

BIOAMAZON NEWSLETTER



BIOAMAZON PROJECT

Conservation of species threatened
by unsustainable trade



ACTO

Amazon Cooperation
Treaty Organization

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**Bolivian researchers
describe a possible new
tarantula species**

**ACTO's contributions for
the implementation of
CITES**

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

Dear readers,

The Permanent Secretariat of the Amazon Cooperation Treaty Organization (PS/ACTO) is pleased to invite you to follow the program of the 19th Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Within the framework of this Conference, in November, two side events will be held to discuss the work carried out for the benefit of the Amazon. On the occasion, there will also be the launch of the Forest Module of the Amazon Regional Observatory and the presentation of the Technical Report on Illegal Trafficking of Five CITES Appendix I Species Emblematic for the Amazon Region.

Furthermore, in this Newsletter n. 17 you will find news related to activities in September and October, including cooperation meetings at the 6th Korea-LAC Business Summit, where climate change, water resources and the potential for regional cooperation, as well as investment and trade opportunities, were discussed.

Finally, you are invited to learn about the details of Project Bioamazon's monitoring visits to Bolivia and Guyana. In the Amazon Countries Session, we share information about a group of scientists describing a possible new species of tarantula in Bolivia, and a summary of the scientific papers on wood identification techniques and purity assessment of rosewood oil, published with the participation of researchers from the Forest Products Laboratory of the Brazilian Forest Service (LPF/SFB). This research was partially supported by the ACTO Bioamazon Project.

Good reading.

Alexandra Moreira López

Secretary General

Amazon Cooperation Treaty Organization

ACTO's contributions for the implementation of CITES in Amazonian countries will be presented at the 19th Conference of the Parties in November

Among the main topics are the Amazon Regional Observatory and the Technical Report on Illegal Trafficking of Emblematic Species to the Amazon

The Amazon Cooperation Treaty Organization (ACTO) will participate in the 19th Conference of the Parties of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in which it will present the results of projects and the actions aimed at supporting the implementation of CITES in the Amazon Region.

Of particular relevance is the presentation of the Amazon Regional Observatory (ARO), with emphasis on the CITES Module, which provides information on central management issues related to the topic in ACTO Member Countries, such as lists of Amazonian CITES species; permits; exports, imports, reimports and species repatriations; and a panel on illegal species trafficking.

The contents of this Thematic Module have been produced mainly from national information systems of ACTO Member Countries in collaboration with their respective institutions and official authorities, as well as data from external sources such as CITES and the portals of the Global Biodiversity Information Facility (GBIF) and the International Union for Conservation of Nature (IUCN), among others.

The side event *Implementation and Results of the Amazon Regional Observatory: Effective Tools for the Management, Monitoring and Control of Threatened Species of Wild Fauna and Flora Species Threatened by Trade in the Amazon Region* will be held on November 24, from 12:15 to 14:00 hours, in the Caribbean Room 7 of the Panama Convention Center.

Among the speakers are Ivonne Higuero, CITES Secretary General; Daniel Wolf, representative of the German Federal Agency for Nature Conservation (BfN); a representative of the KfW and authorities and technicians from Brazil, Guyana and Venezuela.



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On behalf of ACTO, Carlos Salinas, Director General and Head of Forestry; Mauro Luis Ruffino, Coordinator of the regional project for the management, monitoring and control of wildlife species threatened by trade (Bioamazon Project) and the Amazon Regional Observatory (ARO) will be present. Additionally, Natalia Méndez Ruiz-Tagle, consultant for Bioamazon Project and the ORA, will present the Technical Report on Illegal Trafficking of Five CITES Appendix I Emblematic Species for the Amazon Region.

Tree species

ACTO, through the Bioamazon Project, since 2020 has been supporting its Member Countries in the implementation of CITES standards. This support has been oriented towards the development of Non-detriment Findings (NDF), as well as to the promotion of the exchange of experiences among the eight ACTO Member Countries. Bilateral technical advisory meetings were also held with the purpose of strengthening the capacities of the CITES Authorities (Management and Scientific) and the Forestry Authorities of the Amazonian countries.

During the side event *Tree species: Amazonian countries with the support of ACTO coordinate efforts for the implementation of CITES*, to be held on November 22, from 17:15 to 19:00 hours, in the Isthmus 1 Room of the Panama Convention Center, the proposed Amazon Regional Action Plan for the implementation of CITES will be presented, as well as ACTO's experience in strengthening the regional governance structure.

CITES and forestry authorities from Amazonian countries, such as Fabiola Nuñez, representative of Peru; David Veintimilla, representative of Ecuador; and Margarita África Clemente Muñoz, CITES expert, among others, will attend the event. In addition, the Forestry Module of the Amazon Regional Observatory will be launched.

For further information on the ACTO program at CITES CoP 19, click here <http://otca.org/en/acto-at-cites-cop-19/>

The Bioamazon Project visits Bolivia to discuss a technical agenda

Bolivia presented the improvement of Bolivia's National Biodiversity Information System (SINB) and its interconnection with other systems, including the CITES Electronic Permit System.



