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GOTTA GO, MOM'S CALLING: DOLPHIN MOTHERS USE ACOUSTIC SIGNALS TO CALL THEIR CALVES

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Acoustic signals are an important aspect of a young dolphin's life. For example, dolphin mothers may use a distress whistle to warn a wandering infant to return. However, the maternal use of non-urgent calls to maintain proximity to a calf has not been systematically investigated. Given that some situations are more precarious than others, dolphin mothers likely use a variety of signals to communicate with their calves. In this study, two mother dolphins were trained to produce their calves, a successful response resulting in both mother and calf jointly appearing in front of their trainer. Testing occurred when a calf was separated from its mother by a distance of at least five meters during a training session. The mother was asked to produce her calf, a context that appeared non-urgent and non-threatening to both animals. Within this context, mothers spontaneously began to produce acoustic calls that resulted in their calf's return. Although mothers were trained to produce their calves, they were not trained to do so acoustically and could have opted to physically retrieve their calf in the test situation. The mothers' spontaneous choice of an acoustic signal suggests that such signals are an important and efficient form of communication among dolphins. One of the mothers was also asked to retrieve an older offspring, while another dolphin that served as a primary allomother was asked to retrieve the unrelated calf. In all cases, only the appropriate calf responded to its mother's (or allomother's) calls, even when an older sibling and other calves were in the vicinity. These results suggest that: (1) dolphin mothers use distinct calls to request a specific calf's return, (2) other dolphins (including other calves) can distinguish such calls, and (3) non-urgent acoustic calls play an important role in offspring proximity and care.