

Mirror Exposure to Free-Ranging Atlantic spotted dolphins (*Stenella frontalis*) in the Bahamas

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The “mirror state”, described for human self-recognition (1), has been found in some captive species (chimpanzees, bonobos, orangutans, gorillas, Asian elephants, and magpies). Bottlenose dolphins and killer whales have shown evidence of body examination, self-directed and contingency checking behaviors whereas false killer whales appeared ambiguous and sea lions did not recognize themselves in a mirror. Self-recognition processes in wild cetaceans remain unknown. Since 1985 a resident community of Atlantic spotted dolphin (*Stenella frontalis*) has been studied underwater in the Bahamas. Over 200 individuals have been identified. Here we describe the reaction of free-ranging dolphins, of various age classes and gender, during 11 exposures to the presence of a mirror from 1994/1995. Responses to the mirror were mixed. Initial reactions of mother/calf groups were to swim around mirror and stay in close physical proximity. A single male became stationary and postured in an aggressive stance in front of the mirror. Other reactions were to ignore the mirror entirely. In the wild lack of interest in inanimate objects, environmental distractions, and competition with natural activities may influence reactions. In captivity dolphins are not surrounded by natural stimulus and may have more time and social context to explore a mirror. Nevertheless insights can be gained by reviewing reactions of free-ranging dolphins. Under different conditions, animals might demonstrate the emergence of a “situated consciousness” that depends upon the local situations and their scaffoldings.