ACTO'S PHOTO GALLERY

Teams from Bolivia and the Bioamazônia Project met for a technical agenda on the Project and the Amazon Regional Observatory

Bolivia hosted the official mission of Bioamazon Project from September 19 to 24. It was the last of the eight ACTO Member Countries to receive the Bioamazon Project team for a dialogue on the results of the Project's implementation and to become acquainted with the Amazon Regional Observatory, in detail. A field visit was also organized to learn about the work of the Matusha Aidha Association with the management and use of the alligator (*Caiman yacare*).

Representatives of the institutions involved in the execution of the Bioamazon Project and the ARO implementation participated in the opening meeting, held at the offices of the Vice-Presidency of the Plurinational State of Bolivia, namely: Ministry of Environment and Water (MMAYA), National Museum of Natural History (MNHN), National Service of Meteorology and Hydrology (SENAMHI), Social Control of Forests and Land Authority and GeoBolivia.

Marcelo Zaiduni, director of GeoBolivia, welcomed the visit of the Bioamazon Project team, and recognized the value of the visit for the opportunity to learn firsthand ACTO's developments within the framework of the Amazon Regional Observatory (ARO). GeoBolivia is an initiative of the vice-presidency of the Plurinational State, to provide relevant, harmonized and quality geographic information to institutions and users in general, in order to support the social, economic, and environmental development of the country.

Mauro Ruffino, Coordinator of the Bioamazon Project and the ARO, expressed his gratitude to the Director of GeoBolivia for the inter-institutional coordination provided for the meeting. Subsequently, the "ARO Workshop" was held, in which different presentations were made covering aspects of the historical development process, conceptual aspects, tools and procedures, interoperability mechanisms, among others.

In addition, videos of the CITES, Biodiversity and Forestry modules were presented. During the question and answers session, congratulations were given to ACTO for the work carried out with the implementation of the ARO.

During the afternoon session, a meeting "Bioamazon Project Workshop" was held at the premises of the Ministry of Environment and Water (MMAYA), to review the progress and effectiveness of the implementation of the activities of the Project's three components. The meeting was attended by the Vice-Minister of Environment, Biodiversity, Climate Change and Forestry Management and Development, Magin Herrera López, and the Director General of Biodiversity and Protected Areas (DGBAP) and Project Focal Point, Omar Sharif Yumaa, as well as technicians from the DGBAP, the General Directorate of Forestry Management and Development (DGGDF) and the National Museum of Natural History (MNHN). Mr. Rodrigo Aguilar from GeoBolivia also attended the meeting.

Henry Taby, from Seth Solution, a consulting firm of MMAYA, presented the progress made in improving Bolivia's National Biodiversity Information System (SINB) and its interconnection with other systems, including the CITES Electronic Permit System (<https://citesbolivia.mmaya.gob.bo/>).

Field Trip

Thursday, September 22, the Bioamazon Project team traveled to San Buenaventura, province of Abel Iturralde, department of La Paz, to get acquainted with the management and exploitation experience of the alligator (Caiman yacare) of the Tacana Indigenous Peoples by the Matusha Aidha Alligator Handlers' Association. Among those participating in the event were the Bolivian Ministry of Environment and Water (MMAY), the National Protected Areas Service (SERNAP), the Rurrenabaque and San Buenaventura governments, the Indigenous Council of the Tacana People, as well as representatives of the Ese Ejja Indigenous People of the Eyiyoquibo community and the Wildlife Conservation Society (WCS).

The Matusha Aidha Association explained how the alligator (Caiman yacare) is managed and exploited, as well as described their experiences during 15 years of work, such as the study on biology, crop monitoring, the technical regulations for the use of alligator meat (mobile slaughtering machine) for the National Agricultural Health and Food Safety Service (SENASAG); and the transformation of alligator meat derivatives (chorizos – alligator sausage). Such activities contribute to biodiversity conservation by maintaining stable alligator populations, indigenous territorial management, and also generate economic benefits for the communities of the Tacana Indigenous People, improving their quality of life.

Participants had the opportunity to learn about the processing of alligator meat for sausage production, whose equipment was acquired through the Bioamazon Project.

The Matusha Aida Association explained the use of second-rate alligator meat from the arrival of the meat to the vacuum-packed product for marketing, adding value with all the required quality assurance measures. Besides encouraging the communities to take care of the alligator, it is also a source of income that aims to improve the quality of life of the people who carry out this work.

"We are pleased to see the work of the Matusha Aida Association and to confirm that the support of the Bioamazon Project was very important for this community through the purchase of the equipment, with funds from the German financial cooperation through the KfW," said Mauro Ruffino.



Guyana hosted a visit from the Bioamazon Project team

Two workshops were held with the Guyanese team

From August 29 to September 2, the Project Bioamazon/ACTO team visited Guyana following a work agenda including the holding of two workshops focused on the assessment of the execution of Project Bioamazon/ACTO and for the presentation of the Amazon Regional Observatory (ARO), respectively.

