

Bolivian River Dolphin Rescue



Country:

Bolivia

Key Species:

Bolivian river dolphin (*Inia boliviensis*)

Key Conservation Issues:

Habitat fragmentation, species monitoring

Strategies:

Baseline health assessment, disease screening, animal translocation

Worldwide, freshwater dolphins act as sentinels (or indicators) for the health of the environment and other species in the waters they inhabit, playing a key role in our understanding of these ecosystems. However, the Bolivian endemic freshwater dolphin, *Inia boliviensis*, known locally as bufeo, is a remote and poorly studied species. While it is categorized as vulnerable by the Bolivian government, little is known about its health or ecology in the wild. An assessment of the current health status of these river dolphins allows us to understand the effects that human-induced impacts have on these animals and their river ecosystems.



Environmental changes such as dam construction, agricultural runoff, overfishing, pollution and encroachment into river watersheds have been shown to be detrimental to wildlife health. When wildlife and ecosystem health is compromised, it is likely to lead to poor human health as well.

Over the last few years, intensified agricultural practices have transformed the Bolivian landscape, cutting off natural seasonal waterway connections between lakes and rivers and consequently disrupting the migration patterns of the dolphins. In 2017, Bolivian residents reported a group



of 15 bufeos stranded in a slowly shrinking lake. Claudia Venegas, a biologist with the Santa Cruz Department Government and Kathia Rivero, from the Noel Kempff Mercado Museum of Natural History in Bolivia, sought assistance from Dr. Sharon Deem, Director of the Saint Louis Zoo Institute for Conservation Medicine, and Dr. Ellen Bronson, Senior Director of Animal Health, Conservation, and Research at the Maryland Zoo. Together, the team developed and deployed a dolphin rescue operation to save the trapped dolphins. This also provided the opportunity to conduct medical exams—a first for the Bolivian river dolphin.

In October 2018, Dr. Bronson and Dr. Julie Sheldon, a veterinary resident from the Shedd Aquarium in Chicago, traveled to Bolivia, joining the local team in Santa Cruz. Over several days the team of local aquatic experts delivered the dolphins, one at a time, to the makeshift laboratory on shore. The team performed physical exams and ultrasounds, collected blood and fecal samples, and swabbed for infectious disease screening. The team then translocated each dolphin from the lake to the Rio Grande, closely monitoring for travel-related stress during the trip. Before their release into the Rio Grande, three dolphins were outfitted with satellite transmitters to monitor their locations, movements and survival.

“The six dolphins, one female and five males, including one juvenile, were in surprisingly good condition and overall

appeared healthy on examination and based on initial laboratory testing,” said Dr. Bronson. “Having the opportunity to work hands-on with this amazing species and contribute to its conservation was a very gratifying and humbling experience.”

The results will significantly impact future conservation efforts for the species. Furthermore, coordination is already underway to plan the next rescue operation for the remaining dolphins.

“This dolphin rescue and translocation project is an example of the positive impact that zoos and aquariums accredited by the Association of Zoos and Aquariums (AZA) can have by working to ensure the health and conservation of endangered species, whether the species are living in world-class AZA zoos and aquariums or are in the wild, living in habitats that are rapidly being modified by the growing human footprint,” said Dr. Deem. “We hope to continue our collaboration in the near future on behalf of the river dolphins in Bolivia.”



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