

BIOAMAZON NEWSLETTER



BIOAMAZON PROJECT

Conservation of species threatened by unsustainable trade



ACTO

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Update on the Status of Black Caiman in Guyana

Integration of information systems and knowledge management about CITES species

This is the Bioamazon Project Newsletter, of the Amazon Cooperation Treaty Organization (ACTO). It is published every two months to disseminate the actions and results of the Project and its partners.



Bolivia



Brazil



Colombia



Ecuador



Guyana



Peru



Suriname



Venezuela

Hello,

You are receiving the fifth edition of the Bioamazon Project of the Permanent Secretariat of the Amazon Cooperation Treaty Organization (SP / ACTO). This newsletter is distributed every two months to our partners, consultants, and friends of the Bioamazon Project, as well as to people interested in the conservation of Amazonian biodiversity and in the regional work of ACTO.

The Bioamazon Project was born out of the need to protect Amazonian species threatened by trade and the urgency to help Amazon countries reduce asymmetries and weaknesses in the conditions to monitor and conserve threatened species of flora and fauna. Thus, it contributes to the conservation of the species included in the [Convention on International Trade in Endangered Species of Wild Fauna and Flora \(CITES\)](#), in the eight Member Countries of the Amazon Cooperation Treaty Organization - Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

In this edition of the Bioamazon Newsletter we present the regional analysis of the CITES and Biodiversity information systems in ACTO Member Countries and the steps for the development of a regional strategy for interoperability of systems involving the eight Amazonian countries.

In the Amazon Countries section, we show the progress that our implementing partners are making in the countries.

Kind regards and good reading.

Mauro Ruffino

Bioamazon Project Coordinator
Permanent Secretariat / Amazon Cooperation Treaty Organization (ACTO)

Integration of information systems and knowledge management about CITES species

Diagnosis identifies needs to overcome technological and management asymmetries to provide integrated knowledge at the regional level

The Bioamazon Project and the consulting firm Excelencia Corporativa (EXCO) carried out an analysis of the status of national information management systems on biodiversity and CITES species in the eight Amazon countries that are members of the Amazon Cooperation Treaty Organization (ACTO) - Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

The study aims to better understand the needs of each country and create conditions for the development, improvement, strengthening and conditions for interoperability of national information systems. The eight Amazon countries that share the region face similar challenges, at the same time, to conserve biodiversity and the integrity of ecosystems and promote sustainable and inclusive development in the region. One of ACTO's objectives is precisely to reduce the asymmetries between these countries.

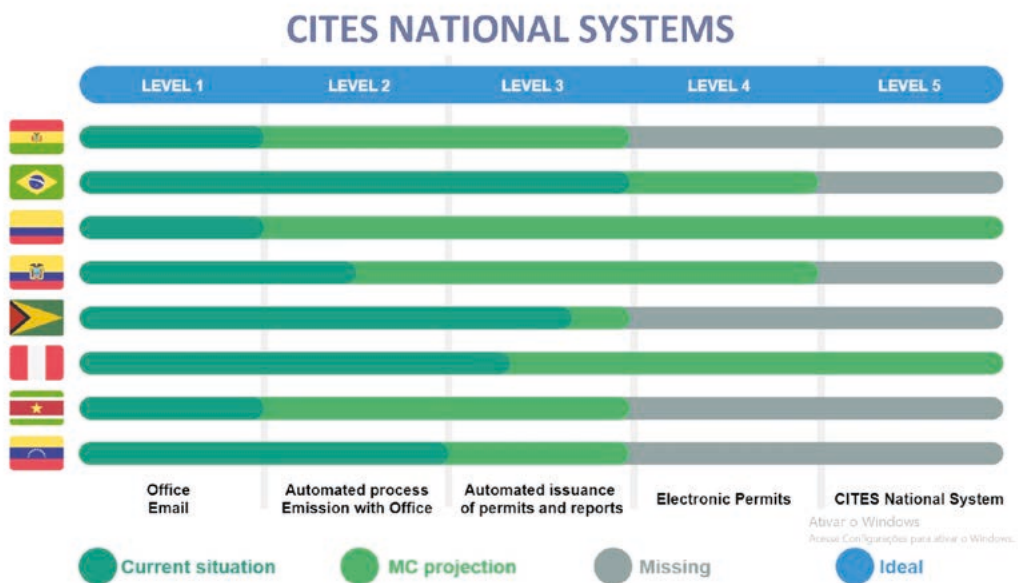
In this context, the Amazon Cooperation Treaty Organization (ACTO), through the [Regional Project for the Management, Monitoring and Control of Wild Fauna and Flora Species Threatened by Trade \(Bioamazon Project\)](#) is supporting the development of national and regional information and knowledge management systems to strengthen the species management instruments CITES in the countries and, through the Amazon Regional Observatory (ORA) of ACTO, in current construction process, promotes advances in regional integration on the management of CITES species.

In general, this first stage of the work made it possible, among other aspects, to update the baseline on national systems, diagnose the investments needed to overcome asymmetries, identify the conditions and requirements for interoperability between systems, propose improvements in infrastructure physical and technological development and to identify training and technical assistance needs.

As for the state of the national CITES systems in relation to the ideal condition, the regional analysis established five levels of development: 1) Office automation and electronic mail; 2) Automated process; 3) Issuance of licenses and automated reports; 4) Electronic licenses; and 5) CITES National System. As for the condition, the survey could identify: 1) Current state; 2) Projection of the Member Country; 3) What is missing; and 4) Ideal condition.

After visits to ACTO's member countries, conducting workshops and doing analysis of documentation and systems, it was identified that the best positioned countries in the current situation are Brazil, Guyana and Peru, which have already reached level 3 with the issuance of licenses and automated reports. However, all countries have projected improvements to reach Level 4 (electronic licenses) and seven of them indicated that they need support and investment to reach level 5 (CITES National System), as shown in Figure 1.

Figure 1. CITES National Systems with the level of national systems in relation to the ideal condition.

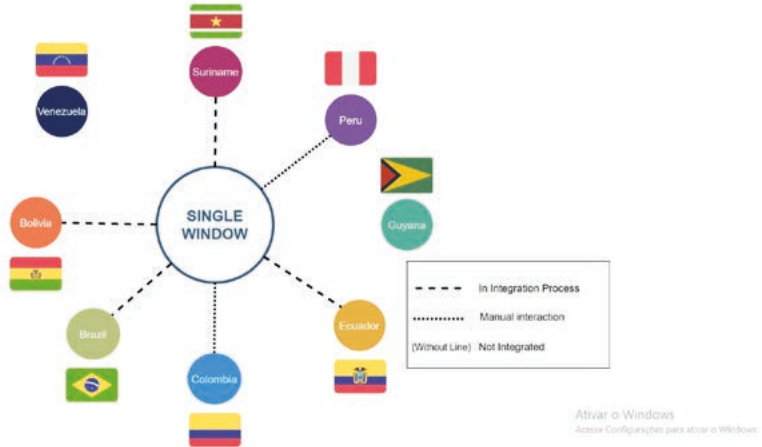


Source: Corporate Excellence/Bioamazon Project/ACTO, 2020.

The single windows for foreign trade can be understood as an information technology interface that allows private entities and government agencies involved in foreign trade to exchange information in a unified and simplified way, streamlining processes. International trade in CITES listed species requires a single window for issuing licenses. In this case, there are also asymmetries between the Amazonian countries, as shown in Figure 2. Five countries - Bolivia, Brazil, Colombia, Ecuador and Suriname are in the process of integrating into the single window of foreign trade. Peru does manual interaction and Guyana and Venezuela have yet to develop integration into the single window.

Figure 2. CITES Interaction - Unique Foreign Trade Windows.