The opening ceremony was held at the facilities of the Environmental Protection Agency (EPA) of Guyana with a welcoming speech by Alona Sankar, National Technical Focal Point of Project Bioamazon/ACTO, who referred to the objective of the technical visit.

Participants in the opening session included technicians and process coordinators from institutions directly involved in the implementation of the Project at the national level, such as the Wildlife Conservation and Management Commission (GWCMC), the Forestry Commission (GFC), the Environmental Protection Agency (EPA), the Hydrometeorological Service (Hydromet), and the Ministry of Foreign Affairs of Guyana.

Junior Alexander, the ACTO focal point of the Ministry of Foreign Affairs, took the floor to express his gratitude for the visit of the Project's technical mission, and highlighted the importance of the investments made by the Project to improve biodiversity



ACTO'S PHOTO GALLERY



ACTO'S PHOTO GALLERY



ACTO'S PHOTO GALLERY

management and CITES implementation, as well as the importance of implementing the ARO to support information management in Guyana; concluding the opening session with his intervention.

An introductory workshop was then held to introduce the ARO and its tools and interoperability procedures. A dialogue was also held with the participants to explore

on the one hand, their understanding of the ARO and, on the other hand, to learn about their expectations with regard to the information, data, and services/products that the ARO should contain. In their interventions, participants emphasized that the ARO should be a useful tool to support not only political decision-making, but also to support learning and/or research processes in universities and be a practical tool to support the formulation of Non-detriment Findings (NDF) for species listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

During the afternoon session of the Project Bioamazon/ACTO workshop, the activities implemented, and achievements reached within each of the three components of the Project were presented.

Based on a questionnaire, the Project's technical team identified new equipment requirements, such as new servers and an electric power generator to strengthen the achievements of Component 1. A presentation was made on the results of the assessment of the compliance indicators, which allowed the team to review, validate, and complement the information presented.

Field trip

The Guyana Wildlife Conservation and Management Commission, through its Licensing and Permitting Division (L&PD), is responsible for managing the trade of wildlife in Guyana. In this regard, the GWCMC recently launched its Domestic Wildlife Licensing System. Under the Domestic Licensing System, the following persons would need to obtain licenses: trappers, middlemen, wildmeat vendors, wildlife breeders, wildlife collectors (of both plants and animals), researchers, recreational hunters, restaurants that sell cooked wild meat.

Funding was received from the Bioamazon Project to undergo capacity building for managing the domestic licensing system.

This field trip will be conducted for wildlife users in Linden and communities in the Demerara River to undergo the application process and be granted licenses as well as to record interviews on the licensees' perspectives on the domestic licensing system which will contribute to a documentary on the impact of the Bioamazon Project in Guyana.

On Thursday, September 1, Bioamazon Project and Guyana Wildlife Conservation and Management Commission teams depart for Linden, at Lichas Hall where licensing of wildlife users took place from 09:00 to 16:00, in a walk-in process with wildlife users coming and going throughout the course of the day.

On Friday, September 2, the team departed from Linden to conduct licensing of wildlife users along the Demerara River at the Amerindian villages of Muritaro and Malali. A speed boat was used for this trip and several stops were made along with the river to facilitate licensing of wildlife users as well as to interview on the licensees' perspectives on the domestic licensing system. Then, they went back to Georgetown.

ACTO at CITES COP 19

ACTO invites you to participate in its programming in the 19th Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The side events will be broadcast on the ACTO channel on YouTube.

Find out about the Programming at <http://otca.org/en/acto-at-cites-cop-19/>



The poster features a background of a lush green forest with a large tree trunk on the left and a canopy of leaves on the right. In the center, there are illustrations of a jaguar, a toucan, and a parrot. The ACTO logo is in the top left, and the CITES COP 19 PANAMA 2022 logo is in the middle left. The main title 'ACTO AT CITES COP 19' is in large green letters, with 'Side Event' and 'Tree species: With the support of ACTO, Amazonian countries coordinate efforts to implement CITES' below it. The date and time 'Tuesday 22 Nov 2022 17:15-19:00' are shown with icons. The location 'Istmo 1 Panama Convention Center Panama City' is indicated with a location pin icon. A QR code is labeled 'Find out more'. A 'Live broadcast' icon with the YouTube logo and 'OTCAvideo' is also present. At the bottom, logos for BIOAMAZON PROJECT, ACTO, German cooperation, and KFW are displayed.

