AMENDMENT OF APPENDICES I AND II OF THE CONVENTION ON INTERNATIONAL TRADE OF ENDANGERED SPECIES OF WILD FLORA AND FAUNA

(CITES)

A. Proposal

Transfer of the population of broad-snouted caiman *Caiman latirostris* of Brazil from Appendix I to Appendix II of CITES, in accordance with Article II, paragraph 2. a), of the Convention and with Resolution Conf. 9.24 (Rev. CoP17) Annex 4, paragraph A. 2. A, ii).

B. Proponent

Brazil*

C. Supporting statement

Downlisting the broad-snouted caiman from CITES Appendices I to II will not harm or result in risk to wild populations because i) the broad-snouted caiman is widely distributed within its range in Brazil, being fully protected in some range states; ii) according to current Brazilian regulation, farming is the only management type allowed and, regarding international trade, Brazilian CITES Administrative Authority has effective mechanisms to control all segments of the production chain; iii) under the controlling measures, it will be advantageous to act legally rather than illegally; iv) currently, there are means to promote efficient systems to monitor the natural populations and their habitats within range states and to apply conservation measures when necessary. More broadly, in accordance with Resolution Conf. 13.2, each of the 14 Addis Ababa Principles for Biodiversity Conservation will be observed closely (see CBD website).

1. Taxonomy

- 1.1 Class: Reptilia
- 1.2 Order: Crocodylia
- 1.3 Family: Alligatoridae
- 1.4 Species: Caiman latirostris
- 1.5 Scientific synonyms:

1.6 Common names: Jacaré-de-papo-amarelo, jacaré mariposa, jacaré-verde; Broad-snouted caiman, Brazilian caiman; Yacaré overo, Overo, Ururan, Yacaré de hocico Ancho, Urara-u, Yacaré pytá, Yacaré say-yu

2. Overview

This proposal shows that the *Caiman latirostris* (broad-snouted caiman) is abundant, has widespread populations in Brazil, and the Brazilian CITES Management and Scientific Authorities have the capacity and is prepared to ensure that conservation goals can be achieved.

3. Species characteristics

3.1 Distribution: The broad-snouted caiman, *Caiman latirostris*, is a native species from Brazil, Argentina, Bolivia, Paraguay and Uruguay. It is distributed throughout the Paraná, Paraguay, São Francisco and Uruguay River basins (Borteiro et al., 2006), being the crocodilian with the southernmost distribution among neotropical species. In Brazil, the species is found in the Cerrado, Caatinga, Atlantic Forest and the Pampas biomes, extending from the coastal areas of Rio Grande do Norte to São Francisco and Paraná-Paraguay watersheds and reaching the Lagoa dos Patos e Lagoa Mirim, in the State of Rio Grande do Sul. More than 70% of the species global distribution is within

^{*} 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.

Brazilian territory. The extension of occurrence (EOO) in Brazil is 2,672,480.4 km2, whereas the area of occupation (AOO) is estimated to be >20.000 km2. The large distribution range of the species and its capacity to colonize anthropic environments justify its classification as Least Concern (LC) according to the IUCN global evaluation criteria.

Brazilian Region/State	River basin	Population data	Source
Northeast/Pernambuco	Tapacurá river	1,744 individuals seen in spotlight surveys, of which 620 were young, 320 sub-adult, 262 adults and 542 eyes only (not classified)	Correia et al. (2021)
Northeast/Alagoas	Marituba river basin	Densities varying from 0.3 to 13 ind/km; eight captures – five females and three males, with sizes ranging from 37 to 73 cm SVI.	Gama & Coutinho (unpublished)
	South Alagoas Lacustrine System	Densities varying from 3.1 to 23.1 ind/km; 39 captures – one female and 36 males, two unidentified, with size ranging from 3.1 to 77.5 cm SVL	Gama & Coutinho (unpublished)
Northeast - Southeast/Minas Gerais, Bahia, Pernambuco, Sergipe, Alagoas	São Francisco river basin (SFB) - Surveys in 64 localities for the presence of caimans over 17 municipalities along the SFB	Occurrence of crocodilians registered in 61% of all surveyed localities - presence of <i>C. latirostris</i> confirmed in 44% of the surveyed sites	Filogonio et al. (2010)
Southeast/Minas Gerais	São Francisco river basin (SFB) – Três Marias reservo	12 spotlight surveys conducted (17.3 to 48.0 km in length), number of caimans counted, including hatchlings,	Passos et al. 2014