INTERACTION OF SIMPLE WINDOWS CITES AND COMEX

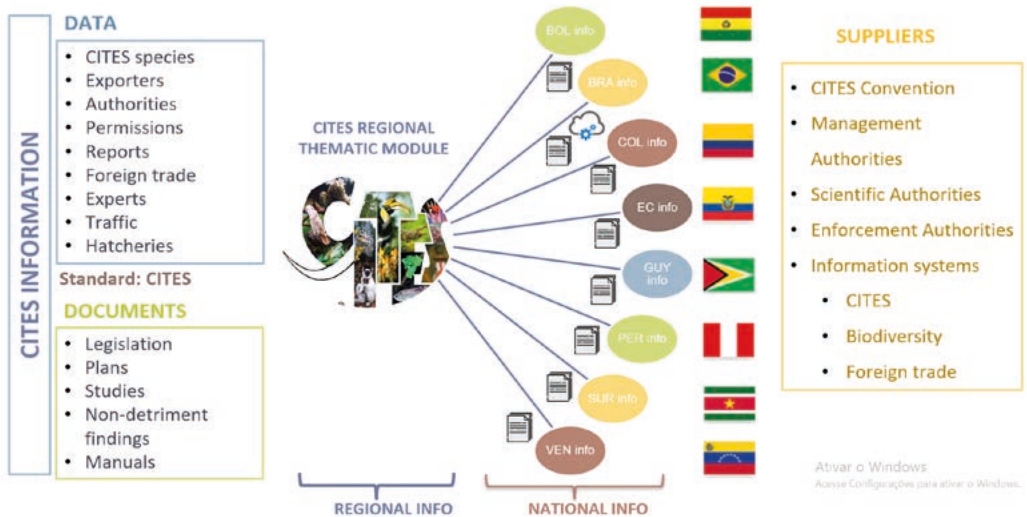


Source: Corporate Excellence/Bioamazon Project/ACTO, 2020.

In addition to improving national CITES information systems in Member Countries, ACTO is also creating the conditions to have a regional vision about CITES through the implementation of the Amazon Regional Observatory (Figure 3).

Figure 3. CITES Regional Information Strategy.

CITES REGIONAL INFORMATION STRATEGY



Source: Corporate Excellence/Bioamazon Project/ACTO, 2020.

Considering the regional context, the Bioamazon Project is directly supporting countries in strengthening their systems. The opportunities generated by these investments in development, integration and improvement in the national information systems on biodiversity and CITES species will enable decision makers to have more access to qualified information, technical studies and specialists in a virtual environment of communication and exchange, with a regional vision of Amazon.

According to the coordinator of the ACTO Bioamazon Project, Mauro Ruffino, after this step of assessing the needs of the countries, projects to implement improvements in the national systems and for the Regional Amazonian Observatory will be developed.

“This diagnosis was very important to have a vision of the needs of each country and the necessary requirements to have an integrated system of information and knowledge management on biodiversity and CITES species in the Amazon region. The next phase of implementing the improvements depends on the efforts of the countries and we intend that, by December 2020, all progress will be concluded”, said Ruffino.

CITES

The [Convention on International Trade in Endangered Species of Wild Fauna and Flora \(CITES\)](#) is an international agreement between governments, to which States voluntarily adhere. CITES aims to ensure that international trade in specimens of wild animals and plants is not a threat to their survival.

According to the Convention, the international wildlife trade is estimated to reach billions of dollars annually and affect hundreds of millions of animal and plant specimens. The trade is very diverse, from live animals and plants to a wide variety of wildlife products derived from them, such as food products, leather goods from exotic animals, wooden musical instruments, wood, souvenir items for tourists and medicines.

Pressure on animals and plants, whether due to commercial exploitation or habitat destruction, puts species at risk of extinction. CITES regulates trade and promotes international cooperation to protect the species listed in the appendices from over-exploitation. Learn more about CITES.

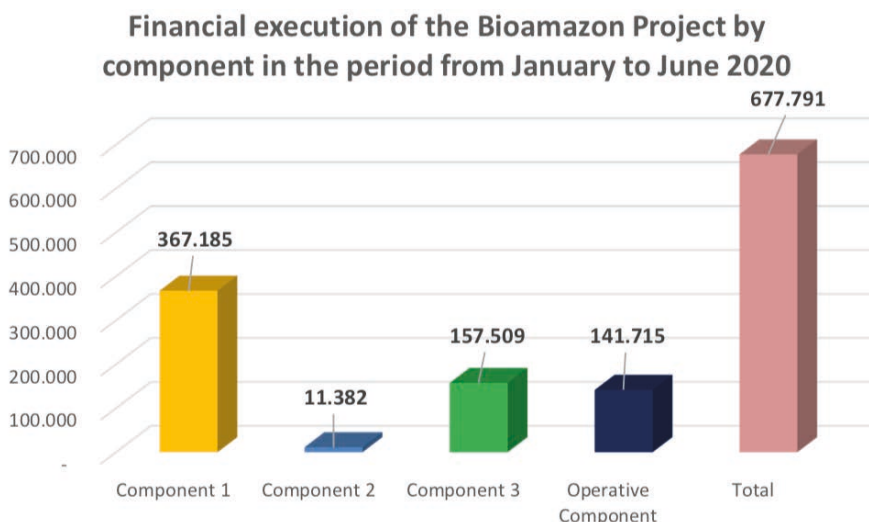
Focus on operational-financial implementation to accelerate biodiversity protection

Six-monthly report describing the status of implementation of the Bioamazon Project, including operational and financial execution, timetable and activities for the period

The performance of the operational-financial execution of Bioamazon Project between January and June 2020 exceeded expectations even during the time of the Covid-19 pandemic that has had an impact on the lives of people in the eight Amazonian countries. This was possible due to the intense virtual work that followed the decisions to implement quarantines in the Member Countries of the Amazon Cooperation Treaty Organization (ACTO) that are implementing project activities.

In this six-month period reported, from 1 January to 30 June 2020, a total amount of € 677,791.42 (Figure 1) of KfW funding and € 123,217 of the PS/ACTO counterpart funding was implemented.

Figure 1. Financial execution of the Bioamazon Project by component in the period from January to June 2020.

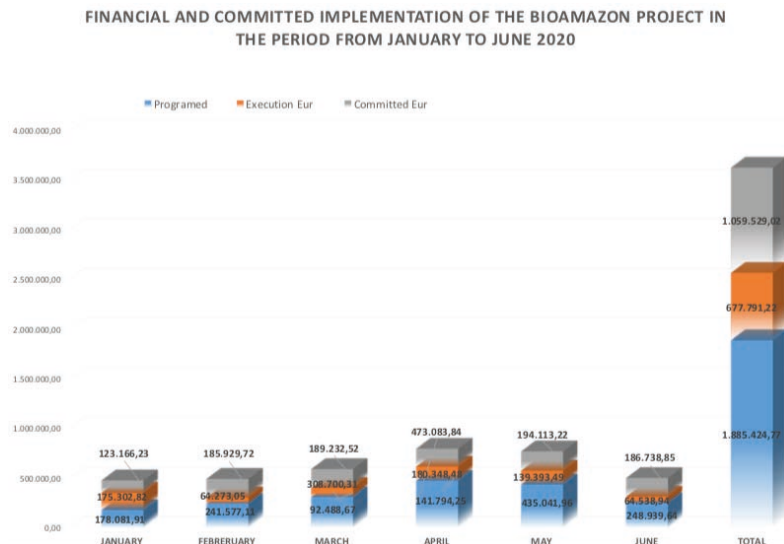


Source: Biannual Report of the Bioamazon Project - PS/ACTO

The half-yearly report, however, shows that in addition to the amount executed, commitments of about € 1,059,529.07 were made, which together total a projected

committed execution of € 1,737,320.09 (Figure 2), corresponding to 70% of the Annual Operating Plan (AOP) and Annual Procurement Plan (APP) for the year 2020.

Figure 2. Financial and committed implementation of the Bioamazon Project in the period from January to June 2020.



Source: Biannual Report of the Bioamazon Project - PS/ACTO

To reach this level of performance, the Project Executing Unit focused on the processes of bidding, invitations, contracts and procurement of the investments planned and approved for Bolivia, Brazil, Colombia and Peru; contracting and execution of the international consulting services for the studies of the Components 1; the process of invitation, selection and contracting for the external audits of the Project, as well as the completion of the Terms of Reference (ToR) for the national consultancies of Bolivia, Brazil, Peru, Ecuador, Guyana, Colombia.

The purchase of goods was carried out for Bolivia, Brazil, Colombia, Ecuador and Peru, within the framework of Components 1, 2 and 3, including the processes of bidding, evaluation, selection and contracting of companies; purchase, delivery, testing of equipment and assignment of use. Operational expenditure for the 2020 January-June period will total € 141,715.

Regarding consultancy and employment contracts, ACTO, through the Bioamazon Project, generated a total of 68 new jobs in short-term consultancies distributed in Bolivia, Brazil, Ecuador, Guyana and Peru. The total amount of disbursements in compensation for the work carried out through 31 consulting contracts signed this semester amounts to US \$ 854,142.54. distributed until the end of the year.