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Amazon Cooperation Treaty Organization

CITES | **COP 19 PANAMA 2022**
Conferencia Mundial sobre la Vida Silvestre

ACTO AT CITES COP 19
Side Event
Tree species:
With the support of ACTO,
Amazonian countries coordinate efforts
to implement CITES

Tuesday 22 Nov 2022 17:15-19:00

Istmo 1
Panama Convention Center
Panama City

Find out more

Live broadcast
OTCAvideo

BIOAMAZON PROJECT
Conservation of species threatened by unsustainable trade

ACTO
Amazon Cooperation Treaty Organization

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by
KFW



ACTO AT CITES COP 19

Side Event

Implementation and achievements of the Amazon Regional Observatory

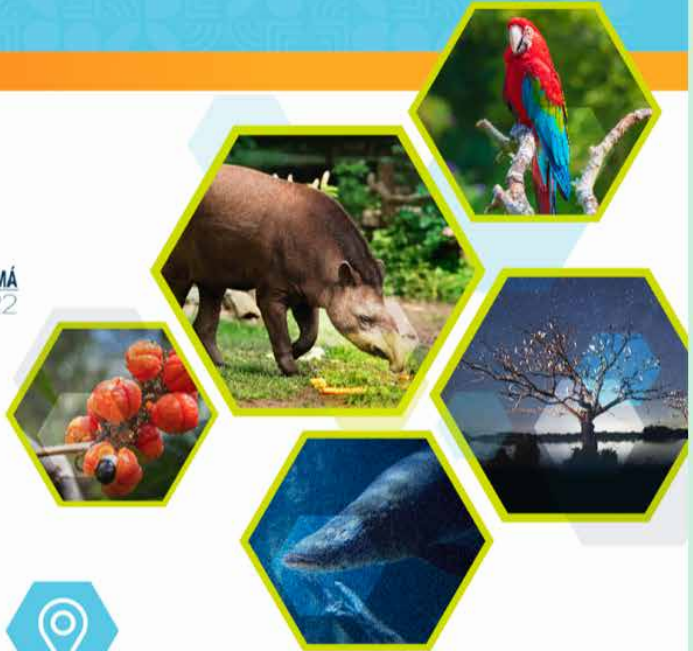


24 Nov 2022

12:15-14:00



Caribe 7
Panama
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Panama City



Find out more



Live broadcast
 OTCAvideo



The ACTO Secretary General, during the thirty-ninth session of ECLAC, draws attention to the fact that the Amazon region is not a middle-income region

Alexandra Moreira highlighted the study being developed by the ACTO and ECLAC with the aim of providing more regionalized information, exclusively on the Amazonian territory in the framework of sociodemographic indicators.

The Secretary General of ACTO, Alexandra Moreira, in the context of her participation at the Thirty-ninth session of the Economic Commission for Latin America and the Caribbean (ECLAC), met with the Executive Director of the Latin American and Caribbean Demographic Center (CELADE) of ECLAC, Simone Cecchini. On the occasion she highlighted the study "Sociodemographic Inequality Gaps in the Amazon Region: A Proposal of Indicators for Visibility".

This study is being conducted by ACTO and ECLAC with the purpose of providing regional information, exclusively on the Amazon territory, based on socio-demographic indicators with a multidimensional vision, evidencing the fact that the Amazon region should not be classified as a middle-income region. Alexandra Moreira sustains that, owing to its very nature and development levels, the Amazon region cannot and should not be compared with the national GDP levels of its countries. The study Sociodemographic Inequality Gaps in the Amazon Region is part of the "Project to Support the Elaboration and Implementation of the Amazonian Strategic Cooperation Agenda (ASCA)", which is being executed as part of the trilateral South-South technical cooperation established between the Brazilian Cooperation Agency (ABC) and the ACTO. Referring to this issue, on October 25, during the presentation of the high-level panel on international cooperation in the face of a new multilateralism, several Latin American and Caribbean countries stated that the middle-income country classification poses a barrier to access to international cooperation, as it is being assessed using the sole *per capita* income indicator, not in accordance with the multidimensionality that should be considered in the variability of indicators.

In her remarks, the ACTO Secretary General referred to the joint work being carried out within the framework of regional cooperation by the eight Amazonian countries in their different working spheres. She also stressed that in no way should the Amazon region be understood as being of middle-income and that it requires more funding to be able to address the priorities established by the Member Countries.

“In addition, we must contribute to the fulfillment of international commitments in the context of multilateral agendas, such as the 2030 agenda and Climate Change and Biological Diversity, both of which have renewed commitments over the coming months as the international negotiations conclude,” she said.

She also expressed her agreement with the relevance of ECLAC’s role in working on a new narrative and methodology to ensure that developing countries may not be affected by the middle-income countries’ classification. However, whatever work is done in this regard, it must yield results in a timely manner, to meet the short deadlines set in the agendas and commitments of the countries. She also emphasized how urgent it is that international funds and cooperation be able to provide timely and continuous financing. “In fact, there are blocs of countries such as ACTO acting jointly, but when faced with projects of such an extensive dimension as is the case of the Amazon, funds are insufficient, so it is necessary for international cooperation windows to consider expanding and opening mechanisms to work from a regional perspective and action”, concluded Alexandra Moreira.

The Thirty-ninth session of ECLAC is held from October 24 to 26 in Buenos Aires, Argentina.



FOTO: BANCO DE IMAGENS/OTCA

Alexandra Moreira, Secretária Geral da OTCA, em evento da CEPAL

ACTO Secretary General participates in the 6th Korea-LAC Business Summit

Organized by the Inter-American Development Bank (IDB), the Korean Ministry of Economy and Finance (MOEF), the Export-Import Bank of Korea (Korea Eximbank) and the Korea Trade and Investment Promotion Agency, the 6th Korea-LAC Business Summit is taking place on September 29-30 in Seoul, South Korea.



