
CHELONIA MYDAS GRAZES THE AGGRESSIVE MACROALGAE CHONDRIA TUMULOSA AT MIDWAY ATOLL (KUAHELANI), PAPAĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

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Underwater video recordings and a necropsy of a recently dead adult female confirm that the green turtle, *Chelonia mydas*, readily grazes the aggressive red alga *Chondria tumulosa*. Present in Papahānaumokuākea Marine National Monument since 2016, *C. tumulosa* has demonstrated the capacity to aggressively overgrow live coral and successfully attach to calcareous reef substrate. A group of three turtles was observed grazing with one turtle exhibiting a burst of up to 18 bites of *C. tumulosa*, in a 95 sec interval. Further, upon examination of a freshly dead female turtle of the same species, fragments of *C. tumulosa* were identified in the esophagus, crop and likely also in the feces; in the freshly consumed food matter *C. tumulosa* constituted approximately 25% of plant material and was the same color as the upper canopy tissues we observed being grazed in the reef videos. This evidence, collected within one month's time, demonstrates that this native megaherbivore has the potential to remove substantial *C. tumulosa* biomass and highlights a potential role for *C. mydas* in the control and distribution of *C. tumulosa*.

DIET SELECTION OF SYMPATRIC SEA TURTLES IN THE GULF COAST OF FLORIDA, USA*

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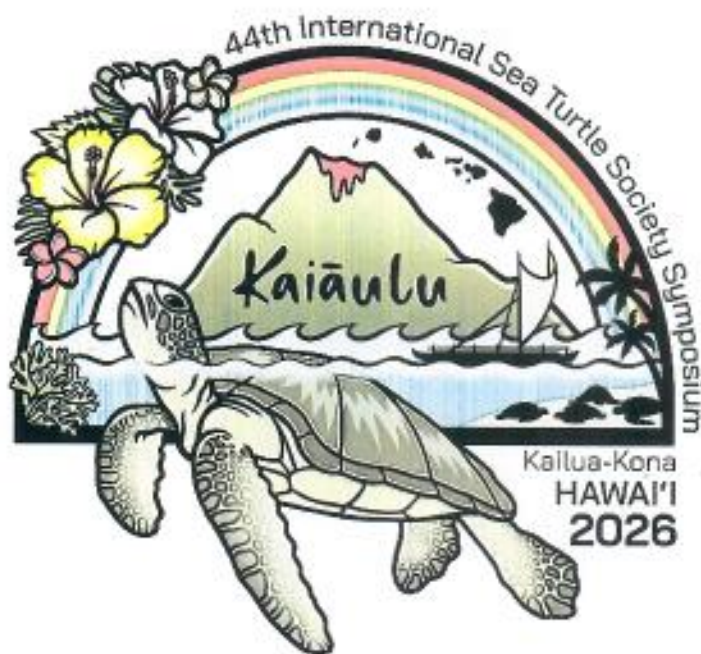
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Understanding dietary differences among sympatric marine turtle species, particularly diet selection, provides valuable insights into their ecological roles and the factors that shape critical life history traits. Stable isotope analysis (SIA) is a widely used tool to evaluate marine turtle foraging ecology, but many studies rely solely on consumer tissues, limiting the ability to assess diet composition or selection. To address this gap, this study uses SIA of epidermis tissue from green (*Chelonia mydas*), Kemp's ridley (*Lepidochelys kempii*), and loggerhead (*Caretta caretta*) turtles alongside SIA of potential prey items in a shared foraging area near the St. Martins Marsh Aquatic Preserve in Florida's Big Bend region. We combined these data with habitat surveys and applied Chesson's selectivity index to evaluate diet composition relative to prey availability. Overall, diet composition differed among turtle species and life stages, with green turtles specializing primarily on plant material, Kemp's ridleys exhibiting a mixed diet dominated by sessile prey, and loggerheads relying heavily on sessile prey but differing in secondary prey between life stages. Mixing model results indicate that green turtles primarily consumed seagrass ($37.2 \pm 9.1\%$) and macroalgae ($25.3 \pm 13.5\%$), with smaller contributions from green algae ($13.0 \pm 6.4\%$), sessile

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