

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Sixty-ninth meeting of the Standing Committee
Geneva (Switzerland), 27 November -1 December 2017

INFORMATION REGARDING *CAIMAN CROCODILUS FUSCUS*
IN THE FRAMEWORK OF COLOMBIA'S UNILATERAL DECLARATION
AT THE 66TH MEETING OF THE STANDING COMMITTEE OF CITES

This information document has been submitted by Colombia in relation to agenda item 32 on *Implementation of the Convention relating to captive-bred and ranched specimens: Report of the Secretariat.**

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

Information regarding *Caiman crocodilus fuscus* in the framework of Colombia's Unilateral Declaration at the 66th meeting of the Standing Committee of CITES

In following with the commitments acquired in the Unilateral Declaration by Colombia regarding *Caiman crocodilus fuscus* made during the 66th meeting of the Standing Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora- CITES (Geneva, Switzerland, January 11-15 2016), to the report presented by Colombia in the 67th meeting of the same Committee (Johannesburg, South Africa, September 23 2016 (Doc.16)), and the invitation to inform on advances made during the 69th meeting, we inform the following:

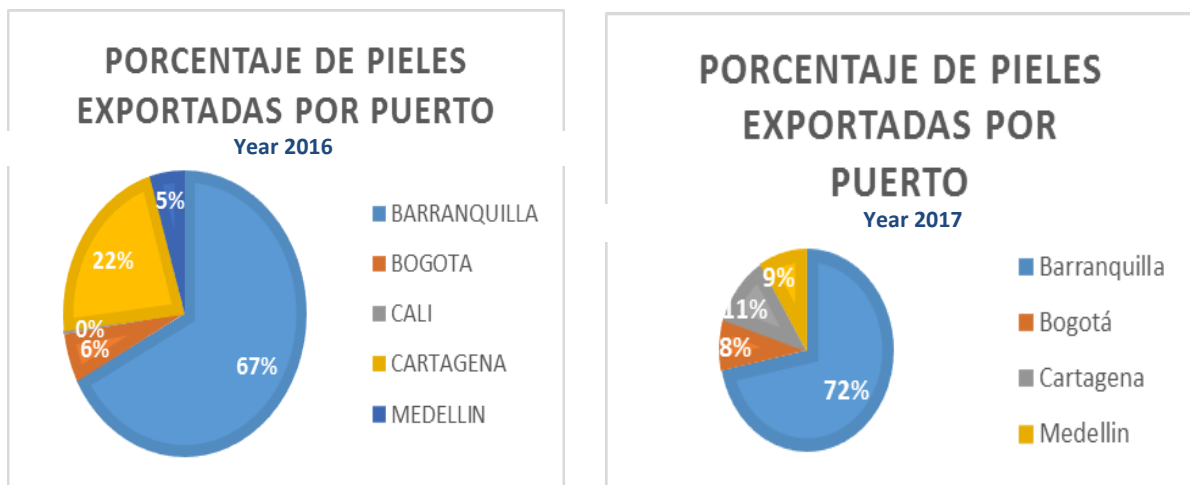
1. Rulings and mechanism for follow-up on the control of exports of specimens of *Caiman crocodilus fuscus*

As previously informed, the Colombian CITES Management Authority (M.A) continues to make controls in the verification in ports for export in 100% of cases for skins of *Caiman crocodilus fuscus* which are protected under a CITES permit (Resolución 2652, 2015); at the same time, there is control and follow up to the cutting of skins in breeding farms, tanneries, distributors and/r manufacturers, that are fractioned for exporting or for the making of artifacts (Resolución 2651 2015).

Table 1
No. of skins verified in port for export by the Ministry of Environment as CITES M.A during 2017

Port of export	Exported skins 2016 (Jan – Dec)	Exported skins 2017 (Jan – Sept)
Barranquilla	283783	140872
Bogotá	22982	18402
Cali	1718	0
Cartagena	94059	32740
Medellín	19281	28748
Total	421823	220772

Graph 1
Proportion of quantity of exported skins by authorized port



¹ By which maritime and fluvial ports are designated, as well as other places for international commerce of specimens of wild flora and fauna.

