

Gidget the sea otter was beloved, scientifically important

 [montereyherald.com/2019/02/05/gidget-the-sea-otter-was-beloved-scientifically-important/](https://www.montereyherald.com/2019/02/05/gidget-the-sea-otter-was-beloved-scientifically-important/)

February 5, 2019



Gidget, a 10-year-old female sea otter who acted as a surrogate mother to many pups at the Monterey Bay Aquarium, has died.

By [Bailey Bedford](#) |

PUBLISHED: February 5, 2019 at 2:21 pm | UPDATED: February 5, 2019 at 3:02 pm

MONTEREY — She was known for her charm and “an exuberance of mischief,” but she also provided significant scientific knowledge about her species.

On Sunday, the Monterey Bay Aquarium said goodbye to Gidget, a 10-year-old female sea otter, who died after suffering ongoing health problems.

Gidget was part of the Aquarium’s sea otter exhibit and surrogacy program and also provided a genetic sample that researchers used to create the first complete southern sea otter genome.

“Gidget touched millions of people with her beauty, charm, and an exuberance of mischief,” said aquarium veterinarian Dr. Mike Murray in a press release. “She is an example of why we do what we do, for the animals in our care and for their wild kin.”



Gidget, one of the curious sea otters at the Monterey Bay Aquarium in 2013. (Vern Fisher/Monterey County Herald)

Her health had dropped precipitously over the previous week, and she had ongoing health problems from osteoarthritis in her hips. The normal lifespan for a female southern sea otter is 15 to 20 years. The aquarium will complete a necropsy, the animal version of an autopsy, to help identify the exact cause of her death.

Gidget was originally discovered as a stranded 10-week-old pup on Morro Strand State Beach in San Luis Obispo County in October 2008 and was brought to the aquarium for care. She was transferred to the Aquarium of the Pacific in Long Beach but eventually returned to Monterey in 2013 where she could help other rescued pups like she once was.

Gidget served as a surrogate mother for four rescued otter pups. Gidget also has a larger legacy. Her DNA was analyzed by researchers at UCLA to create the first complete southern sea otter genome."

"She provides a resource for all future studies of the sea otter and has allowed us to study 150 additional otters based on her genome," said Annabel Beichman, who is leading the initiative at UCLA's Department of Ecology and Evolutionary Biology. "And that lets us learn a great deal about sea otter populations worldwide."

The research is investigating the evolution of sea otters and the history of the population which crashed a century ago due to the fur trade. Understanding the current state of sea otters' genes should help with conservation efforts.

“We are interested in sort of what happened to them before — they were hunted almost to extinction — and what that is going to look like going forward as they grow and expand,” said Beichman.

Gidget’s genes have allowed the researchers to more efficiently study the genes of 150 other otters. A genome is very large, and only a small portion of it is actually genes that make proteins, and thus are interesting to scientists. Having a complete genome, like that of Gidget, serves as a map of where to look in other members of the species. By identifying the interesting sections of Gidget’s genome the researchers have been able to more efficiently study many other sea otters.

“So, she is kind of like the keystone or the big database,” said Beichman. “And then we can just pull out smaller pieces in the other animals.”

Despite starting herself as a stranded pup, Gidget has helped save other members of her species and will continue to do so for generations.

“The fact she has fostered so many pups and has contributed to the otter genome means that she is going to be a sort of famous otter for generations,” said Beichman. “Because she’ll still be used in all the future research on southern sea otters.”