ACTO is also contributing to the improvement of the infrastructure and equipment of the associated national institutions with the objective of strengthening the information and knowledge management systems of the countries. In total, from January to June, US \$ 1,114,199.10 was invested in 130 equipment acquisition processes for government institutions in Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru and Suriname.

The strategy of the Regional Project for the Management, Monitoring and Control of Species of Wild Fauna and Flora Threatened by Trade is based on two main axes to make investments in information management systems and equipment viable and to strengthen institutional technical capacities and inter-institutional coordination in ACTO's Member Countries.

For the second semester, from July to December 2020, the Bioamazon Project will prioritize activities related to Brazil, Guyana, Suriname and Venezuela, in addition to following up on consultancy and service contracts already in place.

"The operational and financial performance of the Bioamazon Project demonstrates the capacity of ACTO to manage large scale projects with a regional vision. We are very happy that the Amazon countries are cooperating and benefiting from the progress of the project," said ACTO's Executive Director, Ambassador Carlos Lazary.

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Ecuador

INTERVIEW

Attention to the genus *Cedrela* with studies and monitoring of forests in Ecuador

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Traceability of forest products, traffic control and construction of regulatory processes for the conservation, control, use and sustainable forest management of these species are also underway in the country.

*Understand the details of the efforts to preserve the genus *Cedrela* in Ecuador in this interview with the CITES implementation team in Ecuador - CITES Management Authority, in the Ministry of Environment of Ecuador (MAE).*

*In Ecuador there are seven species of the genus *Cedrela*, which this August will be included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).*

The country is making efforts to know the distribution of the different species in the territory, as well as DNA identification and statistical analysis with the molecular samples to determine the differentiation between species.

*Understand the details of the efforts to preserve the genus *Cedrela* in Ecuador in this interview with the CITES implementation team in Ecuador - CITES Management Authority, in the Ministry of Environment of Ecuador (MAE).*

Bioamazon Project - How is your country preparing for the implementation of CITES on *Cedrela* spp?

CITES implementation team in Ecuador - The species of the genus *Cedrela* has one of the most valuable and important woods from the commercial point of view, due to its aesthetic value and workability.

Some of the species in the genus *Cedrela* are assessed as being in a threatened category throughout their range in the Neotropics. Due to the high commercial value of their wood, they have been selectively harvested and as a consequence their

populations have decreased drastically. Three of the species of the genus found in Ecuador have been categorized at the global level, based on IUCN criteria: *C. odorata*, *C. fissilis* como Vulnerável (VU) y *C. lilloi* (atualmente sinônimo de *C. angustifolia*), em Perigo (EN).

The objective of CITES is to ensure that international trade in species of wild fauna and flora does not constitute a threat to their survival, by applying regulations that allow verification that the export will not harm the survival of the species and that the specimen was not obtained in contravention of current legislation.

To guarantee the regulation of international trade in these species of high commercial value, it is necessary to join efforts at the regional level, which will allow the conservation and sustainable management of wild populations throughout their range in the Neotropics.

In Ecuador there are currently 7 registered species of the genus *Cedrela*: *C. angustifolia*, *C. domatifolia*, *C. fissilis*, *C. kuelapensis*, *C. montana*, *C. nebulosa*, *C. odorata*.

The Ministry of the Environment and Water, committed to the conservation and management of natural heritage resources, has been carrying out various activities to monitor forests, trace forest products and control illegal wood trafficking. Additionally, concerned about the future of forest species, it has begun the construction of regulatory processes for the conservation, control, use and sustainable forest management of these species, along with research processes to understand the current status of these species in the country.

Protective measures for Mahogany (*Swietenia macrophylla*) and Cedar (*Cedrela odorata*) were the Ministerial Agreements for the species in 2007-2009 and 2009-2011 and Memorandum No. MAE-D-2011-0046 (2011) – on the restriction for the issuance of plans and programs for the exploitation of this forest species.

With the help, in part, of ACTO's financial support and with the technical and logistic support of the projects: Forest Control Project (Forestry Department) and Unique System of Environmental Information Project; and with the support of Walter Palacios (Associated INABIO Researcher). From the Ministry of Environment and Water, from the year 2018, they made several field trips to determine the diversity of the genus *Cedrela* present in Ecuador. Additionally, the collections of the main herbariums of Ecuador were studied, being that at the moment they are totally curated.

With these data, the status of the species is preliminarily evaluated with IUCN categories and criteria (data under revision) and the distribution map of the species of the genus *Cedrela* for Ecuador is generated, which will be updated with the data obtained from territorial studies.

In addition, a framework agreement for inter-institutional technical cooperation was generated between the Ministry of the Environment (MAE) and the San Francisco de Quito University (USFQ), to learn about the distribution of the genus *Cedrela* (Cedar) in Ecuador and to collect data for management measures for these timber species.

The Framework Agreement for inter-institutional technical cooperation between the Ministry of the Environment (MAE) and the San Francisco de Quito University (USFQ),

was generated to learn about the distribution of the genus *Cedrela* (Cedar) in Ecuador and to compile data for taking management measures for these wood species, whose main objective is "To establish a strategic alliance to develop research projects related to the study of the species of the genus *Cedrela*, which will allow the generation of information to establish sustainable forest management, which guarantees the existence of the species for future generations". As a result of this agreement, the first study of genetic diversity and population connectivity of *C. odorata* in Ecuador was carried out in 2019.

On the other hand, the Ministry of the Environment and Water, with the support of the REDD for Early Movers Program REM-Ecuador, has foreseen the execution of actions for the generation of information on the species of the genus *Cedrela*, in order to build specific regulatory frameworks that allow their management, conservation and protection, in such a way that their natural permanence is not affected.

The REM Program is a payment for results program within the framework of REDD+ implementation in Ecuador, considering that the country has been recognized through this mechanism for having demonstrated efforts in reducing emissions from deforestation. The REM-Ecuador Program has four operational components, one of which is Forest Governance, in which the development of the activity has been established: "Evaluation and Management of CITES Forest Species", with the purpose of contributing to the fulfillment of the commitments that Ecuador has before the CITES Convention and defining the suitable mechanisms for the sustainable management of the Mahogany and Cedar species.

It is necessary to mention that the activity of the REM-Ecuador Program also includes that related to the species *Swietenia macrophylla*, which is also found in Appendix II of CITES.

The Ecuadorian Single Window for Foreign Trade is an electronic tool through which all users of customs services and, in general, all foreign trade operators, present the requirements, procedures and documents necessary to carry out foreign trade operations. Its operation is based on Executive Decree 285 of March 18, 2010, published in Official Gazette 162 of March 31, 2010, with the general objective of optimizing and integrating foreign trade processes, administered by the National Customs Service of Ecuador.

In export matters, the Gateway MAE system is connected to the Gateway system of the National Customs Secretariat of Ecuador, whose Single Window Export Interface is currently being revised and improved; and the SIB export interface is developed, but will require improvements according to the final version of the VUE interface. The Gateway is a closed interconnection system created for the VUE by means of which the information of the procedures of the VUE is transmitted to the competent institution to grant the authorization, certificate, or enabling document to complete the requirements of a procedure in VUE.

Ecuador is currently updating the regulatory body related to sustainable forest management of natural forests.

According to the competences of the Ministry of Environment and Water, in the case of the genus *Cedrela*, is improving the processes of approval of use of this genus for forest plantations and has an informatics platform in process of strengthening.

Bioamazon Project - Are there forecasts or results of technical studies?

CITES implementation team in Ecuador - In Ecuador, until approximately 2017, five (5) species of the genus *Cedrela* were known: *C. odorata*, *C. montana*, *C. fissilis*, *C. nebulosa* and *C. angustifolia*.

With the studies carried out by the Ministry of Environment and Water of Ecuador and with the support and technical assistance of the specialist of the Meliaceae family for Ecuador, in order to know the diversity of the genus, two more species are now known to be registered for the country: *C. kuelapensis* (distributed in the south of the country in the province of Loja) and describes the species *Cedrela domatifolia* (Palacios et al., 2019) for the eastern flanks in the Amazon.

Currently, the Zoning Map of the Distribution of the species of the genus *Cedrela* for Ecuador is at the internal level of the institution, in its continental part, which also shows the overlapping areas of distribution where various species converge.

