Caimans population trends in the Anavilhanas National Park, Central Amazonia, Brazil

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Abstract: *Melanosuchus niger* (Black caiman) and *Caiman crocodilus crocodilus* (Spectacled caiman) are among the largest Amazonian vertebrates. Unregulated harvesting for their skins and for their salted meat has threatened both species, with a more severe impact on the Black caiman, which, until 2000, was considered an endangered species. Conservation of these species is controversial, given the potential risk that they may represent to humans and their domestic animals. Hence, a very well-planned management strategy in needed to maintain of wild populations of these apex predators. In this perspective, tourism to see caimans could be as a potentially effective conservation action, by generating profit to stakeholders involved and reducing the number of crocodilians killed. From September-December 2019 we conducted spotlight surveys on relative abundance, size structure and sex ratio of both species in the Anavilhanas National Park located in Central Amazonia, Brazil. We counted 2726 caimans in 516 km of shoreline of canals and lakes, 158 of which were *M. niger*, 383 were *C. crocodilus* and 2185 were only eyes. We captured 66 *M. niger* (20≤SVL (cm) ≤ 118 cm, mean = 32.2) and 71 *C. crocodilus*(20≤SVL (cm) ≤95.5 cm, mean = 43.9), of which 70%and 54%were males, respectively. Our partials results indicated an increase in caiman population parameters when compared with data collected for the same populations in the 1990s.

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