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New vessel among rare breed of ships to save whales

By ERIKA I. RITCHIE / ORANGE COUNTY REGISTER

For nearly two decades, San Juan Capistrano's Dave Anderson provided thousands of visitors a glimpse into the world of whales and dolphins aboard his catamaran, sailing out of Dana Point Harbor.

Now, Anderson has a vessel to help study and protect these sea creatures.



Anderson, who operates Capt. Dave's Dolphin and Whale Watching Safari, for the first time on Saturday, will launch Lily, a 62-foot catamaran power boat. The boat will be used for whale disentanglement and whale and dolphin research. Anderson will also invite the public aboard as a way to provide hands-on training on how whale researchers use data he collects.

The National Oceanic and Atmospheric Administration this year named Anderson and his whale disentanglement task force a lead team in Southern California to assist tangled whales.

Anderson will also help whale research groups such as Cascadia Research in Washington and the Great Whale Foundation operate photo recapture studies. In the studies, whales are logged by recognizable features such as notched flukes, locations and date and time of sighting. There are at least

30 known blue whales and a handful of fin, humpback and gray whales that annually show up near Dana Point Harbor.

The whales are identified by things such as missing parts of their tails, misshapen flukes and odd colorations. Passengers aboard Lily will get to do hands-on whale and dolphin research.

Anderson named the boat in honor of a young gray whale that became entangled in a fishing net and ultimately died in Dana Point Harbor in 2010. He is hopeful that the boat – painted with murals of whales and dolphins – will visually raise awareness about the problem of whales caught in nets.

“It was a sad day that day, sad for lots of people in the harbor,” Anderson said. “The more people that know about entanglements, it help puts a face on the problem.”

Getting the boat seaworthy wasn't easy. Boat owners like Anderson who want to share sea adventures with more than six people and get paid for it have to get their small passenger vessels U.S. Coast Guard-certified. Boats are inspected for things such as life-saving equipment, machinery, navigation and man-over-board drills.

“All those regulations were written in blood,” said U.S. Coast Guard Lt. j.g. Sean Haley. “There is a long history of boating accidents with thousands of cases where lives were lost at sea. There are all sorts of regulations that seem mundane, but there are reasons they're in place.”

Each year, Coast Guard inspectors get hundreds of queries for small vessel inspections. But the often months long process and an 80-page book of regulations is enough of a deterrent to keep only those who are serious about their maritime business pressing on. Coast Guard inspectors require rigorous attention to details and in some cases make weekly visits to the crafts. Many plans are submitted to Washington, D.C. Local inspectors make sure boats pass their regulations.

Boats like Anderson's fall into the 100 gross tons-and-under category. Others in this group include businesses such as commercial fishing and scuba diving. The Coast Guard does similar inspections on large passenger vessels, barges, tankers and all foreign container ships. There are 40 inspectors that divide work on all boats in this category and include the ports of Santa Barbara, Port Hueneme, Marina del Rey, San Pedro, Long Beach, Newport Beach and Dana Point.

LILY'S SPECIAL FEATURES

- Bow-mounted, steerable underwater video/still camera that passengers can use to photograph and view dolphins and whales underwater.
- Bow seating with glass windows to block wind. Heated and air-conditioned cabin and pilothouse. Tables and galley for eating.
- Robotic camera can travel 200 feet underwater, sending video and data.
- Hydrophone: transmits sounds of dolphins and whales underwater.
- Self-sustaining: Reverse osmosis can turn seawater into drinking water at a rate of 24 gallons per hour.
- Research Room: contains whale identification photos, computer and aquarium.

Anderson bought his boat in March and has spent hundreds of thousands of dollars to make it safe for researchers and passengers and to pass Coast Guard inspection. In the end, Anderson estimates the boat will have cost \$2.5 million.

The boat's previous owner took it up to Alaska and down to Mexico. Those sea miles were a boon to Anderson. It makes him confident the boat can persevere in the event of a whale disentanglement chase. In past cases, whales from this area escaped with buoys attached only to be found by fishermen in Northern California. With Lily, Anderson can follow an entangled whale as far as it goes.

It has taken Anderson nearly five months of daily diligence to get Lily ready for the Coast Guard's final inspection. Some of Anderson's greatest challenges included bringing all of the stainless steel railing up to the Coast Guard-required height, rewiring the electrical system and reconfiguring the boat's central staircase.

"Just understanding what is required by the regulations was the biggest challenge," Anderson said. "The Coast Guard tries to help you, but there are regulations for every system – plumbing, electrical, even the type of carpeting allowed. And it is sometimes very hard to know how these rules applied to our vessel."

In one case, Anderson said he got a "No" from the local inspector – the refusal could have cost \$100,000 more. An approval from the Coast Guard

in Washington, changed the outcome, Anderson said.

Despite the challenges, Anderson is happy to finally have a craft that combines his passion of saving sea life with an opportunity to give the public not only a glimpse of whales and dolphins but firsthand experience to help them as well.

"If even one whale is saved because we had a self-sustaining, fully-equipped rescue vessel that could respond quick enough before the whale vanishes in a big ocean, it is worth every penny we spent for it," Anderson said.

Michael Fishbach, a whale researcher with the Great Whale Conservancy, recently spent some time on Lily and talked to Anderson and his crew about doing photo identification work. To make it useful to researchers, photos have to be shot in the right light and key on specifics depending on the whale species. But Fishbach also pointed out that whale watch captains do not have permits to get close to whales and will capture their images opportunistically.

"I believe the Dave Andersons of the world are underutilized by researchers," Fishbach said. "The relationship among whale watch captains, researchers and NOAA should be built upon. A body of people who are making money by being near whales, they will be the primary eyes. I think the potential is huge for the research community."

Research, rescue and observation

Dave Anderson's 62-foot vessel in Dana Point Harbor is a whale-watching business, but also outfitted for NOAA research and whale rescue missions.

THE NAME
 ● Lily, the 62-foot Tolo catamaran and Lily II, the rigid inflatable boat used during rescues, are named after a gray whale that entered Dana Point Harbor in 2010. The whale was entangled in 100 pounds of rope and net.

CAMERAS
 Lily has an underwater camera fixed to the bow and a robotic underwater vessel for filming that will help the crew see how the whale is tangled. Both will be used to help I.D. dolphins and whales in Orange County waters.

LILY FEATURES
 ● 1,500-mile range
 ● Research room
 ● 24 gallons/hr. desalination unit
 ● Live webcast
 ● Micro museum
 ● Dive compressor and dive equipment

Passengers can help NOAA research efforts by assisting with photo ID catalogues.

The hydrophone off the stern has five frequencies to hear dolphins and whales.

Rescuers will be pulled by the whale while attempting to disentangle it with specially designed grapples and blades.

Signal beacons are usually attached to the whale to keep track of it in the vast ocean.

