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Editorial: An unexpected event related to the aquatic mammals of Latin America

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Dear LAJAM readership,

It is my distinct pleasure to present to you the second issue of LAJAM in 2023. This has been an extraordinary year for us. In January of this year, we published the first issue of the year 18.1, which normally is scheduled for April, as a special issue commemorating the 20th anniversary of LAJAM. That issue had 10 review articles and was almost three times the length, in terms of page numbers, as our regular issues. At least a dozen citations have already been attributed to those review articles.

Normally our Editor-in-Chief, Dr. Miriam Marmontel, writes the editorial. However, since late September, an unprecedented mass mortality of river dolphins (Sotalia fluviatilis and Inia geoffrensis) has occurred in Lake Tefé, Amazonas, Brazil coinciding with an extreme low water season and elevated water temperatures reaching 39.1° C (Fig. 1). As many of you know, this is the precise location of the Mamirauá Sustainable Development Institute where Dr. Marmontel runs the Amazonian Aquatic Mammal lab. Since the start of the mortality event, she has been busy with her team recovering carcasses, which now number over 150, and coordinating efforts to rescue live dolphins into cooler and deeper waters. This tragic mortality event is yet another reminder of how fragile our aquatic ecosystems are to climate change and highlights the importance of maintaining population numbers high so they can be resilient in the extreme case of such mortality events. Although I am writing the editorial on this occasion due to the ongoing crisis in Lake Tefé, please note that the process getting our issues together takes many months and involves many of our associate editors and the work of dozens of reviewers. As usual, Dr. Marmontel oversaw the review, copyediting, and final acceptance of every article and note in this issue (as well as this editorial). In this issue, she was also the handling editor of four of the 11 papers.

In this issue, we bring you 3 articles and 8 notes covering a variety of cetacean and pinniped species and a wide range of geographical areas from Mexico to southern Chile. Much remains to be learned about the offshore ecotype of bottlenose dolphins due to their wide distribution, low density, and pelagic habitat. In this issue two papers provide new insights into the lives of these dolphins. Weysfield et al. report the behaviors of a solitary offshore bottlenose dolphin and its interactions with the local spinner dolphins in the Fernando de Noronha Archipelago, Brazil. Félix & Castro reviewed the occurrence of offshore bottlenose dolphins off the central coast of Ecuador in the last 20 years.

Their findings suggest both site fidelity and some degree of population structure, as well as a significant degree of interaction with fishing gear based on the prevalence of scars.

Strandings, while unfortunate, can help us study species that are found in low density or are otherwise difficult to study. They can also help us determine patterns if collected over many years. In this issue, several studies took advantage of strandings or mortality events to learn about those species. Millman et al. reviewed the strandings of Balaenoptera whales in southern Brazil in the last 25 years. They report almost 50 whales stranded belonging to four species of Balaenoptera, more than half of which were common minke whales (B. acutorostrata). Based on the year-round strandings of common minke whales and the prevalence of juveniles, their study lends new support for the importance of the region in the Southwestern Atlantic Ocean for this species. While not a stranding, Bolaños-Jiménez et al. report the first record of a common minke whale in Haiti from a mortality event due to the incidental entanglement of a neonate in a single layer gillnet. The analysis of the stomach contents of a stranded short-finned pilot whale (Globicephala macrorhynchus) in Brazil provided Ribeiro et al. with the opportunity to document the first report of the ingestion of a sponge by this species. The species of sponge is naturally found more than 1,000 miles away from the stranding location. Bolaños-Jiménez et al. provide the first confirmed record of Clymene dolphin (Stenella clymene) in Costa Rica from a small dead dolphin found floating off the Caribbean coast. That brings the number of confirmed cetacean species in Costa Rica to ten. Finally, Urbán R. et al. used samples collected from a stranded beaked whale in Pacific Ocean of Mexico matching the geographical and color patterns described by Pitman et al. (1987) and later referred to as Mesoplodon sp. A. Using a fragment of the control region of mtDNA, they were able to identify this species as the lesser-beaked whale (Mesoplodon peruvianus) as was suggested by previous authors.

Southern elephant seals (*Mirounga leonina*) have a circumpolar distribution in the Southern Hemisphere feeding mainly below 40° S. ENSO (El Niño-Southern Oscillation) events have been linked with sightings further north in the Pacific Ocean, however never as far north as what Romero-Tenorio et al. report in this issue with two recent sightings in the Pacific Ocean of southern Mexico. They conclude that these individuals, both males, likely came from the growing population that has recently reestablished in southern

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Figure 1. An unprecedented mass mortality of river dolphins in Lake Tefé, Amazonas, Brazil is associated with drought conditions and extreme water temperatures in late September 2023. A) The low water conditions of Lake Tefé can be seen with the city in the background and a deceased dolphin (bottom center) being consumed by vultures (photo by André Celho/Mamirauá Institute). B) A team of scientists from the Mamirauá Institute, led by Dr. Miriam Marmontel, conduct necropsies on six of over 150 dolphins that have died in Lake Tefé, Brazil since late September 2023 (photo by Miguel Monteiro).

Chile. Niebaum documented what is possibly a recolonization of the Los Ríos region in south central Chile by southern elephant seals based on multiple recent sightings of at least five individuals. It is unlikely that ENSO alone can explain these repeated recent observations in south central Chile, however since the feeding habits of this species depend on ocean currents and sea surface temperature, the current and future effects of climate change are likely to continue affecting distributional patterns.

Finally, Rodrigues report on a rare collision event between a kitesurfer and a humpback whale (*Megaptera novaeangliae*) in the Arraial do Cabo region of Rio de Janeiro State, Brazil. Thankfully, both the whale and the kitesurfer appeared to be unharmed from the interaction, however the growth of this type of recreation might result in an increased probability of this occurrence in the region.

I thank the many authors and reviewers that contributed to this issue, and I encourage those that may have studies that have yet to be published to submit them to LAJAM for consideration. Be sure to look for our upcoming special issue on manatees in the coming months as well.

Happy reading.

Sincerely,

Daniel Gonzalez-Socoloske LAJAM Managing Editor

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