Table 1. Population distribution and abundance of *Caiman latirostris* in different Brazilian regions and their respective river basins.

		varied from 6 to 78 per survey	
Southeast/São Paulo	Silvicultural landscapes	Density estimated in 2.6 individuals/ha with a linear density of 11.3 individuals/km; 52 individuals captured of all size classes	Marques et al. (2016)
Center West/Goias	Paranaíba river basin 30 artificial lakes	86 sightings	Guastalla (2020)
Center West/Mato Grosso do Sul	Paraná river basin – Porto Primavera reservoir	Densities varying from 0.07 to 0.28 ind/km; 0.49 nests/km ²	Mourão & Campos (1995)
South/Paraná	South Atlantic/High Paraná River	Sights in 37 different localities	Morato (1991)
South/Santa Catarina	Ratones and Veríssimo river basins	Density of 0.25 ind/km	Fusco-costa et al. (2008)
South/Rio Grande do Sul	Tramandaí river basin	42 hatchlings /two clutches	Luchese et al. (2021)
South/Rio Grande do Sul	Tramandaí river basin	Densities varying from 0.12 to 16.23 ind/km	Luchese et al. (2021)

3.2 Habitat: The species inhabits marshes, lagoons and other water bodies, and is considered to be one of the most wary crocodilians. It appears to be more tolerant of cool climates than "tropical" species. This species can be found in urban lakes of the southern region of Rio de Janeiro City (Freitas-Filho 2007). *C. latirostris* has also been found in the mangroves of coastal islands of southeast Brazil (Moulton 1993). According to Yanosky (1994), the broad-snouted caiman can be found from sea level up to 800 m altitude. *C. latirostris* from the São Francisco river basin occurred in preserved habitats as well as in habitats affected strongly by human occupation. Individuals are found in sewage and highly urbanized areas, showing that the species is rather resistant to human impacts and that habitat modification has limited effect on the species distribution (Filogonio et. al. 2010).

3.3 Biological characteristics

Diet: The most common prey are insects, the shrimp *Pseudopalaemon bouvieri*, the snail *Pomacea canaliculata*, fish and birds. Spiders, crabs, amphibians, snakes, turtles and mammals are consumed although less frequently. Arthropods were the most frequent prey for juvenile caiman. Fish

and snails were consumed by all size classes. The proportion of stomach contents with invertebrates decreased with increasing caiman size, and that with vertebrates was greater in the diet of larger caiman. Diet composition and ontogenetic shift are similar to that of other crocodilians considered as opportunistic generalist predators (Borteiro et al. 2006).

Growth: Adults are around 1.5-2.0 m long, although some may reach 3 m. Using mark-recapture techniques Passos et al. (2014) showed that individuals growth rate varied between 0.0 and 0.3 cm*day-1 SVL, and between -6.0 and 8.0 g*day-1 body mass. Polyphasic growth was associated with rainfall and water level, which in turn were associated with changes in temperature and diet.

Reproduction: Nesting occurs at different times of the year depending on the region. In Brazil it occurs between October and March, in Uruguay in January, and in Argentina between January and March. *Caiman latirostris* is a mound nester, laying 18-50 eggs during the wet season, with a maximum of 129 eggs in a nest from a multiple-laying (Larriera 2002). In captivity, the male of a breeding pair has been observed to help the female in the early stages of nest-building, but this has not been documented from the wild. The leading cause of embryonic mortality is fungi and bacteria infections, attacks by ants and termites, and nest predation by foxes, lizards, coatis and water birds. Hatchlings are preyed upon by a variety of predators, and large *C. latirostris* will eat smaller ones, too.