FOTO: BANCO DE IMAGENS/OTCA

ACTO Secretary General, Alexandra Moreira, took part this Thursday, September 29, in the 6th Korea-LAC Business Summit. This event seeks to expand and strengthen commercial bonds among Korea and Latin American and Caribbean countries and to improve understanding of investment and trade opportunities.

Alexandra Moreira was panelist in session III of the plenary: "Facing Climate Change: Coordinated Response to the Crisis". In her presentation, she highlighted how the Amazon Region has been integrating the issue of climate change into the work agenda of ACTO.



FOTO: BANCO DE IMAGENS/OTCA

In her presentation, Moreira stated that climate change in the Amazon region poses even more serious problem in terms of temperature increase, which is reflected in the retraction of Amazonian tropical glaciers, the reduction in the local water supply, and changes in the frequency and seasonality of floods and droughts that affect territorial management planning, food production and energy generation.

“We must urgently include climate change in all our actions, and with a great need to adapt actions and information to a territory, whose potential and attributes are continuously being discovered. Besides, its 44 million inhabitants are directly acquainted with the concept and are regrettably experiencing the impacts of climate change”, emphasized Moreira.

The Intergovernmental Panel on Climate Change (IPCC) estimates that the global average temperature value is 1.1 °C, with the highest value in the Amazon Region, reaching more than 1.2 °C. In addition, there are scientists who indicate that 1.5 °C is already being experienced in the region.

Organized by the Inter-American Development Bank (IDB), the Korean Ministry of Economy and Finance (MOEF), the Export-Import Bank of Korea (Korea Eximbank) and the Korea Trade and Investment Promotion Agency, the 6th Korea-LAC Business Summit is taking place on September 29-30 in Seoul, South Korea.

Watch the full speech of ACTO Secretary General at the 6th Korea-LAC Business Summit here <https://youtu.be/0uS1qgLTbms>

ACTO meets with the Korea Water Resources Cooperation (K-Water)

On the occasion of the meeting with K-Water, Alexandra Moreira outlined the work that the Amazonian countries are developing within the framework of ACTO, particularly the initiatives and projects in the area of water resources.



ACTO Secretary General, Alexandra Moreira, met in South Korea with the Vice President of the Korea Water Resources Cooperation (K-Water) and the Research Director of the K-Water Institute, Dr. Nohyuk Park, along with his management and technical team.

In the context of an invitation from the Inter-American Development Bank (IDB), Alexandra Moreira is in Seoul participating in the 6th Korea-LAC Business Summit while holding meetings with Korean institutions potentially suitable for regional cooperation on issues relevant to ACTO, such as the integrated management of water resources in the Amazon Basin, water security, among others.

On the occasion of the meeting with K-Water, Moreira outlined the work that the Amazonian countries are developing within the framework of ACTO, particularly the initiatives and projects in the area of water resources. She also shared information

about the Amazon Regional Observatory (ARO) and the Water Resources Situation Room, emphasizing the important effort in the development and implementation of the Amazon Hydrological Network and the Water Quality Monitoring Network.

On the other hand, the K-Water presented the work accomplished in the management of water resources at the national level and sector modernization with the implementation of its centers for applied research on water quality, monitoring, early warning systems, flood and drought control, modeling and scenario production, Nexus approach management, information automation, innovation in resilient infrastructure for drinking water supply and sanitation, among other activities, all of which have positioned the agency as a high-level professional and excellence agency.

This meeting provided an opportunity to coordinate potential technical cooperation between the two institutions on water resources issues for the region.

The Korea Water Resources Corporation (K-Water) is the governmental agency for comprehensive water resource development and providing both public and industrial water in South Korea.

It is Korea's leading public organization majoring in water resources management, preventing water disasters and providing clean water through its innovative water management technologies, based on its 50-year background, associated with IWRM and SWM (Smart Water Cities). K-water is one of the world's leading entities in urban planning SWM and digital transformation (AI & Big Data), endowed with its cutting-edge water technologies.

The K-Water Institute develops effective water management techniques and was restructured as a center of five research institutes to develop effective water management techniques and present a vision for future water management.



The Peruvian Ministry of Health, with the support of ACTO, promoted the 2nd Meeting of Community Health Agents of the Amazon region

This meeting aimed at creating dialogue, and knowledge generation and exchange to support the work of these agents and ensure constant actions against diseases that affect the indigenous peoples of the Amazon region, such as Covid-19 vaccination.



ACTO'S PHOTO GALLERY

Community health agents from the Amazon region of Bolivia, Colombia, Ecuador and Suriname participated in the 2nd International Meeting of Community Health Agents of the Amazon: "Our Health, Our Territory", in Puerto Maldonado, Madre de Dios region, Peru.

This meeting aimed at creating dialogue, and knowledge generation and exchange to support the work of these agents and ensure constant actions against diseases that affect the indigenous peoples of the Amazon region, such as Covid-19 vaccination.