Table 2
Relation of verified and exported skins in Jan-Dec 2016 and Jan-Sept 2017

Criteria for verification of skins in ports for export	No. of skins (Jan – Dec 2016)	No. of skins (Jan – Sept 2017)
In confirmity	421560	220458
Marine tail	241	311
Cut tail	1	1
Not in confirmity	21	2
Total	421823	220772

Marine tail: Tail that corresponds to a tail that does not have its last scales due to living in captivity. This cut is verified by the presence of natural scarring.

Cut tail: Tail that presents cutting made to the skin by human action and that does not correspond to the natural cutting produced by living in captivity. This skin doesn't present natural scarring.

Skin and part or fraction not in conformity: Skin that has various cuts of scales or that doesn't show scarring button or that it hasn't ended its natural cycle of scarring or that it has a cut tail. Skin or part of a skin that doesn't comply with the CITES permit for export or in the mobilization document.

2. Population status and perspectives for the establishment of a ranching program in pilot locations.

As informed, in the year 2015 an agreement was signed between the Ministry of Environment and Sustainable Development, in representation of the Colombian CITES M.A, and the National University of Colombia, in order to assess the demographic and biological parameters of *Caiman crocodilus fuscus* populations.

In this regard, between August and November of 2015, field evaluations were carried out on *Caiman crocodilus fuscus* populations in four swamps in the Caribbean region of Colombia, as follows:

- Department of Bolivar:
 - Municipality of Barranco de Loba (Ciénaga Matatigres: 8.857473°, -74.142222°, 17 m);
 - Municipality of Magangué (Ciénaga Grande: 9.215344°, -74.774932°, 15 m).

- Department of the Atlantic
 - Municipality of Luruaco (Ciénaga de Luruaco: 10.606487°, -75.158810°, 61 m);
 - Municipality of Repelón and Rotinet (Embalse de Guájaro: 10.483177°, - 75.102409°, 21 m)

The population structure for each swamp by sample was based on the classification of the individuals that were observed in the four sizes classes (Class I <50 cm; Class II = 50.1 – 120 cm; Class III = 120.1 – 180 cm; Class IV = 180.1; as suggested by Ayarzagüena (1983) and Velasco & Ayarzagüena (1995) according to their total length.

To estimate the size of each population, individuals were captured, marked and recaptured between the takings of samples. All individuals that were captured were marked in the tail with a sub-dermal chip in the left side of the base and with a cut on the fourth scale of the simple line.

In order to estimate the population size the basic model was used (Lincoln-Petersen) that shows the Ciénaga Matatigres as the one that hosted the population with the greatest number of individuals of all categories, followed by the Guájaro and Ciénaga Grande populations. The results show an estimate of population in the Ciénaga Matatigres with a higher relative density (Ago 3.29 ind/km, Nov 2.12

ind/km), followed by Ciénaga Grande (Ago 0.98 ind/km, Nov 0.90 ind/km), Luruaco (Ago and Nov 0.80 ind/km) and Guájaro (Ago 0.59 ind/km, Nov 0.34 ind/km).

It is important to keep in mind that the capture information obtained in both field trips was not enough for the estimation of population size, given that the sampling was interrupted by the termination of the agreement and it was not possible to have the third field trip that was programmed.

Table 3
No. of individuals of *Caiman crocodilus fuscus* sighted, marked and recaptured for sampling. Population size of each swamp according to nocturnal observations.