To date, and within the framework of the current MAE/DNF-USFQ Institutional Agreement, it has been possible to sample and extract DNA from almost all the species reported in this genus for the country. Access to this genetic resource has been obtained based on the guidelines of the Framework Contract for Access to Genetic Resources that the USFQ maintains in force.

Specifically, it has been corroborated that within the group defined as *Cedrela odorata* according to taxonomic criteria, molecularly there would be more related groups. To determine this assumption, statistical analyses have been carried out with the molecular samples and it has been corroborated that at least one population in the northern zone of the mountains, previously defined as *Cedrela odorata*, is genetically segregated from other populations located on the coast and in the Amazon.

This population of the mountains is very different molecularly and could even be a new species. Likewise, at least for the Northern zone of the country we can recognize, through these same genetic studies, the level of connectivity of the different populations of *C. odorata* for the three regions of continental Ecuador. When the population of the Northern mountains is segregated, it can be seen that in Ecuador the coast and Amazonian groups are more genetically related to each other (with low connectivity anyway), compared to the mountains one, which is shown as a very separate group genetically.

Due to the different diversity and genetic connectivity found in each region under study, it is recommended to carry out differentiated management measures for each of the populations/regions analyzed. This means that we cannot treat all the populations of *Cedrela odorata* as "one" and manage them in the same way for logging. The analyses suggest that the populations of each region analyzed have a highly differentiable genetic diversity among themselves, which would mean that if one of the regions is exploited more than the other (due to the misconception that there is only one population for the entire country) important genes and alleles unique to each region could be lost, which, among other things, could help the individuals of the species tolerate future changes, such as those expected for the climate.

Likewise, and as a result of the genetic analyses mentioned here, it has been possible to observe that even within the populations of the Coastal and Northern Amazon

regions, there would be molecular divergences in different subpopulations of *C. odorata*. This means that it must be further investigated whether nearby species with molecular differentiation are coexisting in these regions and therefore should not be treated as a single species (which must also be taken into account for their management).

Precisely to investigate more about the real diversity of the genus *Cedrela* for Ecuador, to know about the genetic resources of *Cedrela odorata* and to understand its evolutionary relationships with other species, at the moment we are working in the laboratory to obtain the first draft of the phylogeny of this taxonomic group. This work will also allow obtaining a genomic library for *Cedrela odorata* and other related species that could be used for the generation of identification tools that can be applied in the control of extraction and management of this species. All the molecular works summarized here have been developed under the guidelines and control of the aforementioned Framework Contract on Access to Genetic Resources.

Bioamazon Project - What is the context of the exploitation and trade of species of the genus *Cedrela* in your country? Are there links to official data on exploitation and trade that can be shared?

CITES implementation team in Ecuador - The Board of Forests permanently develops special operations, focused on the mobilization and final destination of forest products, as a result of which the following results have been obtained on the control of this species.

The table below summarizes the results achieved in the various forest control operations carried out by the different components:

Table 1. Volume of wood retained in forest control operations.

Year	Final Destination	Fixed Positions	Mobile units	Total Result
2014	81,12	-	34,31	115,43
2015	21,39	-	31,48	52,87
2016	11,85	7,58	19,82	39,25
2017	25,43	-	3,82	29,25
2018	9,88	-	-	9,88
2019	27,22	-	-	27,22
RESULTADO TOTAL	176,89	7,58	89,43	273,9

* figures are in cubic meters (m3), mainly lumber.

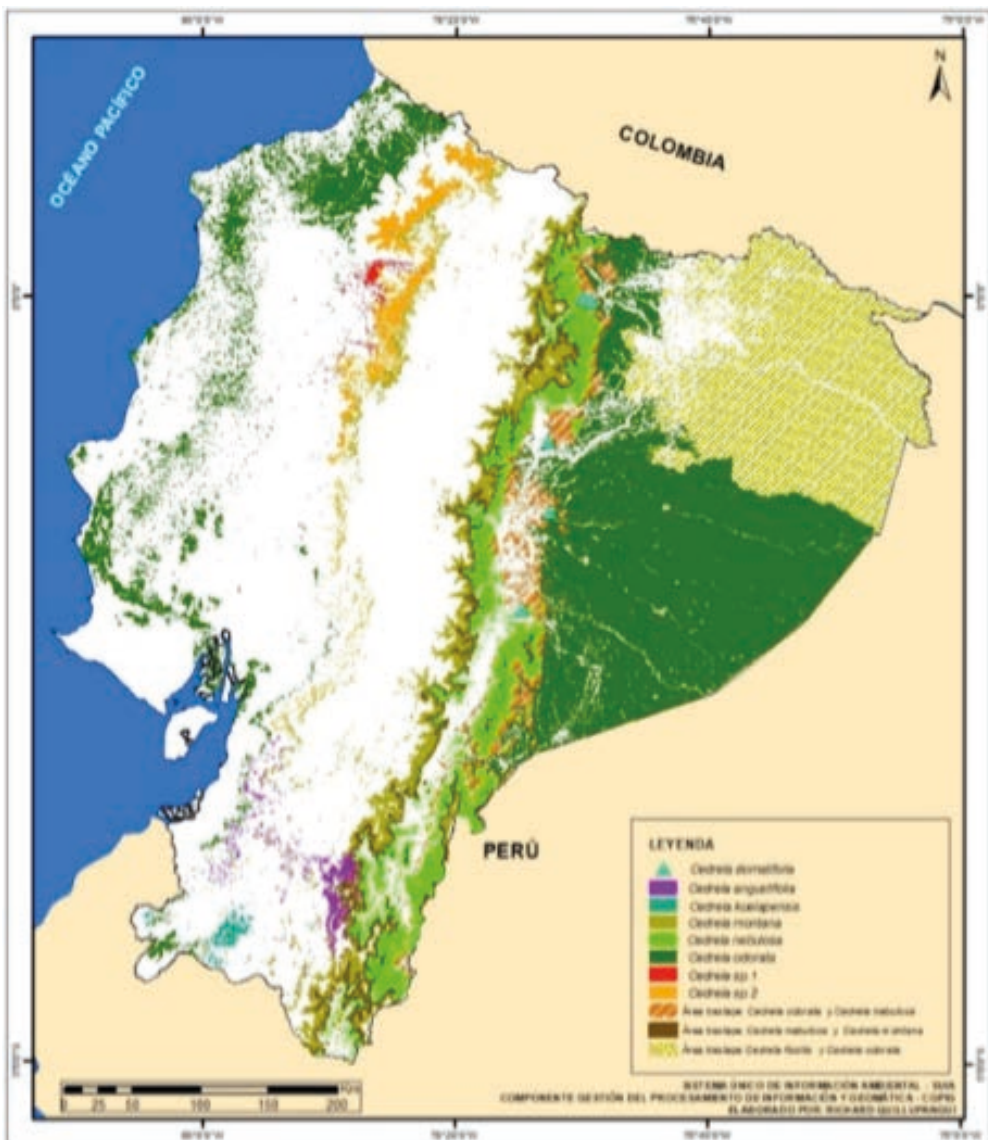
Bioamazon Project - Are there surveys and maps on the distribution of *Cedrela* in your country? How to monitor the populations of the species?

CITES implementation team in Ecuador - Currently the Ministry of Environment and Water has the preliminary Zoning Map of the Distribution of species of the genus

Cedrela for Ecuador (See Figure 1), in its continental part; which also shows the overlapping areas of distribution where various species converge. This map will be updated with the territory studies.

With respect to monitoring, currently this will be done from the Ministry of Environment and Water, with the financial support of the REM-Ecuador Program, which within the Forest Governance Component has prioritized the activity "Evaluation and Management of CITES species". Within this activity, population studies will be developed in the territory of *Swietenia macrophylla* (Mahogany/Ahuano) and some species of the genus *Cedrela*.

Figure 1. Preliminary Zoning Map of the Distribution of species of the genus *Cedrela* for Ecuador.



Bioamazon Project - Would more cooperation between Amazonian countries on this genus be important?

CITES implementation team in Ecuador - There are needs for cooperation regarding:

- Exchange with CITES experts
- Training on Non-detriment Finding (NDF)
- Exchange of experiences with counterparts on control and traceability activities of forest products between Ministries of Environment
- Strengthen research topics and exchange of experiences between Scientific Authorities and government or Administrative Authority officials to take into account this information in decision making.

