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**BOTTLENOSE DOLPHIN (*TURSIOPS TRUNCATUS*) SOUND PRODUCTION
DURING A COOPERATIVE TASK**

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Although many species have proven capable of cooperating to achieve common goals, the role of communication in cooperation has received relatively little attention, despite its importance. Analysis of communication between partners is vital in determining whether actions are cooperative rather than serendipitous or learned via trial and error (Chalmeau and Gallo 1996). Wild cetaceans often produce sounds while cooperating in foraging, play and mating contexts, but the role of these sounds in cooperative events is largely unknown. Here we investigated acoustic communication between two male bottlenose dolphins while they cooperatively opened a container (Kuczaj, Winship, and Eskelinen, 2014). Analyses of whistles, burst pulses, and whistle squawks that occurred during four contexts (i.e., no container, no animals interacting with container, one animal interacting with container, and two animals interacting with container) revealed that overall sound production rate significantly increased during container interactions. Sound production rates were also significantly higher during cooperative successes than during solo successes, suggesting that the coordination of efforts rather than the apparatus itself was responsible for the phonation increase. The most common sound type during cooperative successes was burst pulse signals, similar to those found during cooperative herding by male bottlenose dolphins (Connor and Smolker, 2004).