## Body temperature variation during the breeding vycle of the American crocodile (*Crocodylus acutus*) in Western Mexico: mating behavior compromises thermoregulatory behavior

Paulino Ponce-Campos<sup>1,3</sup>\*, Valentine A. Lance<sup>2</sup>, Eulogio Pimienta-Barrios<sup>1</sup>, Sara M. Huerta-Ortega<sup>1,3</sup>, John Thorbjarnarson<sup>5</sup>, J. Jesús Romero-Villaruel<sup>4</sup> and Martín Huerta-Martínez<sup>1</sup>

 <sup>1</sup>Departamento de Ecología, Centro Universitario de Ciencias Biológicas y Agropecuarias (CUCBA), Universidad de Guadalajara, Guadalajara, México
<sup>2</sup> Graduate School of Public Health, San Diego State University
<sup>3</sup>Bosque Tropical, A. C. Apartado Postal 5-515. Zapopan, Jalisco 45042, México (btropical@yahoo.com.mx; poncecp@hotmail.com)
<sup>4</sup>Departamento de Vida Silvestre, SEMARNAT, Nayarit, México
<sup>5</sup>Wildlife Conservation Society, New York, USA

<u>Abstract:</u> A comparison of body temperature variation during the breeding season, January to June, between adult wild and captive male and female *Crocodylus acutus* in Jalisco (wild crocodiles) and San Blas, Nayarit (captive crocodiles) was carried out in 2002. Body temperature records showed that reproductive behavior in the wild population resulted in a significant decrease in body temperature during March when reproductive displays and copulation occur. The decrease in body temperature in both sexes was attributed to the fact that the crocodiles spent more time in the water and less time basking during the copulatory phase of the breeding cycle. In the captive population however, no such decrease was observed, because the water in the pens in which the crocodiles were held was much warmer than the water where the wild crocodiles were observed. These results reveal a previously unknown aspect of crocodilian thermoregulatory behavior.

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