Bioamazon Project - In what sense would cooperation between countries in the Amazon region be more opportune?

CITES implementation team in Ecuador - There is interest in signing a Framework Cooperation Agreement between countries that have trade in species of the genus *Cedrela* to strengthen the issues of trade and sustainable forest management of these species in the region.

- Generation of specific agreements on capacity building and technical tools.
- Generate mechanisms of regional communication, in which Administrative Authorities are included, as well as Scientific Authorities, control, etc.



Update on the Status of Black Caiman in Guyana

Author: **Adonika Amereisa Spellen**, Pesquisadora, Comissão de Conservação e Gestão da Vida Silvestre da Guiana, Grupo de Especialistas em Crocodilos da UICN.



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ABSTRACT: *The objective of this study is to 1) provide an update on the population status of black caiman in Guyana with a focus on populations along sections of the Rupununi River, and 2) to determine whether the black caiman population in Guyana continues to meet the biological criteria that warrants this species to remain a CITES Appendix I listing or if it can be down listed to Appendix II. These objectives served to answer the question of what is the current population distribution, abundance, structure and trends of black caimans in Guyana and to understand their interactions with the local indigenous communities where they occur.*

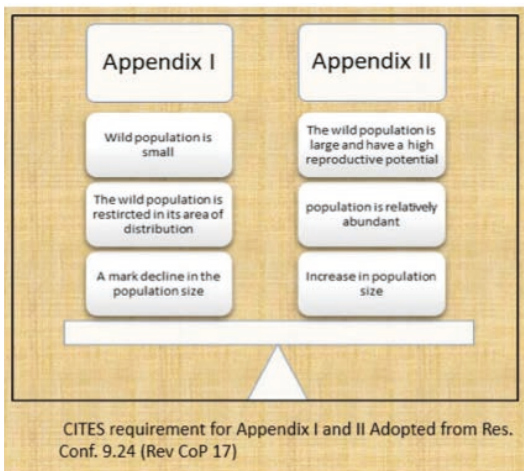
KEY WORDS: *Black Caiman; Melanosuchus niger; CITES; population status;*

Determining whether a species meets the biological criteria to be listed in a particular Appendix under the Convention of International Trade of Endangered Species of wild flora and fauna (CITES) requires consideration of the best available information. Scientific Authorities are tasked with providing information about species status in their country before trade is allowed. For species not traded in high volume, or whose history of trade is not shadowed with extinction level exploitation, it is an easy task. However, for species such as the black caiman (*Melanosuchus niger*) and other crocodylians, the determination of a finding of non-detriment takes a more complex approach. Based on the requirements of Annex 1-Biological criteria for Appendix I, outlined in Res. Conf 9.24 (Rev. CoP 17)¹, interpreting the meaning of “threatened with extinction” and applying the reverse, Appendix I species

¹ <https://cites.org/eng/res/09/09-24R16.php>

could be easily distinguished from Appendix II species. This logic is only meant to be applicable to assess if the situation which led to the listing of the species has changed. For a more accurate representation the initial proposal to place the species in Appendix I should be examined. However, this is not possible for the black caiman because it was listed at the inception of the CITES Convention in 1975.

Figure 1. Comparison of the criteria for listing a species in Appendix I and Appendix II in CITES



Hutton and Webb examined CITES in terms of its ability to eradicate illegal trade using a case study of crocodylians. The study discussed the roles of the resolutions outlined by CITES as measures to combat illegal trade in wildlife, and concluded that conservation plans for crocodylians require both strict conservation management of populations while also incorporating sustainable use (Hutton & Webb, 2002).

The objective of this study is to 1) provide an update on the population status of black caiman in Guyana with a focus on populations along sections of the Rupununi River, and 2) to determine whether the black caiman population in Guyana continues to meet the biological criteria that warrants this species to remain a CITES Appendix I listing or if it can be down listed to Appendix II. These objectives served to answer the question of what is the current population distribution, abundance, structure and trends of black caimans in Guyana and to understand their interactions with the local indigenous communities where they occur.

Study Area

Figure 2. Map of the study area. (sections of the Rupununi and Essequibo River)



The survey was conducted in three rivers in the North Rupununi Wetlands. Namely 100.7 km of the Rupununi rivers which forms a hydrological link to the Amazon basin (Berardi, et al., 2018), 47.3 km of the Upper Essequibo River (Yakato to Primus Inlet), and 36.5 km of the Rewa River. The Rupununi River is one of the main tributaries of the Essequibo River and the Rewa River is a tributary of the Rupununi River. The landscape changes as you travel down river from Yupukari Village where there is a transition from savannah/bush islands to a high mixed primary forest as one approaches the village of Crash Water. The river is defined by fallen trees due to erosion of river banks, clusters of sandbanks and igneous rock embedment.

Figure 3. Black caiman habitat in Guyana.



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The research questioned the suitability of the Appendix I listing of black caimans using Res.Conf. 9.24 (Rev. CoP 17). The methodology was developed around the biological criteria in Annex I which speaks to the biological criteria for a species to qualify for an Appendix I listing. After a thorough examination of the criteria was done and in order to assess Guyana's population in the context of CITES vari-

ous approaches would need to be undertaken to produce a final result. Res.Conf. 9.24 (Rev. CoP 17) urges Parties to review the population size, distribution and the population trends for the species under consideration.

- To answer the question of the population size, a population assessment in the North Rupununi was done. (Fukada, Saalfeld, Webb, Manolis, Risk 2013).
- To answer the question of their distribution, traditional knowledge was consulted
- To answer the question about the population trends, traditional knowledge and an exhaustive literature review on previous surveys on black caimans in Guyana were consulted

The population was assessed in terms of their abundance index, nesting sites and habitat. Three rivers, which included Rupununi, Rewa and Essequibo rivers, were selected and surveys were conducted along various sections. Rupununi had a total of seven survey sites ranging from Katoka to Crash Water Creek. Rewa river (Small Government Pond to Seawall) had a total of three survey sites and for the Essequibo river (Yatoka Pond to Primus Inlet) three sites which included ponds, were surveyed.

The survey covered a total of 184.5 km of sections in the Rupununi, Rewa and Essequibo and 1609 black caimans were observed in total for this survey. Rivers and ponds were included in night time spotlight surveys and day time nest searches. The Essequibo River showed the highest mean encounter rate, followed by the Rupununi River then the Rewa River. The number of caimans spotted were recorded in ten-minute time intervals. A GPS point was recorded

at the end of every 10 minutes. This was done to determine the areas with the highest concentration of black caimans. The mean for the areas varied across sites. A total of eight nests were discovered. The nest descriptions ranged from showing signs of predation, intact active nests and nests from previous seasons. A total of 25 respondents were targeted to assess local utilisation, human-black caiman conflict, and population status from a local perspective. Traditional uses of teeth include charmed necklaces against bad luck and as an anti-venom against snake bites. The skin is believed to possess antifungal properties; it is sometimes burnt and applied to crops.

In 2002, Graham Webb 4.18 ind/km survey results showed a lower encounter rate than Gorzula's survey of 7.4 ind/km in 1990. Between 1990-2002 there were no reports to suggest commercial use of the species. A closer examination of Watkins area of study revealed that counts were done over a 300 km distance and included new study sites in "dead zones" for the species. Dead zones are areas

where the species occurs in low abundance. Peter Taylor on the other hand, limited his survey to a specific higher-intensity area ranging from Katoka Village to Simoni Creek in the Rupununi River (Peter Taylor pers. com 2018). The calculation used by Taylor (2006) was done by taking the average of the pond data and the mean encounter rate of the river data which yielded 16.9 ind/km. Using this same method, the encounter rate for the Rupununi River will equate to 32 ind/km and for the Essequibo River 33 ind/km. While this estimate is evident in some areas, the results also indicated that the population occurs in clusters and the encounter rates can be as low as 1.2 ind/km.

The species does not appear to be commercialised or appear on the local markets. It is offered the highest level of protection under the Wildlife Conservation and Management Act of 2016 and internationally by CITES. These measures combined effectively safeguards black caimans in Guyana from domestic and international trade.

Figure 4. Distribution map of black caimans in South America and the current CITES listing in their various range countries. Information obtained from CITES website.



