September 30, 2022

Health and Welfare Assessment of Tokitae (also known as Lolita), killer whale housed at Miami Seaquarium, Miami-Dade County, Florida.

Report of James McBain, DVM retired, and Stephanie Norman, DVM, PhD
(Biographical statements below)

At the invitation of Friends of Lolita, a non-profit organization formed by Pritam Singh, we are continuing our health and welfare assessments of Tokitae (Toki).

Since the last (August) update, Drs. McBain and Norman completed a site visit to the Seaquarium September 11-13. This visit included collaborative consultations with Toki's primary and consulting veterinarians and with water quality and enrichment experts to provide a holistic approach to improving Toki's quality of life as presented in her August assessment. Plans to improve the water quality have begun to take shape in the form of maintaining her water temperature in the 57-59°F range/14-15°C. Two 20-ton water chillers have been ordered to more readily maintain this temperature range than the current chillers. Two of the pool's four filters have had the media changed from sand to glass which has improved her water quality. The other two are underway, but work has been delayed during the recent hurricane storm.

Experts in enrichment for marine mammals under human care are working with her current animal care staff team members to create a plan that carefully and thoughtfully introduces Toki to various types of enrichment elements that target specific sensory modalities, including sight, hearing, taste, touch, and echolocation.

Toki continues to be treated for a chronic infection by her primary and consulting veterinarians. While on antibiotics, she continues to be active, engaged with her trainers, and maintain a very good appetite. When the course of antibiotics is completed and are discontinued, however, her appetite and activity level decrease, suggestive of the underlying chronic infection, the cause of which has not yet been identified.

To further investigate the potential cause(s) of the infection, with Toki's primary and consulting veterinarians, we initiated more advanced molecular methods to test her blood, respiratory chuff, and environmental water, using next-gen sequencing to perform a comprehensive diagnostic test all at once for thousands of microbes.

This past week, Toki experienced a period of decreased appetite and low activity. During the weekend her veterinarian and consulting veterinarian administered an antibiotic and supplemental medications. Her vital signs do not indicate that her infection has gotten worse, although she is showing signs of discomfort.

Working together, we are continuing to track the course of her illness with regular laboratory testing to help detect changes in her health condition and organ function.

Respectfully submitted:

James McBain, DVM retired

Stephanie Norman, DVM, PhD

Dr. James McBain, DVM, Retired Vice President of Corporate Veterinary Services for SeaWorld and Busch Garden Parks. is considered a pioneering expert in marine mammal veterinary medicine. His career at Sea World included serving as senior staff veterinarian corporate director of veterinarian medicine and Vice President of Corporate Veterinary Services. He has authored and coauthored more than 83 scientific papers, books and presentations on marine mammals and is recognized worldwide for his experience and expertise. Dr. McBain is seen by his peers as having fundamentally altered the way in which marine mammal medicine is practiced. Dr. McBain has served as a mentor and trained countless veterinarians seeking his specialized knowledge. In 2009 he received the Distinguished Veterinary Alumni Award for Outstanding Service from Washington State University.

Dr. Stephanie Norman, DVM, PhD, veterinary epidemiologist and wildlife veterinarian, received her DVM from Texas A&M University; her Master of Science in epidemiology from the University of Washington, Seattle; and her PhD in wildlife epidemiology from the University of California, Davis. She has been involved in the field of animal health, disease, and conservation for more than 20 years. Dr. Norman has extensive clinical and teaching experience, and has authored or co-authored more than 40 peer-reviewed scientific papers and reports. In addition, she has served as a wildlife epidemiologist for NOAA, National Marine Fisheries Service.