

# **Reproductive trade-offs in the Morete's crocodile, *Crocodylus moreletii***

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***Abstract:*** The most studied trade-offs focus on the reproductive effort, that is, the proportion of the energy resources of the individual allocated to reproduction, these resources are limited by the environment in which the individual is found and can be influenced by the natural selection, so that the individual seeks to allocate its resources to its different functions, to maximize its fitness. Evolutionary trade-offs in reptilian reproductive effort have focused on optimal egg size. The objective of this study was to evaluate the reproductive trade-offs between egg size and clutch size in the swamp crocodile (*Crocodylus moreletii*). For this, 13 nests were evaluated, 13 post-oviposition females and 434 eggs, of which 292 (67.2%) neonates hatched. No trade-off was found between clutch size and egg size; however, a positive correlation was found between egg size and hatchling size, showing that hatchling size is related to hatchling size. survival of it.

***Keywords:*** Crocodiles, Reproductive effort, Fitness, Life histories, Energy resources

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