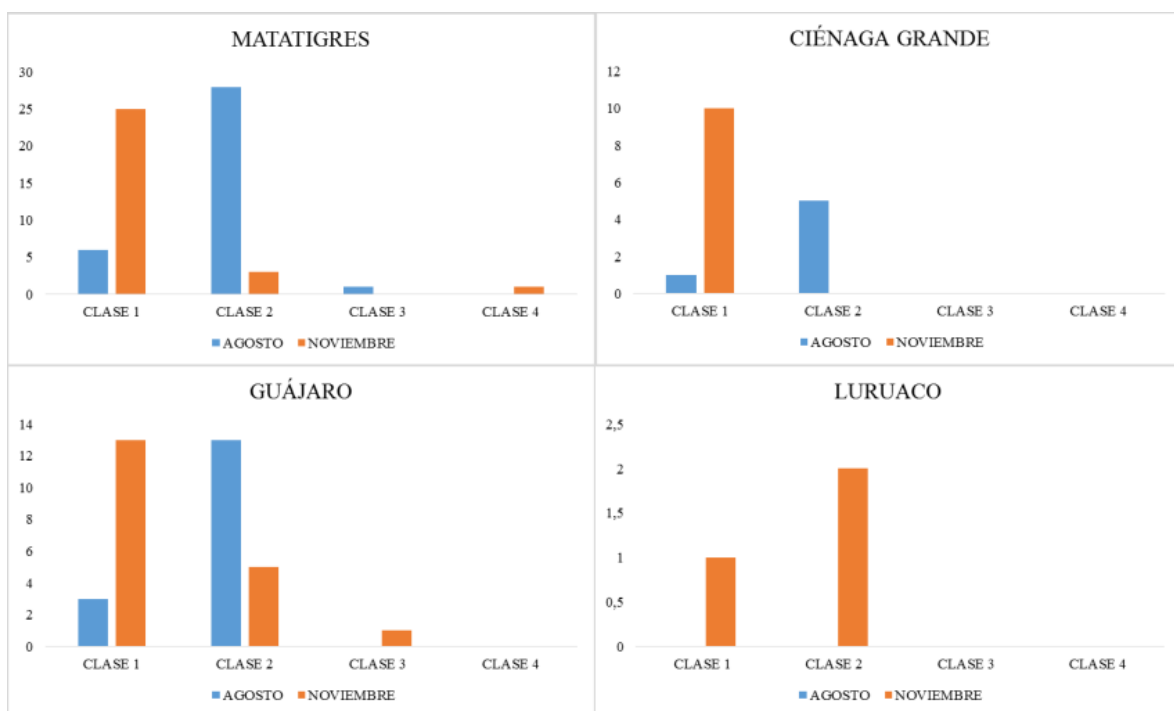
Swamp	Individuals sighted		Individuals Captured and marked		Individuals Recaptured		Estimated population size		
							Night Counts		Petersen
Sampling month	AUG	NOV	AUG	NOV	AUG	NOV	Estimated No.	Estimated No.	Estimated No. (Standard error)
Matatigres	148	95	36	29	0	2	108.5	70.9	360 (+/- 171)
Ciénaga Grande	47	43	6	10	0	1	119.9	37.7	66 (+/-44)
Guájaro	57	33	17	16	2	1	84.9	61.3	289 (+/- 198)
Luruaco	8	8	0	3	0	1	12.1	20.9	-

The populations structure was different in each of the four locations, just as it shows in Figure 2: In Matatigres, in both field samplings there were individuals of all categories including reproducing adults (Class IV) and individuals of Class I, which allows to infer that there is a recruitment in the wild and that its probably generated by young adults (Class III) and elders (Class IV). However, a decrease in Class II individuals was observed. In Ciénaga Grande and Guájaro, there was also recruitment evidence and

it seems that it happens because of the reproduction of young adults (Class III). Finally it's probable that in Luruaco the younger adults were undertake the population recruitment.

Based on the captures it was possible to determine the following sex ratio of males/females: Matatigres (1.5; N = 40), Ciénaga Grande (2.8, N = 15), Luruaco (1.0; N = 2) y Guájaro (1.3; N = 21).

