

Vocalization patterns of Indo-Pacific humpback dolphins (*Sousa chinensis*) in Kalpitiya lagoon, Sri Lanka

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Indo-Pacific humpback dolphins (*Sousa chinensis*) occur in the coastal waters of the Indo-pacific region from the eastern shores of South Africa to the northern coast of Australia. Throughout their range, the ecology and vocalization patterns of the Indo-Pacific humpback dolphins remains poorly known, with the exception of populations off South Africa and Hong Kong, where the animals have been relatively well studied. In January 2012, passive acoustic recording of Indo-Pacific humpback dolphins at Kalpitiya lagoon located on the north- west shores of Sri Lanka were taken and their vocalizations were classified as broadband click trains, burst pulses, and whistles generally similar to those of some other delphinid cetaceans. Comparison of results with the previous humpback dolphin vocalization patterns for Moreton Bay, Australia and West Hong Kong waters found broad similarities. The click energy was concentrated in the range of 35-45 KHz frequency band in the present study where whistles consist of two tonal units lasting approximately 0.6s. The first component is a nearly constant frequency tone centered on 6.5 KHz followed by a short frequency-modulated (FM) from 6.5 KHz to 7.5 KHz lasting 0.4s. A silence (approximately 0.1 s) separated the two-part phrase and the second component had a slightly modulated tone (8–9 KHz). Each component had strong associated harmonics.

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