Behaviour: Hatchling and young broad snouted caiman, *Caiman latirostris*, disperse in the environment to search for suitable thermal environments when subjected to higher thermal amplitudes (Verdade et al., 1994). This suggests *that C. latirostris* might be able to shift between passive and active thermoregulation, depending on the thermal regime experienced.

3.4 Morphological characteristics: Its color is greenish, almost brown, with a yellowish belly, broad and flat snout. As its common name implies, it has proportionally the broadest snout of any crocodilian. The broader and shorter snout in *C. latirostris* is probably an autapomorphic feature of this species within Caimaninae (Fernandes et a. 2015). The mean size of hatchlings emerging from eggs is 21 cm total length, whereas adults are around 1.5-2.0 m long, although some may reach 3 m.

3.5 Role of the species in its ecosystem: According to Somaweera et al. (2020) information regarding the role of crocodilians can be described under five criteria within the context of modern ecological concepts: as indicators of ecological health, as ecosystem engineers, apex predators, keystone species, and as contributors to nutrient and energy translocation across ecosystems. Crocodilians are suitable as sentinel and bioindicator species. Therefore, in addition to the traditional arguments for the conservation of these species, such as their ecological value and intrinsic existence, there are cultural and socioeconomic issues, in addition to the value that legitimates the importance of crocodilians in the context of the current ecosystem health crisis.

4. Status and trends

4.1 Habitat trends

The species seems to be resistant to the ecological impacts of damming, an important conservation conclusion considering the large number of hydroelectric dams within the species' range in Brazil (Passos et. al 2014). According to Mascarenhas et al. (2020), *C. latirostris* are sighted in open areas without native marginal Atlantic Forest vegetation, associated with an intensified human activity, near houses, fishing nets and caiman traps, suggesting that the species is resilient to human impacts in its habitats. Nevertheless, as state in Item 8.5 (Habitat Conservation), within the *C. latirostris* distribution range there are a number of Federal, State and Municipal protected areas, including those of integral protection oriented to species preservation, and sustainable use reserves, which together ensures the availability of natural habitats to the species.

4.2 Population size

Mourão & Campos (1995) estimated a total of 630 caiman nests per year in 1280 km2 of floodplains in the Porto Primavera area, border of Mato Grosso do Sul and São Paulo States.

The number of *C. latirostris* registers and captured individuals are presented in Table 2. Until 2017, more than 2,000 registers and 14,000 individuals have been captured inside and outside protected areas in Brazil. Large number of nests, registers and captured animals are all indicative of a large Brazilian population size.

Total population size of caimans is hard to estimate, because of a number of methodological constraints. However, assuming the species area of occupation is estimated to be >20.000 km² (Coutinho et al. 2013) and, supposing that only 1/5 of this area is actually occupied, there is a high probability to find the species in 400,000 hectares. Supposing an estimated density of 1,0 to 2,0 ind/ha (Marques et al. 2016), total population size would vary from 400,000 to 800,000 individuals in its whole distribution range within Brazil.

Table 2. Number of captured individuals of *Caiman latirostris* in different Brazilian Protected Areas according to the National System of Biodiversity Information (SISBIO), from 2006 to 2017.

Registers of C. latirostris	Registers	Number of captured individuals
UC State	1,370	1,662
UC Federal	69	1,537
UC Municipal	49	6,196
Outside protected areas	588	4,920
TOTAL	2,076	14,315

4.3 Population structure

Analysis of population size structure reveals individuals of all sizes of both sexes, indicating that the population is reproducing.

Table 3. Size structure of *C. latirostris* individuals from different site in Brazil. Class I=hatchlings, Class II=sub-adults, Class III=young adults and Class IV=adults.

