

HAWAIIAN GREEN TURTLES DIVE TO RECORD DEPTHS DURING OCEANIC MIGRATIONS*

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The diving behavior of one adult female and two adult male green turtles was recorded during their roundtrip breeding migration from Laniakea, Oahu, to French Frigate Shoals in the Northwestern Hawaiian Islands. Diving behavior was also captured during the return trip to their foraging grounds. All three turtles exhibited a biphasic diving behavior. During the daylight hours, diving depth was shallow (1-4 meters) and duration was short (1-18 minutes). It is assumed that the turtles were moving deliberately toward their destination during this time. Between 19:00-19:30 hours daily, the turtles began a diving pattern consisting of deep dives with a mean maximum dive depth of 35-55 meters and a mean duration between 35 and 44 minutes. The nocturnal deep diving pattern ended and the shallow diurnal diving began between 06:00 and 07:00 each day. The adult female made two dives in excess of 135 meters and one of the males made several dives in excess of 100 meters. These are the deepest dives ever recorded for a naturally diving green turtle. It took an average of 36 days for the turtles to make the trip to French Frigate Shoals and an average of 30 days to make the return trip. The deep nocturnal diving was unexpected and this behavior is in need of further investigation.



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