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Multiple forging strategies in a marine apex predator, the Galapagos sea lion *Zalophus wollebaeki*

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Three fundamental foraging patterns in air-breathing marine vertebrates have been described: epipelagic, mesopelagic and benthic. Many sea lion species with access to extensive continental shelves have been described as benthic foragers. Coincidently these species are considered threatened. The Galapagos sea lion *Zalophus wollebaeki*, a top predator in the Galapagos Islands, is also considered threatened in this ecosystem. Sea lions at the central part of the archipelago have access to a vast continental shelf. For this reason we hypothesized that sea lions within this region would dive benthically. In addition, effective protection and conservation of this species requires knowledge of their foraging patterns and habitat utilization. We investigated the diving behaviour and habitat utilization of female *Z. wollebaeki* of a centrally located colony situated inside the highest density area of the population using time-depth recorders and satellite telemetry. Three distinct foraging patterns were found and described (shallow, deep and bottom divers), and individuals utilizing each pattern foraged in different locations. Epipelagic, mesopelagic and benthic dives were exhibited in the sea lions' diving behaviour, but these dive types were not exclusively associated with a foraging pattern. Between foraging trips females hauled out more frequently on other islands than they did on their breeding colony. The finding of 3 distinct foraging patterns that differ spatially has direct implications for management, particularly with regard to fisheries interactions. Marine protected areas can be implemented in the regions described as *Z. wollebaeki* foraging areas. *Z. wollebaeki's* wide foraging range coupled with their use of multiple haul-out sites should be considered in future studies when determining foraging trip lengths and habitat utilization since presence/absence from the colony does not reflect foraging trip length

Palabras clave: Diving behaviour, Foraging behaviour, Galapagos Islands, Habitat utilization, Individual specialization, Galapagos sea lion, Zalophus wollebaeki