Source	State	Site	Year	I	п	ш	IV	ND	n total	Method
Gama & Coutinho (unpublished)	Alagoas	Resex da Lagoa de Jequiá	2021	32	23	1	1	13	70	Night count
Gama & Coutinho (unpublished)	Alagoas	APA da Marituba do Peixe	2021	1	17	1	0	16	35	Night count
Gama & Coutinho (unpublished)	Alagoas	Lagoa da Guaxuma	2021	20	34	5	0	55	114	Night count
Mascarenhas-Júnior, 2020	Pernambuco	River Tapacurá dam reservoir, São Lourenço da Mata	2015- 2016	326	207	10	54	299	996	Night count
Carvalho Jr. & Batista, 2013	Bahia and Minas Gerais	Grande Sertão Veredas National Park	2013	9	16	4	2	5	36	Captured
Marques et al 2016	São Paulo	Angatuba	2010	16	28	8	0	-	52	Captured

Verdade 2001	Alagoas	Lagoa Vermelha	1999	47	64	6	122	239	Night count
Verdade 2001	Pernambuco	Parque Dois Irmãos	1999		5	3	2	10	Night count
Correia 2021	Pernambuco	River Tapacurá dam reservoir, São Lourenço da Mata		620	320	262	542	1744	Night count

4.4 Population trends

In the State of Santa Catarina, Luchese et al. (2021) reports an increasing population size of *C. latirostris*, particularly in suitable areas near urban centers. As an example, they mentioned a large population size inhabiting a mangrove, rivers and drainage channels close to the city of Florianopolis (South Brazil), where the species was rarely observed back in the 1990's.

There are also a number of reports of C. *latirostris* being found in urban and peri-urban areas, which might indicate that these individuals are dispersing towards new areas, and also suggesting an increasing trend in the size of natural populations.

4.5 Geographic trends

As the number of scientific investigations increases, new reports on *C. latirostris* encounters within Brazil are presented. The data obtained from the Federal Research Authorizing System (SISBIO) clearly indicates an increase in the geographic occurrence of *C. latirostris* within the country (Figure 1).

Figure 1. Registers of *Caiman latirostris* described by the Federal Research Authorizing System (<u>https://www.gov.br/icmbio/pt-br/servicos/sistemas/sisbio-sistema-de-autorizacao-e-informacao-em-biodiversidade</u>).



5. Threats

C. latirostris is the Brazilian crocodilian that presents the most complex situation with regard to conservation. Its natural habitats are impacted by socioeconomic activities, since their geographic distribution coincides with the most densely occupied areas in Brazil (Northeast, Southeast and South), regions in which most of the natural environment has already been altered (Verdade & Lavorenti 1990, Verdade et al. 1992, Mourão & Campos 1995, Freitas-Filho et al. 2009, Filogonio et.al. 2010). Activities

such as draining wetlands, deforestation, habitat reduction, pollution, urban expansion and intensive use of pesticides are constant threats (Verdade 1997, 1998, Filogonio et. al. 2010). On the other hand, C. *latirostris* is found in urban and peri-urban areas as well as in habitats affected strongly by human occupation, suggesting the species is resilient or has some degree of resilience to human impacts.

6. Utilization and trade

6.1 National utilization

As the Brazilian population of *C. latirostris* is included in CITES Appendix I, the species can only be farmed. As described in Table 2, there are currently five operating farms in Brazil. They are located in Southeast and Northeast states, managing around 6,100 specimens. Specimens are used for both meat and skin. It is important to note that in order to trade products, specimens can only be processed in abattoirs inspected by sanitary authorities, either Municipal, State or Federal.

Table 4. Operating farms of Caiman Latirostris in Brazil.

