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BUBBLESTREAM WHISTLE PRODUCTION, QUALITY, AND PARAMETER DEVELOPMENT IN INFANT ATLANTIC BOTTLENOSE DOLPHINS (*TURSIOPS TRUNCATUS*) DURING THE FIRST THIRTY DAYS OF LIFE

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The characteristics of vocal development in dolphin neonates are largely unknown. This study focused on whistle production in four bottlenose dolphin calves during the first thirty days of life in order to further clarify the understanding of the early emergence of whistle-type vocalizations. Hydrophone and video coupled data were utilized to assess acoustic parameters of whistle-type vocalizations (i.e., whistles and whistle-squawks) that coincided with a bubblestream emission from the focal calf. Calf whistle rates (per hour) were highest in days 20-30 when compared to days 0-10 and 10-20. One calf produced a predominantly stereotyped whistle contour after day 26 that retained a “tremulous and quavery” quality, which is commonly characteristic of young calf whistles, but that stereotyped, repeated contour differed to his recorded signature whistle at three years of age. Whistle-squawks were significantly more common than adult-like, clear narrowband whistles, and the maximum frequency and duration of calf whistle-type vocalizations increased across the study period. These data suggested that whistle production can begin as early as the first days of life, and that the acoustic prowess of dolphins was evident even during the first month of life.