



UNED Research Journal / Cuadernos de
Investigación UNED

ISSN: 1659-4266

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Universidad Estatal a Distancia
Costa Rica

Morera-Brenes, Bernal; Monge-Nájera, Julián
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UNED Research Journal / Cuadernos de Investigación UNED, vol. 3, núm. 1, julio-
diciembre, 2011, p. 97
Universidad Estatal a Distancia
San José, Costa Rica

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Immersion periods in four neotropical turtles

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Recibido 30-VII-2010 Corregido 20-VIII-2010 Aceptado 31-VIII-2010

Semi-aquatic turtles often dive to escape from terrestrial predators, but to our knowledge, the time that Costa Rican species can stay under water is unknown. To obtain preliminary measurements of this ecologically significant parameter, we tested several individuals in an aquarium with water at 25°C in Sabanilla, San José, Costa Rica. We placed the turtles in the water and moved a hand on the surface whenever they attempted to swim upwards, but otherwise allowed them to resurface. They were all adult females except for *Kinosternon scorpioides* (3 males, 1 female).

The times they stayed under water were: *K. scorpioides* 60-365s (15 repetitions); *Kinosternon leucostomum* 82-84s (6 repetitions); *Rhinoclemmys pulcherrima* 413-435s (2 repetitions) and *R. funerea* 525 seconds (one test).

The maximum time was of about one hour, recorded for a female *K. scorpioides*. Standora et al. (1984) found that in nature, submersion times for the marine *Dermochelys coriacea* averaged 480 seconds, similar to the times we recorded for *Rhinoclemmys* spp.

We thank M. Sassa for advice.

REFERENCE

Standora, E.A., J.R. Spotila, J.A. Keinath & C.R. Shoop. 1984. Body temperatures, diving cycles, and movement of a subadult leatherback turtle, *Dermochelys coriacea*. *Herpetologica* 40:169-176.

Article edited by Vanessa Nielsen-Muñoz