The findings of this research provide evidence to support that the population of black caimans in Guyana is distributed in the rivers of the North Rupununi Wetlands at encounter rates and size classes which indicates a stable productive population, they are not restricted in their area of distribution, does not seem to face consequential anthropogenic threats and is fulfilling its role in the ecosystem as a top predator. These findings indicate that the population of black caimans in Guyana, now meets the criteria to be listed as an Appendix II species. In order for the species to be listed in Appendix II, a proposal outlining the justification would have to be made to the Conference of Parties in CITES.

Acknowledgement

Appreciation is extended to Anthony Roberts and Ashley Holland of Yupukari Village, Dr Anouska Kinahan, Dr Carlos Iberio, Dr Grahame Webb, Pablo Siroski (IUCN Crocodile Specialist Group, Dr Marissa Tellez (Crocodilian Research Coalition) Charles Stephen and Alex Stewart, without whom this research would not be possible.

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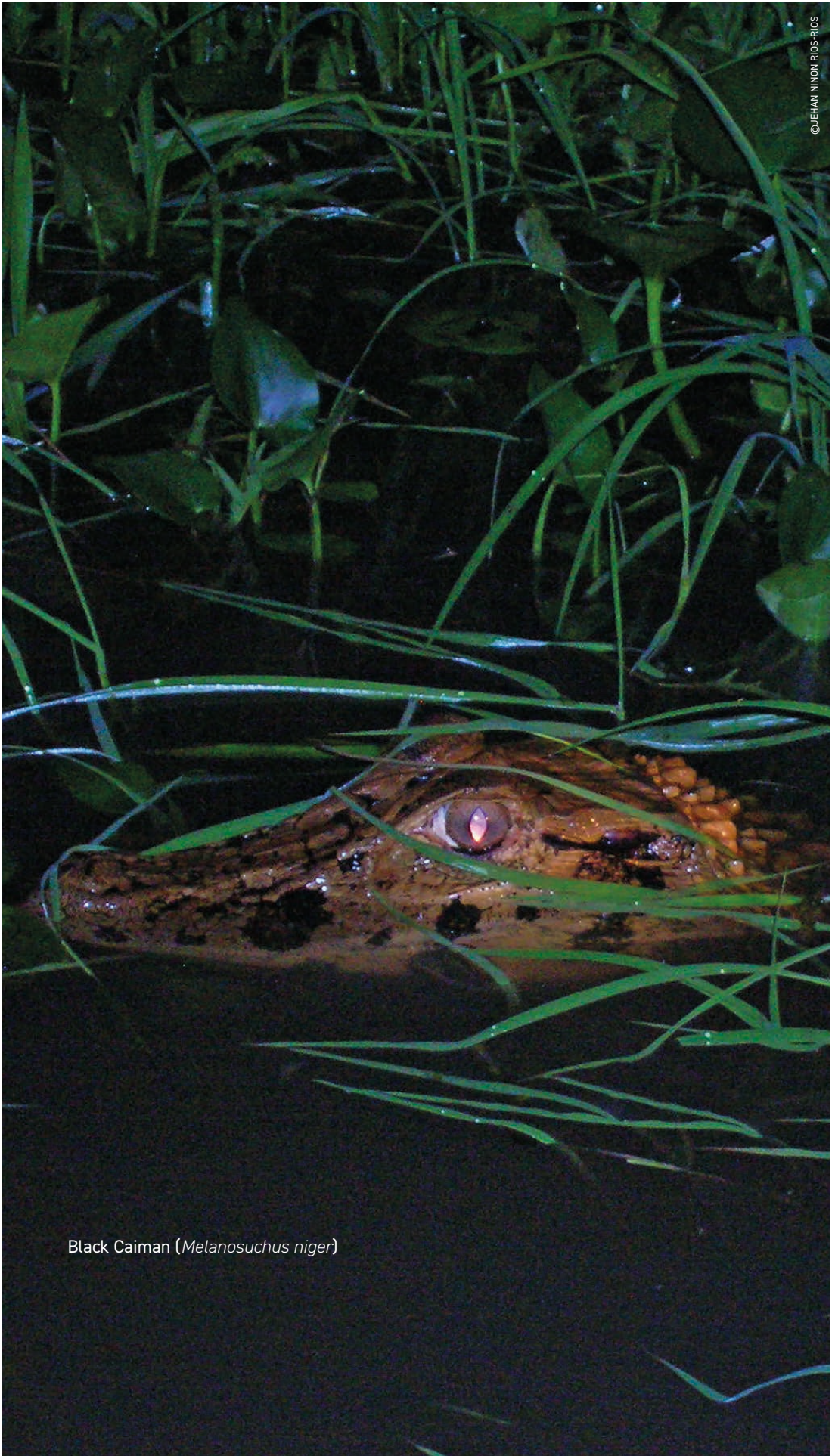
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Black Caiman (*Melanosuchus niger*)

Information on the inclusion of the Cedar in Appendix II of CITES

The National Forest and Wildlife Service (SERFOR) held a webinar on August 14 to inform users that, as of August 29 of the current year, all species of cedar (Cedrela spp.) present in Peru will be included in Appendix II of the Convention on International Trade in Endangered Species of Fauna and Wild Flora (CITES).

Presentations on sustainable wood management and on the genus Cedrela spp. in Peru are available, in Spanish, in this [link](#)

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Servicio Nacional Forestal y de Fauna Silvestre
Ministerio de Agricultura y Riego

Comunicado: declaración de stocks para la emisión de permisos de exportación cites de productos maderables del género cedrela spp (cedro)

Comunicado



Tracking of each tree from the forest to its final destination

Transparency and technology to reduce illegal logging and promote sustainable forest management

Author: **Sarah Crabbe**, Deputy Director Research and Development, Foundation for Forest Management and Production Control of Suriname

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In Suriname each log harvested is followed from a standing tree up to its final destination. This is possible thanks to its unique barcode label number, the ID-card of the log and the Foundation for Forest Management and Production Control (SBB) responsible for forest monitoring. It makes it possible to follow each log from the 1.000.000 m³ produced annually, contributing about 2% to the Gross Domestic product.

Most of Suriname's 93% forest cover is owned by the state and land use licenses are granted through concessions for natural persons or companies and community forest for indigenous and tribal communities. Within a license you can only work when you get a permission for a harvest plan for specific harvest units. In the harvest plan all commercial trees get a number and their locations are saved within the system. When a tree has been harvested within the "open" harvest units, it's getting its barcode label and is included on a register of all the harvested logs. These cutting registers are then uploaded in the Sustainable Forestry Information System Suriname (SFISS). This system is a component of the National Forest Monitoring System (NFMS). The implementation of this system is done with policy guidance from the Ministry of Land Policy and Forest Management, and in a close collaboration

with the multiple stakeholders within the forestry sector. SFISS links this back to the harvest plans, checking if no other trees were felled and creating alerts for anomalies. This crosscheck is used by the forest guards to check in the field making sure the harvesting has taken place as was planned within the harvest plan. Also, a general evaluation of the impact of the operation on the remaining forest stand is made by the forest guards. The information in SFISS is compared and validated with satellite images.

While the above-mentioned steps are conditional for logs to enter the flow, this is just the first step. All other steps in the flow are registered and monitored in SFISS. A log can only move within the flow when it has the correct label status. With the log tracking modules, the private sector and the forest guards can at any time verify the label status and other information. This high degree of transparency is reducing the amount of problems at the source, because the buyer of logs can immediately track these logs in the system. For the forest guards it's even possible to verify this information through a mobile application in remote off the grid locations. Having the full system implemented will make it almost impossible for illegally logged logs to enter the flow.

The objective of SFISS is three fold: 1) When logs are being logged according to the rules they can move through the flow with minimal bureaucratic obstacles and at the highest efficiency, 2) The high degree of transparency and easy access to information for the forest guards and the private sector is contributing to a significant decrease of illegal logging, and 3) Systematic collection of information on the impact of the forestry operations on the remaining forest stand provides a framework to guide companies to work a more sustainable manner.

Currently the country exports more than 90% of the roundwood to China and India, making the market quite vulnerable. SFISS provides a basis for a national certification schema which can open new markets for Suriname. SFISS will also be integrated within the country's Measuring Reporting and Verification System, providing estimates on reduced emissions for REDD+ from the forestry sector.