Figure 2
Population Structure of the of *Caiman crocodilus fuscus* in the studied swamps



Anthropogenic, abiotic and biotic factors affecting the species *Caiman crocodilus fuscus* in the four swamps

Regarding the biotic and abiotic factors that are affecting the species, there's the pollution of the swamps due to:

- Agricultural activities and use of agrochemicals that end up in water bodies, in this case the channels that drain into the swamps;
- Heavy metals dumping, such as mercury and cyanide used in the extraction of gold, into the channels and swamps;

- Aquatic and terrestrial habitat, degradation, as a consequence of the river bank deforestation to increase agriculture and cattle ranching areas;
- Drying out swamps for other productive activities, such as agriculture and cattle/pig ranching.

Amongst the anthropogenic factors that affect the species are:

- Artisanal or net fishing, given that *Caiman crocodilus fuscus* and other species are caught and trapped. The majority of the animals caught are sacrificed because of fear of bites.
- Hunting to provide animals (adults, juveniles and newborns) for captive breeding and the selling of their skins.
- The harvest of eggs for consumption, which generated an impact on the species, even if it's in as low proportion.

Caiman crocodilus fuscus population status survey continue during 2017, as a part of the Agreement No. 518 of 2017 between the Ministry of Environment and Sustainable Development, in representation of the Colombian CITES M.A, and the National University of Colombia. In the framework of this agreement, the Ciénaga of Matatigres, was chosen based on the results obtained during the studies the year before, where there is evidence that out of the four studied locations, it's the one with the biggest population.

Furthermore, and as a complement, based on the revision of the population studies of *Caiman crocodilus fuscus* that allowed identifying geographic areas with studies gaps, there has been a new location chosen for study: the Ciénaga de Paredes, located between the municipalities of Puerto Wilches and Sabana de Torres in the department of Santander (N. 7.440227°, W-73.777156°, 50 m).

3. Export quota based on Non-detrimental finding –NDF- for ranching specimens in pilot locations

It's relevant to highlight that Colombia is committed to the compliance of the acquired commitments; however, the establishment of an export quota based on non-detrimental finding –NDF- will be defined once the population studies have been finished in the pilot sites that have been selected for this purpose.

4. Establishment and implementation of a marking system for ranching specimens

Currently, the marking of specimens of *Caiman crocodilus fuscus* produced in the captive breeding program developed by Colombia, is under national regulations such as: Resolution 0923 of 2007, which modified Resolution 1172 of 2004, "by which the National System of Identification and registration of Wildlife Fauna Specimens en Ex Situ conditions is established..." as well as in resolution 1173 of 2004.

In case that the population studies results are conclusive and allow the implementation of a ranching program, this will be carried out exclusively by eggs harvest in the selected sites. The eggs harvested will be marked with the nest number and of the egg, and all animals will be marked at birth with the amputation of scales. The marks or cuts must make reference to the nest number and year of production, and this will be a unique number for each individual.

Finally, regarding point 5 and 6, we reiterate what was informed in Doc.16 during the 67th meeting of the Standing Committee, in relation to the current legislation in Colombia which does not include limitations in size of skins that can be exported, but regulates: i) the obtainment of environmental licenses; ii) the compliance with cutting the 10th scale in newborn animals in farms; iii) control and follow-up on the cutting of skins; and iv) control and follow-up on exports in ports by the environmental authority and the Colombian CITES M.A.

Likewise, there is the Notification to the Parties No. 2015/064, in which there is a limit for the exports of whole skins in any state of processing and that show the scarred button due to the cutting of the 10th scale and of parts or fractions of terminated skins previous to being exported and that have been subject to control and follow-up before the cutting. This, in order to verify the traceability of the scarred button, guaranteeing its production in breeding farms.

Finally, it's important to mention that from November 21st to the 24th, Colombia will host and international workshop on "Non-detrimental Extraction" in the city of Cartagena, with the objective of strengthening technical and scientific capacities of the national CITES Authorities in the elaboration of said extractions, focusing on species of herpetofauna. This workshop is possible thanks to joint efforts made by the Ministry of Environment and Sustainable Development, in representation of the Colombian CITES M.A and the Alexander von Humboldt Investigation Institute, as coordinator of the Colombian CITES Scientific Authorities (S.A).