

Structure and population dynamics of crocodilians in Estero Prieto, Puerto Arista, Tonalá, Chiapas

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Abstract: This study was performed in the Estero Prieto wetland within the RAMSAR site Sistema Estuarino Puerto Arista, municipality of Tonalá, Chiapas. The field work was carried out between June 2014 and May 2015 through 6 bi-monthly samplings that considered the rainy and dry seasons. To study the populations of crocodilians in this wetland, the organisms of *Crocodylus acutus* and *Caiman crocodilus chiapasius* were quantified and classified by the method of Chabreck (1966). This method consisted of detecting, during the night, the specimens directing a flash of light towards their eyes. The results showed that the population of *Crocodylus acutus* was present throughout the study, but it was more evident during the dry season because in this one we obtained an encounter rate of 28.5 ind/km, and the estimated population was 57.08 ± 10.17 crocodiles. The class structure for this species consisted mainly of juveniles. In the case of *Caiman crocodilus chiapasius*, its population increased considerably in the dry season and presented a rate of encounter of up to 42.5 ind/km and an estimated population of 85.15 ± 20.38 individuals. The population of caymans was represented mostly by juveniles. The findings of this study allow us to argue that Estero Prieto is a refuge zone and a priority site for both species, so efforts to conserve it should be increased.

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