Through the Bioamazon Project carried out by the Amazon Cooperation Treaty Organization (ACTO) with financial support from the German Development Bank (KfW), all components related to legality will be further strengthened. This includes tying all loose ends in the all existing modules based on the current experience during the implementation. It includes also the development of two mobile application which will speed up the administrative processes, and be a tool for the forest guards to intervene quickly when there is problem with the logs to be exported. Tracking of transport will also be included. Special attention will be given to the *Cedrela Odorata* which is a CITES species, but is also logged frequently within Suriname.

When Suriname started to work on SFISS in a close collaboration with the Tropical Agricultural Research and Higher Education Center (CATIE) and the Inter-American Development Bank (IDB), one of the first activities was a regional exchange with neighboring countries on the topic of timber traceability. This through regional collaboration channels that were build amongst other through the long term '*Monitoring deforestation of the Amazon region*' project. SBB contacted Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) and an exchange visit took place in Brasilia where the Surinamese delegation learnt about National

System for the Control of the Origin of Forest Products (SINAFLOR), the older sister of SFISS. Up-to- today the collaboration continues. Ideally one day, all timber from the Amazon could be tracked through a regional traceability system.

SBB would like to thank ACTO and KfW, CATIE/IDB, WWF and Forest Carbon Partnership Facility (FCPF)/REDD+ for the support to the SFISS -system



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The Baby Manatee of Santa Fe

Thanks to its allies in the communities, the Amazon Rescue Center (CREA), in Peru, rescues and takes care of a manatee

But for that to happen there was an adventure through the waters of the Ucayali River until we reached the community of Santa Fe.

*Author: **Cristian Vélez**, Education and Ecotourism Coordinator of the Rescue Center*

Like every day, the residents of the "Santa Fe" community, on the banks of the Ucayali River, in the Peruvian Amazon, get up when the sky still has that color between blue and violet, before the sun appears and imposes its light and heat. Every morning they go to the river to place their fishing nets. Sometimes they are lucky, others not, and recently they need it more than ever, because due to the pandemic the only store in the community is practically out of supply and prices are through the roof. The closest city is Requena, but it is many hours away from navigation. What falls into the nets will be the food of the day for them and their families who wait anxiously at home with the banana and cooked cassava.

At midmorning they return to check the fishing nets. "*There was luck,*" they think. They notice movement in the nets; however, it is an unusual one, stronger, something is desperately fighting against the nets, trying to break them to escape through the waters of the Ucayali. "*They are not fish*", they comment among themselves. Suddenly the net stops moving, and they attentively observe and timidly see a small black trumpet emerge from the water, breathe and submerge, and one of the fishermen recognizes it and says: "*It is a manatee*".

Tens of kilometers from the "Santa Fe" community, in the Amazon Rescue Center - CREA, in the city of Iquitos, biologists, veterinarians and volunteers work every day to save the animals they shelter: monkeys, alligators, turtles, ocelots, manatees and many more, all of them are rescued. The pandemic has hit hard here too. For months, the doors have been closed, they stopped receiving visitors and that has affected the generation of economic income, however, this has not stopped their work, which continues despite these adversities.

Suddenly, the biologist Juan Sánchez, a member of CREA, receives a call. "*There is a manatee in my community,*" he says. "*I know CREA, I went once when I visited Iquitos, I know that you take care of these animals and also that it is forbidden to catch them, it is why I call you, but you must hurry, I am trying to explain to the people here*" cut the call. Juan immediately informs the team. "*We must organize this rescue as soon as possible, we are against time,*" he mentions; They are always against time when it comes to rescue, the less time a manatee spends in captivity the greater its chances of survival.

Meanwhile in the community, the manatee causes curiosity in the whole town, the fishermen dug a hole, put a plastic and filled it with a little water, children and adults come

to see it, some throw huama or water lettuce, an aquatic plant that serves as food for adult manatees, but the captured manatee is still a baby, it needs breast milk. Fishermen debate the fate of the manatee. *"We have to share the meat,"* one of them says. *"But it is very small,"* replies another. *"Better sell its meat and distribute the money",* this last proposal seems to convince most. *"We should put two stakes through his nose, that's how manatee hunters do,"* someone suggests. Machete in hand, they cut some branches from a tree and began to shape it into stakes which is taken to the pool where the manatee is found, their sentence has already been passed.



Biologists from the Amazon Rescue Center (CREA), rescue manatees in the community of Santa Fe, Peru.

On July 24, two days after the capture of the manatee, the rescue team made up of two members of CREA and one from the Loreto Regional Production Directorate arrived in the community. Charles, the resident who alerted about the catch, waits in the port. *"What happened to the manatee?",* They ask, the answer leaves them stunned. *"They tried to put the stakes, but the manatee would not let it, with its little wings it covered its nose and dropped the stakes",* "It was there when I intervened and told them that it is forbidden to hunt and eat these animals, at first they did not believe me, but when I told them that in Iquitos there is a place where they take care of them and give them their milk, they began to listen to me, so

they decided not to do anything until you arrived". Immediately the rescue team goes to see the manatee, they do a quick check-up and examine its condition, it is a female baby, it has wounds on its back caused by a sharp object, however, it shows a lot of resistance, it is very strong, a good signal.

After reviewing the manatee, the team meets with the community to explain about the species and why they are currently categorized as vulnerable to extinction, but above all they explain the crucial role that manatees play in the Amazon ecosystem. *"The manatees are allies of the fishermen, it is better to have a live manatee in the lake because it could guarantee that there is an abundance of fish,"* they mention. Aquatic plants such as huama or water lettuce have accelerated growth speed and it can cover a body of water very quickly. It is estimated that an adult manatee can consume about 30 kg of these plants daily, which makes it a biological controller par excellence, in addition, with their feces and urine, they provide essential nutrients for the development of phytoplankton and zooplankton, bases of the food chain of aquatic ecosystems. The manatee, whose scientific name is *Trichechus inunguis*, is a species of aquatic mammal exclusive to the Amazon, which is endemic to the region and is listed on Appendix I of the Convention on International Trade in Endangered Fauna and Flora (CITES).

Finally, after the meeting with the community, the fishermen decide to voluntarily hand over the baby manatee, the protocol indicates that it must be transferred



Biologists from the Amazon Rescue Center (CREA) examine the manatee in the community of Santa Fe, Peru.

immediately to CREA to begin its rehabilitation process, however, there is a commitment to return to the community when pass the pandemic to work hard on environmental awareness and education. After what appears to be endless hours of travel, around 1:00 a.m., they finally arrive at CREA, and the baby manatee is placed in the quarantine area, where her wounds are healed and she is fed a special milk without lactose, for two years she will take this formula that will replace breast milk and the biologists who take care of it will give her the love she need.

This rescue makes us reflect on the important role that rescue centers play, which are spaces to educate, sensitize and inspire. And this opportunity to assess the species not only occurs with the hundreds of visitors to the Center, but also with an awareness program in the communities.

In other circumstances, it would have been impossible, for CREA members, to find out about this manatee, however, thanks to the fact that they have already worked with nearly 200 thousand people, who have known its conservation message for more than 12 years. We can say that they have allies, who are now the saviors of the Amazonian manatees.

At the beginning of this project, in 2007, they were fortunate that their message was heard by Daryl Richardson, director of *The DallasWorld Aquarium Zoo - DWAZoo*, who has become a fundamental piece for the rescue of various species Amazonians since then, until now 51 manatees, and 25 of which have already been released into the wild. DWA-Zoo's support is crucial for them to continue operating and rescuing species during these pandemic months. In addition to this, there are constant supports of the Peruvian Amazon Research Institute - IIAP and, more recently, the Amazon Cooperation Treaty Organization (ACTO), through the Bioamazonia Project. Thanks to these conservation allies, this manatee will now have an improved quarantine and rehabilitation area.

The Amazon is the largest region in Peru, currently facing many challenges which have been aggravated by the pandemic, there are many places of difficult access where the Amazonian population survives as it has been doing for generations, using the resources provided by the forest. However, factors such as pollution, overexploitation, illegal logging, monocultures, among many others, have made resources increasingly scarce and that has caused many species to begin their decline towards extinction, and given this reality, it is required articulator work from governments, schools, communities and institutions to act towards the sustainable future of the Amazon.