More than 50 health agents participated in this second meeting, which was organized and coordinated by the following institutions: the Peruvian Ministry of Health (MINSA



ACTO'S PHOTO GALLERY

for its acronym in Spanish), the Ministry of Culture (MINCUL for its acronym in Spanish), Universidad Nacional Amazónica de Madre de Dios (UNAMAD) and the Native Federation of the Madre de Dios and Affluent Rivers (FENAMAD for its acronym in Spanish).

The meeting was officially opened Julio Mendigure, Director of Indigenous Peoples of the Peruvian Ministry of Health. Mendigure thanked all for attending and recognized the importance of the role of community health workers during the pandemic: "The Indigenous Peoples were the ones who fought the pandemic, and the community agents were essential in saving thousands of lives as they were the communities' ears and eyes."; and he added: "May the health of the Indigenous Peoples be at the Forefront of our conversations".

The indigenous leader of FENAMAD, Ruth Vanessa Racua, considered this moment ideal to have this exchange of experiences and knowledge as health always come first: "She invited the authorities of the institutions and allies to continue strengthening the community health agents in the fight against this disease which is still taking the lives of many indigenous brothers and sisters."



ACTO'S PHOTO GALLERY

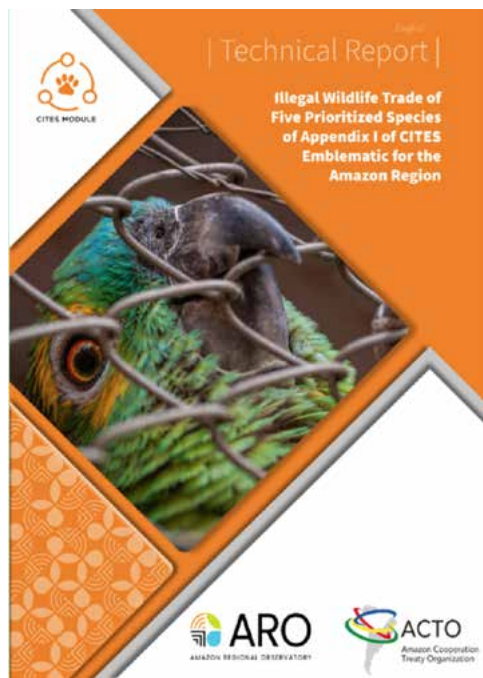
Technical Report Illegal Wildlife Trade of Five Prioritized Species of Appendix I of CITES Emblematic for the Amazon Region

This publication will be presented at the ACTO side event - Implementation and results of the Amazon Regional Observatory: effective tools for the Management, Monitoring and Control of Endangered Fauna and Flora Species in the Amazon Region - at the 19th Conference of the Parties of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The event will be held on November 24, from 12:15 p.m. to 2:00 p.m., Panama City time.

KNOW MORE

<https://oraotca.org/en/news/technical-report-illegal-wildlife-trade-of-five-prioritized-species-of-appendix-i-of-cites-emblematic-for-the-amazon-region/>



Jovens amazônidas conhecem atuação da OTCA

Palestra do coordenador do Projeto Bioamazônia foi oferecida virtualmente, em agosto.

Cerca de 70 jovens, com idade entre 18 e 35 anos, residentes na Amazônia Legal brasileira e que tem ação e envolvimento com coletivos, organizações socioambientais e áreas protegidas participaram de curso de formação para fomentar o protagonismo jovem e estimular a ação coletiva em prol da equanimidade socioeconômica e conservação ambiental por meio da compreensão histórica do desenvolvimento e ocupação da Amazônia.

O coordenador do Projeto Bioamazônia da OTCA, Mauro Ruffino, foi convidado para apresentar as ações do Projeto. A palestra, realizada virtualmente, em agosto, mostrou os principais resultados do Bioamazônia no Brasil, assim como nos outros Países Membros da OTCA.

O curso de formação, 180 horas distribuídos em oito módulos, com atividades síncronas e assíncronas, foi organizado pela VerdePerto Socioambiental, em parceria com o Instituto de Pesquisas Ecológicas (IPÊ), Rellac-Joven e Conselho Nacional das Populações Extrativistas (CNS), com financiamento do Fundo Lira do IPÊ.

Bolivian researchers describe a possible new tarantula species

*The research will be submitted for publication in a specialized journal, and it is proposed that the species be named **Hapalotremus otcai**, in honor of the support received from ACTO.*



ACTO'S PHOTO GALLERY

Bolivian researchers reveal to science a possible new species of tarantula. The discovery resulted from the study "Diagnosis of the impact of illegal species trafficking on invertebrate populations in Bolivia", requested by the Permanent Secretariat of the Amazon Cooperation Treaty Organization (SP/OTCA), in coordination with the General Directorate of Biodiversity and Protected Areas of the Ministry of Environment and Water of the Plurinational State of Bolivia.

The outcome of this consultancy is a "Diagnosis of the current status of the populations of teraphosidae (tarantulas) in Bolivia and the impact of illegal trafficking on the group". This study allowed for expanding the knowledge on the distribution of these species, in addition to the discovery of new species for science.