State	Local	Name	Activity
ES	Itarana/ES	Criadouro Caiman	Commercial farm
MG	Jacutinga/MG	Criatório Caiman Ltda.	Commercial farm
SP	Porto Feliz/SP	Criatório Caiman Ltda	Commercial farm
AL	Marechal Deod	oro/AL Ame Brasil	Commercial farm
AL	Maceió/AL	Mister Cayman Ltda	Commercial farm

6.2 Legal trade: The Argentine population of *C. latirostris* was transferred from CITES Appendix I to Appendix II in 1997, and the first exports of skins from ranched animals were reported by Argentina in 2001. Argentina reported exporting 5,473 ranched skins in 2016 and 3,652 in 2017; no report has been received from Argentina for 2018 but importing countries, Germany, France, Spain and the United States, report 2,811 skins (Caldwell 2020). European imports of ranched skins increased more than 20-fold within the period 2003-2012, with trade levels almost doubling between 2011 and 2012. No wild-sourced skins were imported to the EU 2003-2012 (UNEP-WCMC, 2015). Brazil reports exporting small numbers of skins from captive-bred animals most years. Recently this has amounted to two skins to Switzerland and 50 skins to Italy in 2016 and a further 12 to Italy in 2018 (Caldwell 2020).

6.3 Parts and derivatives in trade: After *Melanosuchus niger (Black Caiman), C. latirostris* yields the best skin of all the southern South American caimans. Likewise, the meat is highly appreciated. There are other products that have market value, such as bone flour and handicrafts made using the head and legs, although these have not been traded currently.

6.4 Illegal trade: In northeastern Brazil, illegal hunting still supplies local markets for meat in small cities along the São Francisco River basin. The meat is sold as salted carcasses like codfish, locally called "São Francisco codfish" (Verdade 2001). In Argentina, illegal hunting has been reduced, as local rural people ("gauchos") are currently rewarded for locating nests for the local ranching program (Larriera et al. 2008). Although still occurring in some places, illegal hunting is no longer the major threat for this species - probably due to a combination of reduced density, improved protection, increased cost of illegal hunting, and legal skins becoming more attractive to traders. Illegal trade of skins has not been documented in the last years in Brazil.

6.5 Actual or potential trade impacts

It is well known that local communities do use caiman meat as an important source of protein, together with fish, crab and shrimp, particularly in sustainable use reserves along the eastern Brazilian coast. It is expected that local legal management will supply the meat market, thus suppressing illegal meat trade. Likewise, the legal trade of skins and leather would add value to the species and, consequently to the whole ecosystem, becoming an important incentive to promote natural habitat conservation. Nevertheless, Brazil will practice zero quota of ranched or harvested individuals.

7. Legal instruments

7.1 National

The national laws and regulations related to the commercial use of caimans in Brazil are:

- The Federal Constitution, the Chapter on Environment (Article 225);
- Fauna Federal Law 5.197 of 1967;
- CITES Federal Ordinance 76.623 of 1975;
- Law 6.938 of 1981, promulgates the National Environmental Policy;
- Environment Criminal Federal Law 9.605 of 1998;
- Enforcement CITES Federal Ordinance 3.607 of 2000;
- Federal Law 9.985 of 2000 promulgates the National System for Protected Areas (SNUC), which ordinates the creation and management of protected areas, including wildlife management;
- Ordinance 2.519 of 1998, which promulgates the Convention on Biological Diversity (CBD);
- National Environment Council (CONAMA) Resolution 487 of 2016 established a national marking system for captive wild animals, with specific terms for crocodilians;
- National Environment Council (CONAMA) Resolution 489 of 2016 establish different categories and criteria to authorize management of fauna;
- National Complementary Law N° 140 of 2011, which establish competence to authorize fauna management;
- National IBAMA Normative N° 93 of 1998, which establish guidelines to exporting Brazilian wild fauna;
- National IBAMA Normative N° 07 of 2015, which establish guidelines to captive management and exporting crocodilians;

7.2 International

Brazil is signatory to CITES and CBD and the national laws for both convention implementations are:

- CITES Federal Ordinance 76.623 of 1975;
- Enforcement CITES Federal Ordinance 3.607 of 2000;
- Ordinance 2.519 of 1998, Convention on Biological Diversity (CBD).

8. Species management

8.1 Management measures

The Programme for Conservation Biology and Management of Brazilian Crocodilians is coordinated by the Centre for Conservation and Management of Reptiles and Amphibians (RAN/IBAMA).

