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Distribution of the Caiman, *Caiman crocodilus* on Tobago

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The Spectacled or White Caiman, *Caiman crocodilus* ranges throughout much of Central and South America, from southern Mexico to Ecuador, eastern Peru, the northern tip of Bolivia and the northern half of Brazil. In various parts of Latin America it is also locally known as Baba, Babiche, Babilla, Cachirré, Caiman Blanco, Caiman de Brasil, Caiman Llanero, Cascarudo, Common Caiman, Jacaretinga, Lagarto, Lagarto Blanco, Spectacled Caiman, Tinga and Yacaré Blanco. Caiman populations have been documented in Trinidad and Tobago (on both islands) and on the small islands north of the Venezuelan coast (IUCN 1996) such as Los Testigos Islands, Porlamar, Isla de Coche, Isla de Cubagua, Isla La Tortuga, Isla La Orchila, Aruba, Curacao and Bonaire. In Trinidad its population was well documented by Murphy (1997). However, its distribution on Tobago has not been fully documented. Hardy (1982) stated that the caiman once occurred in most rivers and marshes on Tobago but that by the 1980s they had become limited to a few rivers in southern Tobago. He documented two historical occurrences, both of which were by potentially crocodylian drifters from South America: 1) In August 1979, Captain Isaac Augustine killed a large caiman swimming approximately 5.0km off northeastern Tobago, and 2) Woodcock (1867, p. 192) reported a 5.0-m-long individual from the Hope River, possibly the Orinoco crocodile, *Crocodylus intermedius*. Woodcock (*Ibid.*) wrote,

“In the rivers in the windward part of the island the alligator is often seen; one has been taken 17 feet [5.18 m] long; it was killed in the Betsey’s Hope River, where it had attacked a man who was crossing the stream, but who fortunately escaped the monster. It has always been considered that this animal was a stranger, brought by the current from one of the continental rivers; the native alligators do not measure much over six feet [1.83 m], and I have not heard of any injury done by them to man.”

Spectacled Caiman were first recorded on Tobago by Woodcock (*Ibid.*), but the species was not listed officially for Tobago until more than 100 years later (Mertens 1969). Boos (2007), via personal communications 1982-1983 with F.M. Madem (Roberto Franco Tropical Biological Station, Villavicencio, Colombia), suggested that Tobago’s caiman (to which Boos referred as *C. crocodilurus*) may be a distinct subspecies, on the basis of the smaller size of adults observed on Tobago in relation to their length. To date, this has not been verified, either genetically or morphologically, thus, the native crocodylian on Tobago

is still regarded as the generic *Caiman crocodilus*.

From 2007 to 2015, I searched for caiman on Tobago both at night (using eye spotting with flashlights) and during daylight. Figure 1 illustrates the current distribution of the caiman on Tobago, according to my findings.

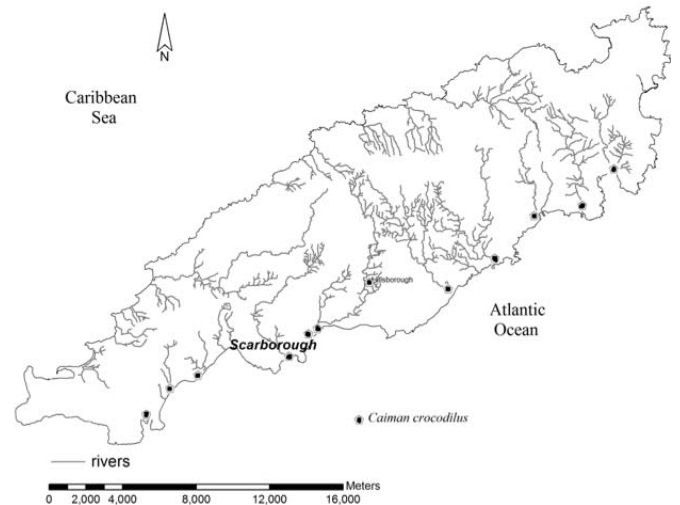


Fig. 1. Current distribution of *Caiman crocodilus* on Tobago.

During these investigations, *Caiman crocodilus* was noted mainly along Tobago’s Atlantic Coast. From this distribution one could hypothesise, as did Woodcock (1867), that the Atlantic Ocean and the outflow of the Orinoco River have had the greatest impact on colonisation and/or re-colonisation by this species. Most sites at which *C. crocodilus* was found were near the coast (less than 1.0 km distant), but water depth seemed to be the common factor among all sites where the species was found. From north to south, sightings were at the lagoon at the mouth of Kings Bay River, Louis D’or River, Argyle River, Richmond (Dog) River, Goldsborough River, Hillsborough Dam, Hope River, Blenheim River, swamps along Milford Road, and the ponds around the Magdalena Grand Beach and Golf Hotel. Individuals were only observed in the deep water regions. Many rivers on Tobago flow into the Atlantic Ocean, but caiman were noted on the Atlantic Coast only in rivers deeper than 2.0m. Hillsborough Dam supports the population at the highest elevation (approximately 300m). The major obstacle to movement of caiman from the Atlantic to the Caribbean side of Tobago seems to be the high elevation of the Main Ridge. For example, one might expect them to occur at the Courland River on the Caribbean coastline. The Courland River has several reaches with deep water and similar riparian vegetation to all other localities where the species was observed. Swimming around the island to colonise would seem a bit challenging as they would be moving against the ocean and Orinoco currents.

These results show the distribution of *C. crocodilus* to be not only localised to the south as previously described by Hardy (1982), but that it has an Atlantic coastal distribution potentially influenced by topography, elevation, water depth and proximity to the coast.

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