

Graduate student leads the way in Cuban manatee conservation



Cuban manatees swim with divers in Punta Frances. Photo credit: Anmari Alvarez-Aleman

Published March 8, 2016

By Hannah O. Brown

Anmari Alvarez-Aleman hitchhiked 40 miles to North Havana in the winter of 2007 in search of a sight that would guide her life in the years to come—a Florida manatee and her calf resting in the intake canal of a power plant.

“We realized [they were from Florida] because of the scars,” Alvarez-Aleman said. “In Cuba, manatees don’t have scars, so seeing a manatee with multiple sets of scars, it was kind of suspicious.”

Alvarez-Aleman sent photos of the pair to the U.S. Geological Survey, and the images matched with a female that had first been photographed in 1979, and again frequently after that date.

“She had different calves, and she was doing okay until she decided to swim south,” she said. “Maybe she got lost when she was heading south to find the warm water.”

This Florida manatee, named Daysi by the Cubans and CR131 in the U.S., is the first known to have wandered so far south that she ended up in Cuba.

“With my research, I want to explore more that situation,” Alvarez-Aleman said. “Whether there is a gene flow between Cuba and the U.S.”

Alvarez-Aleman is a doctoral student at University of Florida’s School of Natural Resources and Environment with a mission to ask questions about Cuban manatee conservation that have not been asked before. Her account of the Florida manatee who traveled to Cuba was published in the [Tampa Bay Times in December](#).



*Anmari Alvarez-Aleman is a doctoral student in SNRE.
Photo by Jenny Adler*

While a good deal is known about Florida manatee population ecology, Alvarez-Aleman faces several obstacles when confronting conservation issues related to the Cuban subspecies.

One major challenge is public sentiment.

“It was a very complicated animal to work with because in Cuba it’s really endangered, and people are still using manatees as an alternative source of protein, even when it’s illegal,” she said.

Though Alvarez-Aleman said most fishermen don’t seek out manatees for food, they are opportunistic in their consumption of them. Trawling nets are a major culprit. If a net has large mesh, manatees are easily entangled, and at that point, fishermen rarely leave them alive.

In addition, there is little done to promote education and awareness in Cuba on manatee conservation issues.

“It’s not like in Florida where everyone, or almost everyone, loves the manatee,” she said.

Cuban manatees are considered endangered. Somewhere between 500 and 1000 individuals occupy Cuban waters, though it’s difficult to pinpoint exact numbers because of a lack of population data.

“In Cuba, nobody else is studying manatees,” Alvarez-Aleman said. “I mean most of this stuff is well known in the Florida population, but not in Cuba, and if you want to understand the situation of the species, you need to study populations in different regions.”

Gathering more information on the Cuban population is likely to yield insights into the populations found in Florida and how they interact with those in Puerto Rico and Belize—which host the same subspecies as Cuba.



Researchers collect data during a Cuban manatee capture. Photo Credit: Anmari Alvarez-Aleman

“The knowledge about Cuba is going to be very useful in understanding more about the Florida population and the population in Puerto Rico and Belize, because Cuba is kind of in the middle,” Alvarez-Aleman said.

James “Buddy” Powell, executive director of the Sea to Shore Alliance and manatee conservation researcher for 40 years, has worked with Alvarez-Aleman as a visiting researcher in Cuba and now in Florida.

Powell believes Alvarez-Aleman’s research has the potential to change the way biologists think about Florida manatees as well as add conservation knowledge to the Cuban subspecies.

“We tend to think of Florida manatees as being very isolated, but you know, some of the work that she is doing might cause us to rethink that,” he said.

Powell has been traveling to Cuba to guide manatee conservation research and mentor students for the past 16 years. Though progress has been slow going, he believes the tides are turning when it comes to researchers from the U.S. and Cuba working together.

“It’s come a very long way from where it was when I went down 16 years ago,” he said. “As relations continue to improve and many of the hurdles are removed, we will see more and more collaboration and cooperation going on.”

Alvarez-Aleman’s research is one of example of that dynamic in action, he said.

As researchers across countries continue to work together, Powell hopes to see a cultural shift occur in how Cubans value their native manatees.

“Manatees are very iconic here in Florida, and we’d like to see something like that happen in Cuba, too,” he said. “It’s one of the very few large impressive animals that are native to Cuba as well as Florida, so it would be really nice if they also tend to adopt the species as their own.”

Alvarez-Aleman is set to finish the first year of her doctoral program by the end of this spring. Once Alvarez-Aleman completes her degree, she plans to move back to Cuba and focus on manatee conservation there as well as in the U.S., traveling back to Florida from time to time to continue collaborative research. She hopes that shared research projects will also result in shared resources, since manatee conservation programs in Cuba are in their early stages.

“Marine sites are an expensive type of research,” she said. “I hope that with this collaboration we kind of help each other, because we are sharing nature.”