

# THE BEACH REPORTER

## Sea mammals along the coast dying

By Eric Michael Stitt

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An unprecedented amount of domoic acid along the Southern California coast has set off a chain reaction, causing some marine mammals to have seizures and killing others with no answers as to how it all started.

The domoic acid is killing off mammals, which has overloaded a nearby rehabilitation center. Meanwhile marine biologists are still at a loss as to what causes this yearly occurrence. Experiments are being done and humans are urged to stay away from beached mammals and shellfish.

Domoic acid is a toxin that is produced by algae, for reasons that are unknown. The algae is then consumed by shellfish, which are then eaten by marine mammals such as dolphins and sea lions, according to Joe Cordaro, a wildlife biologist with the National Marine Fisheries Service.

He said nobody knows why the domoic acid is produced but some speculation is that it has to do with fertilizer from lawns that drain into the ocean. He added there is also no explanation as to why shellfish aren't affected by the domoic acid, but they are definitely the carriers.

"The higher up on the food chain, the more organisms are affected," he said.

That is why the California Health Department has now prohibited people from collecting shellfish, he said.

Cordaro added that shellfish, sea lions and birds, that also eat the shellfish, are those that are being affected by the domoic acid outbreak.

Once the domoic acid is taken into the body, it migrates to the brain and causes the mammal to have seizures, said Peter Wallerstein, president and founder of Whale Rescue Team.

"It's been crazy with domoic acid," Wallerstein said. "I've never seen so much fright and confusion on the mammals' faces before. Their bodies are just overcome with this toxin. It's devastating to the population."

Wallerstein expressed how important it is for people to not eat shellfish, since fishing for them has been stopped.

"People could get it too," he said of the toxin. "People have died from domoic acid by eating the shellfish."

This outbreak happens yearly. There is no exact time frame, but this season will last from early April to July. Wallerstein said when the outbreaks occur, they just brace for it and try and keep up with the effects. But for some reason "it seems like a potent boom this year" he said. So far, he has rescued eight mammals from Hermosa Beach, 30 from Redondo Beach, five from Manhattan Beach and six from El Segundo.

Wallerstein said we are seeing only a small percentage of the effect that domoic acid is having

on marine mammals because many animals will have seizures far from land and end up drowning. Those that are lucky to wash up on shore are rescued.

Jill Ramona, director of business and development at Fort MacArthur, said because of the unprecedented amount of domoic acid being produced they are now at full capacity. "We got 97 animals in April," she said. "The toxins in the water are at the highest level they've ever seen."

Because they're at full capacity, the biggest challenge is having enough volunteers and funding to help nurture the mammals, she said.

With Fort MacArthur not able to accept any more mammals, the Los Angeles County lifeguards are regulating what is called a 48 watch over any mammals that wash up on shore. Because of this, PIO Capt. Terry Harvey of the lifeguard division, said people need to stay away from any mammals that wash up on shore. Federal law prohibits any human contact with these species. If there is, it could result in a \$10,000 fine and one year in prison.

Because this happens yearly and there is no known cause for it, marine experts are steadily working to come up with some answers. Astrid Schnetzer, a research assistant professor and marine biologist at the University of Southern California, said they are currently undergoing numerous experiments to try and get a better understanding of why domoic acid is being produced, why it's so abundant this year and how they can develop some kind of forewarning for future outbreaks.

"We're collecting a wealth of information trying to narrow it down," Schnetzer said.

She said the main unanswered question is they don't know "what certain conditions are making (algae) produce domoic acid."