On the agenda

INVITATION

Países Miembros de la OTCA: Bolivia, Brasil, Colombia, Ecuador, Guyana, Perú, Surinam, Venezuela

Organizado por: OTCA, SAM

COORDINACIÓN DE INTERVENCIÓN EN SALUD PARA PUEBLOS INDÍGENAS EN LA TRIPLE FRONTERA DE PERU, BRASIL Y BOLIVIA (MAP) FRENTA A LA EMERGENCIA DEL COVID-19

WEBINAR IV

Finalidad: presentar la experiencia de coordinación de intervenciones en salud para pueblos indígenas en la región de la triple frontera de Perú, Brasil y Bolivia (MAP) frente a la emergencia del COVID-19, promoviendo la articulación de una visión compartida y una potencial agenda común para las acciones de gestión del COVID-19.

PARTICIPANTES

- Representantes de los Ministerios de Salud y de asuntos indígenas del Bolivia, Brasil y Perú.
- OPS SAM
- Personas interesadas

Día: 04 de septiembre de 2020
Hrs: 11:00 - 13:00 Hora de Brasilia

YouTube

También se transmitirá via YouTube
<https://www.youtube.com/user/OTCAvideo/videos>

The Amazon Cooperation Treaty Organization (ACTO) and the Subregional Program for South America of the Pan American Health Organization (PAHO SAM) invite to the fourth webinar of the Indigenous Health series, with the theme to

Coordination of Health Interventions for Indigenous Peoples in the Triple Border of Peru, Brazil and Bolivia (MAP) in the face of the COVID-19 Emergency

to be held on

September 4, 2020, from 11:00a.m. to 13:00p.m

(Brasilia Local Time)

on the OTCA channel on YouTube

<https://www.youtube.com/user/OTCAvideo>

Forest fires in the Amazon

More than 70 representatives of government entities from the Amazonian countries responded to the ACTO call to discuss the issue of forest fires

The virtual meeting on July 24 was attended by representatives of the eight Amazon countries, through their Ministries of Foreign Affairs, Ministries of the Environment and other institutions.

It was agreed on the immediate work arrangement and on the search for mechanisms of cooperation and joint action to prevent and mitigate forest fires.

[*Know more \(Spanish only\)*](#)

Panel at the Leticia Pact Summit

Preceding the political dialogue from the heads of state, the Second Presidential Summit of the Leticia Pact for the Amazon held a panel of experts in the first follow-up on the topic 'Innovative solutions for the conservation and sustainable development of the Amazon'.



“The Amazon plays a decisive role in the Region, in the reactivation and recovery after COVID 19. This recovery has to be based on innovative and ambitious actions considering economic, environmental and social equity,” said Alexandra Moreira, Secretary General of ACTO.

[Know more](#)

Biological diversity and ecosystem services

ACTO and the representatives of the eight Amazon countries, through their Ministries of Foreign Affairs, Ministries of the Environment and other entities agreed to advance in the development of a regional assessment on biological diversity and ecosystem services in the Amazon Region under the conceptual format and methodological of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

[Know more \(Spanish only\)](#)



Publications

Analysis on Loss of Fish in the Amazon

The Food and Agriculture Organization of the United Nations (FAO) has launched an analysis on the loss of fish in the Amazon.

The [Estimaciones de Pérdida de Pescado en la Amazonia \(Brasil, Colombia y Perú\)](#), published in Circular de Pesca e Acuicultura n° 1198, of 2020, demonstrates the main causes, natural or not, of the loss of fish in different stages and makes recommendations to reduce and avoid the enormous losses, due to the lack of application of the principles basic handling and hygiene of fish.

The report is available in Spanish [here](#).

2020 World Wildlife Crime Report

The trafficking of wildlife is increasingly recognized as both a specialized area of organized crime and a significant threat to many plant and animal species.

The second edition of the [World Wildlife Crime Report](#) takes stock of the present wildlife crime situation with a focus on illicit trafficking of specific protected species of wild fauna and flora, and provides a broad assessment of the nature and extent of the problem at the global level.

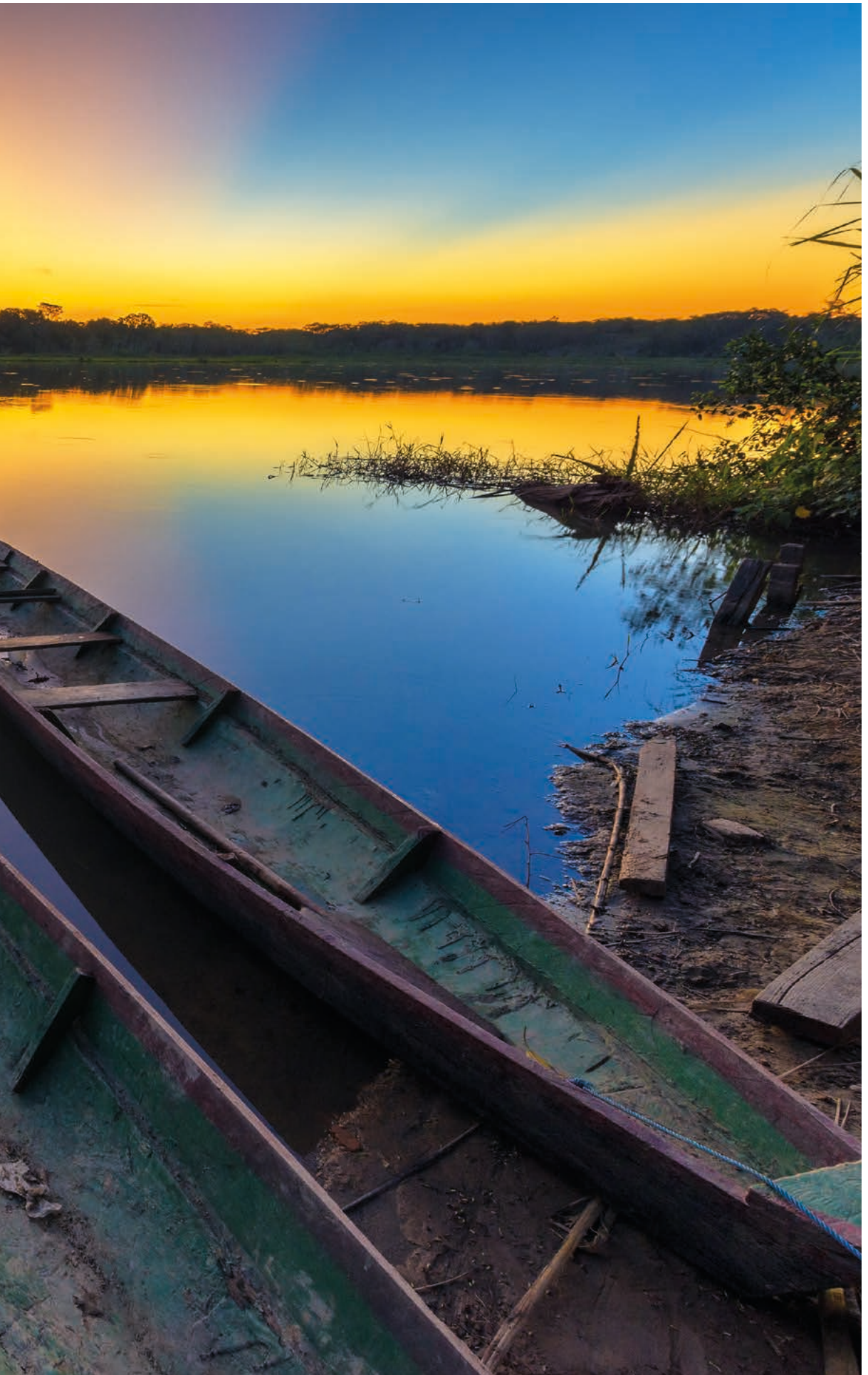
It includes a quantitative market assessment and a series of in-depth illicit trade case studies, including rosewood. In addition, value chains and illicit financial flows from the trade in ivory and rhino horn is presented. This report was released by United Nations Office on Drugs and Crime.

Report available in English [here](#)



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Sunset in the Amazon.
Madidi National Park, Bolivia



About the Bioamazon Project

Bioamazon is a **regional project in the ACTO's framework** that contributes to the conservation of **Amazon Biodiversity**, especially the species included in the CITES Convention.

To this end, **it seeks to increase the efficiency and effectiveness of the management, monitoring and control of species of wild fauna and flora threatened by trade** in ACTO member countries: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

It is part of a Cooperation Agreement between the Federal Government of Germany and ACTO with implementation through the KfW.

Ficha Técnica:

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Bolivia



Brazil



Colombia



Ecuador



Guyana



Peru



Suriname



Venezuela