The researchers responsible for the description of the species — Juan Fernando Guerra Serrudo, who is an associate researcher of the Bolivian Fauna Collection and the National Museum of Natural History; and Natalie Herrera, a researcher at the Museum of Natural History of La Paz — stated that the group of teraphosids is one of the most unknown but fascinating groups due to its morphology, behavior, and interaction with other species.

Upon completion of the description and morphological analysis of the potential new species, the work will be submitted to an accredited scientific journal. Once published, the suggested name — *Hapalotremus otcai* — in honor of the ACTO will be official and will become part of the known biodiversity of Bolivia.

Tarantulas in Bolivia

The Plurinational State of Bolivia is considered one of the 15 megadiverse countries; however, there is still limited knowledge about biodiversity, and research and inventory efforts have focused mainly on vertebrates and higher plants.

Bolivia's Red Book of Invertebrates (MMAyA 2020) lists 70 species under some threat category, but only considers three orders of insects (*Coleoptera*, *Hymenoptera* and *Lepidoptera*). This shows a preliminary or circumstantial knowledge of the conservation status of invertebrates in Bolivia. Nevertheless, of the species included in this first document, four invertebrate species are categorized in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Commonly called tarantulas, the family Theraphosidae, suborder Orthognatha (Mygalomorphae), comprises numerous tropical and subtropical taxa known as migalas, chilean rose, tarantulas, apasankas, pasankas, qampu kusi-kusi and qampu. According to Platnick's World Spider Catalog 2021³, approximately 1010 species are known worldwide, assigned to 152 genera.

There are still few studies conducted in Bolivia. On the one hand, Simon (1892) describes the first species, the *Lasiadora boliviana*, and in 1903, he described the *Hapalotremus albipes*. Later, in their research, Strand (1907) described three species of tarantulas for the valley and the mountain range of Sorata; Shiapelli & Gerschman (1962) cite three species of *Theraphosidae*; and Galiano (1979) mentions two species of *Salticidae*. On the other hand, in an expedition carried out in July 1993 in the departments of La Paz and Beni, Hoffer & Brescovit (1994) published a list of 41 families and 396 species. Several other species continued to be described by different researchers until 2021.

Guerra (2020), in a report in the Revista Escape of La Razón⁴ newspaper, warns about the illegal trafficking of Bolivian species. Additionally, 30 species of Theraphosidae are listed for Bolivia. It is possible to estimate, however, that at least 50 species of tarantulas could be found in Bolivia, as shown in several studies from 2014 to 2021.

Based on the diagnosis carried out with the support of ACTO's Bioamazon Project, the main threats identified for Theraphosidae are habitat loss, habitat degradation, overexploitation of wildlife, the impact of agrochemicals, and climate change.

This study was carried out to provide information on the Theraphosidae family. Diagnoses were made on the current status of the populations of the different species of tarantulas in Bolivia and the level of impact of illegal trafficking on the group. Also, a list of species subject to trafficking was prepared, along with technical data sheets on each species and the threats to each taxon.

Bolivia is a center of oro-hydrographic distribution, offering an infinite number of environments that host species of Theraphosidae, several of which are considered endemic. From a list of 32 species of Theraphosidae present in Bolivia, 15 of them occur in other countries and 17 are endemic to the country. Among those 32 species, 15 are offered on different websites, and several of them are bred in captivity, which shows the impact of trafficking of Theraphosidae species, not only in Bolivia, but also at the continental level.

*With information from Diagnóstico de los Theraphosidae de Bolivia – Propuesta Plan de Acción de los Invertebrados de Bolivia.

[1] <https://wsc.nmbe.ch/family/100/Theraphosidae>

[2] <https://www.la-razon.com/escape/2020/07/01/tarantulas-bolivianas-a-la-venta-en-internet/>

[3] <https://wsc.nmbe.ch/family/100/Theraphosidae>

[4] <https://wsc.nmbe.ch/family/100/Theraphosidae>

Technique enables to evaluate rosewood oil purity, a product valued by the perfume and cosmetics industry

*This oil is extracted from the *Aniba rosiodora* species, listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).*



PHOTO CREDIT: TEREZA PASTORE/LPF-SFB

The Amazonian native forest species *Aniba rosiodora*, which is popularly known as rosewood, is under threat of extinction due to intense exploitation over decades. With the inclusion in Appendix II of the CITES in July 2010, the commercialization and export of rosewood oil is now restricted to authorized management areas.

Aniba rosiodora is a large tree, which can reach a height of up to 30 m and a diameter of 2 m. It has a straight cylindrical trunk and a brownish-yellow or reddish bark. According to *Flora do Brasil*¹, the species is native to Brazil, occurring in the states Amazonas, Pará, and Amapá and is distributed in several South American countries: Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela as well as in French Guiana.

¹ <https://floradobrasil.jbrj.gov.br/FB78444>

It produces an essential oil with high added value and is highly demanded by the perfume and cosmetics industries for its unique aroma. The chemical constitution of the oil is rich in linalool, an important compound with fixative power, but its whole chemical profile gives the oil its unique aroma.