The only form of management currently proposed is farming of broad-snouted caiman, following requirements of national laws and management plans.

8.2 Population monitoring

RAN has a nationwide monitoring programme (Programme for Conservation Biology and Management of Brazilian Crocodilians) that considers the ecosystem as the management unit and implements monitoring by systematic surveys, applying a set of standard methodologies. Methodology includes: i) habitat description based on satellite image interpretation, ii) water level, temperature and rainfall recording, iii) standard geo-referenced spotlight surveys estimating population size structure and sex ratio, iv) nesting ecology, and v) in sites with sustainable-use potential, mark-recapture techniques. In order to apply such methodology and to ensure a sustained programme, local personnel have been trained and equipped for the job. Standardized surveys are carried out in States to evaluate population trends in all habitats. Regular evaluations and systematic reports on the management programme will

be provided in order to attend both domestic and international observers and to ensure transparency to the programme. The Programme is ongoing since 2003.

8.3 Control measures

8.3.1 International

All CITES regulations are already applied in Brazil, including the specific regulations for crocodilian trade and management. The Ministry of Agriculture and the State Sanitary Authority have strict measures to control meat exports, whereas cured skins can be exported, therefore, control measures can also be implemented at the tanneries. There are other government agencies that play an important role in controlling trade, particularly at the border with neighboring countries. These include the Federal Police, the State Police at each respective State and the Forestry Police, which are also effective to control domestic trade.

8.3.2 Domestic

The strict observance of national and international laws and regulations are monitored by enforcement of State and Federal organisms as mentioned above.

All participants of farmed broad snouted caiman have i) to register in a national database (*Cadastro Técnico Federal*), ii) to obtain the State Environmental License, and iii) to submit annual reports. All measures are controlled by IBAMA and ICMBio, with the support of range States, which are responsible for issuing annual licenses for transport of and trade in products and sub-products. All skins have to be tagged according to CITES Resolution Conf. 11.12. All products coming from registered slaughter houses are legal and have a government green stamp. Legal products attain good prices at the local market, therefore, it is also an incentive to join the legal market based on its economic advantages. The Ministry of Agriculture and the State Sanitary Authority are also responsible for monitoring meat trade and meat sanitary quality.

8.4 Captive breeding

As described in Item 6.1. (**National utilization**), there are currently five operating farms in Brazil. They are located in Southeast and Northeast states, managing around 6,100 specimens. Specimens are used for both meat and skin. It is important to note that in order to trade products, specimens can only be processed in abattoirs inspected by sanitary authorities, either Municipal, State or Federal. The species respond well to captive management, presenting satisfactory growth and reproduction.

8.5 Habitat conservation

Within the *C. latirostris* distribution range there are a high number of Federal, State and Municipal protected areas, including those of integral protection oriented to species preservation, and those of sustainable use which are established aiming at promoting the involvement of local communities in resource conservation. Together such a net of protected areas should ensure species conservation.

Table 5. Number of captured individuals of *Caiman latirostris* in different Brazilian Protected Areas according tothe National System of Biodiversity Information (SISBIO) from 2006 to 2017.

Protected Areas	Category	Number of captured individuals
Apa De Ibitinga	Environmental Protected Area	1
Apa De Jenipabu	Environmental Protected Area	32
Apa Do Litoral Norte - Praia Do Forte	Environmental Protected Area	1
Apa Do Rio Joanes Ipitanga - Busca Vida	Environmental Protected Area	2
Apa Ilha Comprida	Environmental Protected Area	2
Apa Litoral Norte - Barra Do Itariri	Environmental Protected Area	1
Apa Litoral Norte - Imbassai	Environmental Protected Area	2

