

DOLPHINS

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umented the resident dolphins, a precursor to studying their health. As predators at the top of the marine food chain, dolphins are the first to show signs of environmental change.

Chances are, if they're healthy, so is the ocean.

"Everything that's in the bay is getting into them," Ahuja said. "They indicate the overall health of the bay."

Bearzi and her husband, Charles Saylan, the project's executive director, informally began surveying the dolphin population in the Santa Monica Bay by sailboat in 1995. When she inquired of area researchers and federal and state agencies about the dolphin population, Bearzi hit a void.

"After that, I realized there was just limited information on dolphins and I came up with the idea to do a research project," she said.

Bearzi began distinguishing the local "resident" dolphins from the visitors in 1996 by photographing the dorsal fins of the animals, which bear distinctive

scars used to identify individuals.

Six months later, the couple bought a motorboat and organized marine biology student volunteers to help with the research. Early this year, Bearzi and Saylan formed the nonprofit group Ocean Conservancy Society to fund the L.A. Dolphin Project.

The project, which costs about \$30,000 a year to run, has survived on small grants from the American Cetacean Society and donations from individuals and small businesses. About 10 qualified volunteers take turns working on the boat each week.

Using this research to earn a doctorate degree from UCLA, Bearzi has begun to match the 9,000 photos she's taken since June 1996. It's a standard starting point for dolphin research that can take years to complete.

Bearzi hopes to complete her survey within two years and then test the physical health of the animals.

"The idea is to assess their health visually and through biopsy - without capturing or harming them - just taking a scratch of dermal layer to assess their health for pesticides, toxins ... and match the DNA to find out whose

DID YOU KNOW?

✦ Dolphins feed on small fish, typically trout, and often live no farther than a mile or two off the coast.

✦ Dolphins can reproduce after age 10 and can live as long as 50 years.

✦ Dolphins usually travel in groups that vary in size from three to schools as large as 1,000.

✦ Generally, bottlenose dolphins stay in warm waters, but they acclimate easily, developing a layer of blubber for cold waters.

✦ Bottlenose dolphins swim faster than our best Olympic swimmers - about two meters per second during long distances and about six meters per second when sprinting.

related to whom," Ahuja said.

For now, however, the crew is just observing the cetaceans. They never touch or swim with them. Bearzi snaps several pictures of each dolphin and then the

crew moves on.

"We don't want to interfere with their behavior," Bearzi said. "If they start to be scared of the boat, we'll have a real big problem."

Apparently, the dolphins know how to rid themselves of the paparazzi.

"If we start getting a lot of tail slaps or aggressive behavior to indicate they're annoyed, we leave," Bachman said.

It's common for the social animals to swim with Bearzi's boat. Sometimes, the crew will find a few dolphins playing catch with a jellyfish.

"They always try to make a living the easiest way they can," said Terrie Williams, a UC Santa Cruz dolphin expert. "They're just like humans."

Bearzi has spent 10 years studying dolphins and sea turtles, including research with the Tetays Institute in Milan, Italy, and six years in the Yucatan Peninsula in Mexico before moving to Los Angeles in 1995.

This year she has recruited Ahuja, an educator at the UCLA Ocean Discovery Center, and students Bachman and Wan to meet weekly for their 22-mile trips from Marina del Rey to Point Dume and back.

Although she and her crew are still compiling data, Bearzi has found that the most common species in the Santa Monica Bay are the bottlenose dolphin, which appear year-round; the Pacific white-sided dolphin, generally a winter guest; the common dolphin and Risso's dolphin.

Bottlenose dolphins have been studied extensively.

Randy Wells, considered a world authority on dolphin research, has studied the Sarasota Bay population for about 30 years. Other well-known studies are taking place in the Bahamas, Santa Barbara, Santa Cruz, San Diego and Wilmington, N.C. In Europe, dolphin research is under way along the coast of Croatia and Greece.

The Santa Monica Bay may have been overlooked for study because other research projects covered the populations moving along the California coast, according to UC Santa Cruz's Williams. A very mobile animal, dolphins are among the most difficult marine mammals to study.

The Southwest Fishery Center in La Jolla and other agencies monitor regional dolphin populations. But local studies are vital in

areas such as Santa Monica Bay that are prone to pollution.

Research can gauge the environmental hazards caused by humans and the level of danger they pose to the human and wildlife population, said Charles Woodhouse, curator of the Santa Barbara Natural Museum of History.

"These dolphins cover hundreds of miles ... and the presence or absence of animals ... could be a function of man's activity," Woodhouse said.

Dolphins often have a broad area of residency called a "home range" that can span as far as 1,000 miles, said East Coast dolphin expert Bill McLellan. Consequently, residency can take years to establish.

McLellan and his team of researchers with the University of North Carolina at Wilmington have spent the last eight years studying dolphins that move from Florida to New Jersey. But they still don't have a solid estimate of the dolphin population.

Bearzi knows she's in for a long-term project, saying, "You need to study this animal for many years."