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Capture and Breeding of the Tobago Caiman

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NATURE NOTE

Capture and Breeding of the Tobago Caiman

While conducting studies and collecting specimens for his two volume work, "Los Crocodylia de Sur America," Professor Frederico M. Medem (1912-1984) visited Trinidad in 1972, and with my brother Julius O. Boos, made a trip to Tobago to collect and examine specimens of the "alligators" which had been recorded from this island by Woodcock (1867), though not officially listed until 1969 by Mertens.

The specimens, collected at Hillsborough Dam in the mountains of central Tobago, sparked the interest of Medem, as they seemed below the 'normal' adult size for the species *Caiman crocodilurus*. Medem (1983) later stated that the Tobago population "posiblemente representa un nueva subespecie," and in correspondence with the author, in February 1983, he again stated, "I am almost sure that the caimans from Tobago represent a new subspecies, possibly due to island dwarfism." In August, 1983 he encouraged me to "catch several caimans from Tobago alive, adults of both sexes, and to establish a controlled breeding unit somewhere in Trinidad".

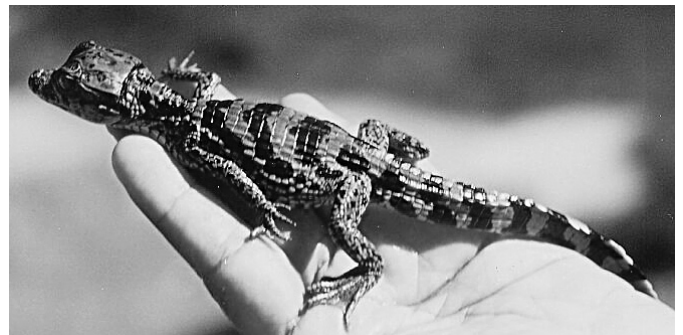
Four years after Medem's death, an expedition was mounted by the Zoological Society of Trinidad and Tobago Inc. Between the 19th and 21st of September, 1988 the author, keepers John Seyjagat and Nicholas Leith, and Council member Geoffrey Gomes, captured three adults (one male, two females,) and two juvenile caimans at Hillsborough Dam in Tobago. These caimans were collected at night, after locating them by reflected eye-shine, by slowly approaching in an inflatable boat and noosing them from the end of a bamboo pole. This required powerful hand-held flashlights, two men to paddle and a fourth man to slip the noose over the head of the caiman. One female was captured during the daylight hours, while apparently intent on protecting her territory; she kept returning to within noosing range as we imitated the calls of young caimans.

By July, 1990 both females looked gravid although no mating had been observed. The pond in the enclosure measured 6.5 x 6 m and was about 1 m deep. There was an adjacent area of "land" semi-circular in shape with a diameter of 6.5 m. On this land, chopped up bush and grasses was supplied for the nest construction by the females. However, on the morning of August 17, 1990, and again on August 22, first, 21 and then 24 eggs were seen to have been discarded in the meter-deep water of the pond. These eggs were hurriedly retrieved, and placed into an artificial incubator, in the hope that they were fertile and that they had not drowned. Incubation consisted of placing

the eggs in a glass aquarium with a substrate of peat-moss, and temperatures between 31 and 32 °C were maintained by a heat lamp suspended above the open top of the aquarium.

Egg weight and measurements were as follows: August, 17: 55-59 g, 53-63 mm x 29-30 mm diameter; August 22: 63-73 g, 58-69 mm x 30-31 mm diameter.

By November 16, 1990, two caimans hatched from the first batch laid. In this batch there were nine spoiled eggs, ten were fertile but the embryos were dead, and the total incubation was 75 days. Between November 26 and December 2, 1990 nine more eggs hatched from the second batch, eight were spoiled, seven were fertile but dead, and the total incubation was from 96 to 102 days. Of the eleven Tobago caimans that hatched, six survived for several years until I lost track of them. By January 31, 1991 they averaged 24.3 cm total length and 40.2 g in weight. These young should be carefully monitored to chart their progress and periodic measurements made of the adults to monitor their growth. The progress of any future breeding should also be recorded.



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