Apa Municipal Água Parada	Environmental Protected Area	1
Apa da Marituba do Peixe	Environmental Protected Area	12
Área De Proteção Ambiental Cananéia-Iguapé- Peruíbe	Environmental Protected Area	0
Área De Proteção Ambiental Costa Dos Corais	Environmental Protected Area	1
Área De Proteção Ambiental De Guapi-Mirim	Environmental Protected Area	179
Área De Proteção Ambiental De Jenipabu	Environmental Protected Area	21
Estação Ecológica Da Guanabara	Ecological Station	178
Estação Ecológica De Guaraqueçaba	Ecological Station	13
Estação Ecológica De Maracá-Jipioca	Ecological Station	1
Estação Ecológica De Pirapitinga	Ecological Station	79
Estação Ecológica De Tapacurá	Ecological Station	589
Estação Ecológica Do Taim	Ecological Station	5
Parque Estadual Da Lagoa Do Cajueiro	State Park	1
Parque Estadual De Dois Irmãos	State Park	88
Parque Estadual Do Rio Doce	State Park	135
Parque Municipal De Maceió	Municipal Park	20
Parque Nacional Da Serra Da Canastra	National Park	1
Parque Nacional Da Serra Do Cipó	National Park	58
Parque Nacional De Ilha Grande	National Park	7
Parque Nacional Do Iguaçu	National Park	67
Parque Nacional Do Pau Brasil	National Park	1
Parque Nacional Do Superagui	National Park	20
Parque Nacional Grande Sertão Veredas	National Park	61
Parque Natural Municipal Bosque Da Barra	Municipal Park	4
Parque Natural Municipal Chico Mendes	Municipal Park	160
Parque Natural Municipal Chico Mendes E Marapendi	Municipal Park	5720
Parque Natural Municipal De Marapendi	Municipal Park	128
Parque Natural Municipal Marapendi	Municipal Park	160
Reserva Biológica De Santa Isabel	Biological reserve	1
Reserva Ecológica De Guapiaçu - Regua	Biological reserve	24
Rppn Fazenda Macedônia	Private Protected Area	29
Reserva Extrativista Lagoa de Jequiá	Extractive reserve	28

Total 783

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8.6 Safeguards

Brazilian Federal and State governments have funds specifically assigned to the national caiman monitoring programme. The funds have been used to train local expertise and technicians to apply survey techniques, which have been standardized across the whole broad-snouted caiman range. For instance, it has been a successful initiative, particularly to entice local communities to be trained.

9. Information on similar species

The caiman monitoring programme is organized to also obtain information on the biology, distribution and abundance of *Paleosuchus* spp. The results show that *Paleosuchus* spp. occur in relatively low densities, sharing the habitats occupied by broad-snouted caiman. Thus, *Paleosuchus* should also benefit from *C. latirostris* conservation programmes.

10. Consultations

This first draft proposal, under the responsibility of RAN/ICMBio, was elaborated with the support of IBAMA and national crocodilian specialists. Stakeholders and environmental authorities of the Brazilian broad-snouted caiman regions were also consulted. As advised in CITES resolutions, this proposal should be submitted to the IUCN Crocodile Specialist Group and to CITES Scientific and Management Authorities of broad-snouted caiman range States (Argentina, Uruguay, Paraguay, Bolivia) for comments and suggestions.

Note: the population of Argentina is included in Appendix II, and is subject to a ranching program approved by the CITES Secretariat and the IUCN/SSC Crocodile Specialist Group. Other populations within the species range in other countries should also merit downlisting to Appendix II.

11. Additional remarks

Until the 1970s, the 23 species of crocodilians in the world were considered endangered. In the last 35 years, after sustainable-use programmes suggested by CSG/SSC/UICN, only two still remained in the UICN red list (*Alligator sinensis* and *Crocodilus siamensis*), both not used for legal international trade from their wild populations. The present proposal is included in this context and expects as outcomes, the social development of Brazilian local communities through the management for conservation of broad-snouted caiman populations.

Caiman latirostris is abundant and widely distributed within its distribution range and, therefore, the species does not meet the criteria to be included in CITES Appendix I. Accordingly, the species should be downlisted to CITES Appendix II.

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