the trailing debris, rather than harpooning the whale with floating kegs. Then, just like in *Moby Dick*, the team hangs onto the ball with the line and lets the whale take their skiff for a Nantucket sleigh ride.

*Ed Lyman:*

And we're doing it for a reason, it's all about assessment. So when we're towing behind the whale we can feel its strength. If the lines are drifting, that's good news. And that changes our technique.

*Liz Fox:* The tools Lyman uses are designed with human and whale safety in mind. Lyman unfurls a rolled-up set of knives to reveal a modern collection of blades and grapples that won't harm the whale and will quickly sever the tie between whale and boat if needed. And even well-planned disentanglements can change at sea. Last April, Lyman's team struggled to free the season's last of three entangled humpbacks, a calf that dragged what appeared to be a typical poly blend braided line.

*Ed Lyman:* Well we got the cutting grapple on and fifteen minutes later, nothings happening. And we look down, and the grapple's all fowled.

*Liz Fox:* That's when they pulled up the line. It was extraordinarily heavy and they realized it was actually a five eighths inch coaxial communications cable.

*Ed Lyman:* We needed a pair of bolt cutters, a large pair of bolt cutters.

*Liz Fox:* After two days of pursuing and tiring out the whale, the team cut the cable in two spots. Some of the material remained in the calf's mouth, and that's the best Lyman's team could do.

*Ed Lyman:* And that's what we have to do. I mean, you have to look at the long run here.

*Liz Fox:* And while the public has a vital role in spotting distressed whales, Lyman stresses that a call to NOAA's whale entanglement hotline can save whales' lives and humans' lives. Here in California, the whale hotline is 1866-767-6114. And that's an example of folks doing right by the ocean. Until next time, I'll be searching for all things Positively Ocean. For Ocean Currents radio and KWMR, this is Liz Fox reporting from Kihei, Hawaii.