Different factors are involved in the quality of the oil. Oil adulteration is the industry's highest concern. Adulteration may occur in several ways, such as mixing of the real oil with other essential oils (natural or synthetic), an addition of non-volatile and volatile plant products, or even a substitution of the original plant by other plants during the extraction phase. As the main marketed product is the essential oil, developing effective analytical methods for identification and determination of purity and authenticity is required to ensure product quality.

A novel method for essential oil authentication was developed by direct and rapid analysis using near infrared spectroscopy (NIRS) and data driven independent modeling of class analogy (SIMCA).

Researchers from the Forest Products Laboratory of the Brazilian Forest Service (LPF/SFB), the Institute of Chemistry at UnB, the National Institute for Amazon Research (INPA) and *Universidade Paulista* (UNIP) published the results of the research in the *Microchemical Journal*, under the title: A green and direct method for authentication of rosewood essential oil by handheld NIRS and one-class classification modeling, to be released on demand by the authors.

There were 130 samples collected in different Brazilian states, including industries, small cooperatives, local producers, and commercial products purchased over the internet. The NIRS spectroscopy analysis was coupled with mass spectrometry (GC-MS) analysis of the samples to certify their purity and authenticity. The GC-MS analysis, despite its efficiency, is not available for most cooperatives and small producers and does not allow on-site measurements. On the other hand, NIRS can perform fast, direct, low-cost, and non-destructive analysis using portable equipment.

NIRS measurements were performed without any sample treatment. Representative sampling revealed significant variation among samples declared as rosewood oil in the Brazilian market. This method proved 98% efficiency in the analysis of authentic and commercial samples from different origins, indicating that it can be an alternative for export authentication and quality control purposes.

Studies for a method to analyze rosewood oil using the Near Infrared Spectroscopy technique were requested from Brazil by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and were partially supported by the Bioamazon Project of ACTO.

Today, rosewood oil is sustainably produced in Brazil. The *Aniba rosiodora* species has been cultivated and is now grown by mills and small producers in the Amazon. The oil, which in the past was extracted from the trunk requiring the felling of the tree, is now extracted from the leaves and branches. The communities and producers are also replanting the species. More details are available in the video about the research at <https://youtu.be/hAN82W-AXiE>



Scientific paper reports on laminated wood identification technique

A new technique allows for easier species identification and may help in the fight against illegal logging of tropical timbers



Training on NIRS technology held at the Forest Products Laboratory, Brazil.

Identification of sliced mahogany veneers by portable near-infrared spectroscopy and multivariate data analysis is the title of the scientific paper published by the IAWA Journal. The article explains how the use of wood identification techniques and the outcomes of international initiatives such as the standards of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) contribute to the control of trade, exploitation and smuggling of these products.

The Paper from Hugo da Silva Rocha, Jez William Batista Braga, Daniele Cristina Gomes da Cunha Kunze, Vera Rauber Coradin e Tereza Cristina Monteiro Pastore and published in 2021, presents the use of Near-Infrared Spectroscopy associated with chemometric tools for the discrimination of sliced or veneered wood with similar general characteristics: *Swietenia macrophylla* King (mahogany), *Carapa guianensis* Aubl. (andioba), *Cedrela odorata* L. (cedar), *Micropholis venulosa* Pierre (curupixá) and *Hymenaea coubaril* L. (jatobá) using a portable spectrometer. The

PLS-DA models yielded an efficiency of between 96.5% and 100% in discriminating samples among the five forest species. In summary, the portable NIRS technology and the PLS-DA models provided a good performance for the rapid detection and discrimination of wood veneers.

The dissemination of the use of this technique would contribute to a better identification of the type of timber used and support the fight against illegal logging. The illegal extraction of valuable tree species is mainly propelled by a globally active market that demands logs, sawn timber, veneer and furniture.

ACTO's Project Bioamazon supported studies for the development of the near-infrared spectroscopy technique.

Access to the article via doi: <https://doi.org/10.1163/22941932-bja10054>

The screenshot shows the Brill journal website interface. At the top left is the Brill logo. The navigation menu includes 'Publications', 'Subjects', 'Services', 'Open Access', 'About', and 'Contact'. The article title is 'Identification of mahogany sliced veneer using handheld near-infrared spectroscopy device and multivariate data analysis'. Below the title, it indicates the journal is 'IAWA Journal' and lists the authors: Hugo S. Rocha, Jex W.B. Braga, Daniele C.G.C. Kunze, Vera T.R. Coradin, and Tereza C.M. Pastore. The online publication date is 25 Feb 2022. There are buttons for 'Get Access', 'Download Citation', and 'Get Permissions'. A thumbnail image of the article cover is visible. Below the title, there are tabs for 'Abstract', 'Metadata', 'References', 'Cited By', and 'Metrics'. The 'Abstract' tab is selected, showing the following text: 'The illegal logging of valuable tree species is mainly motivated by a global market that consumes logs, lumber, veneers, and furniture. The use of objective techniques to identify species and the effects of international initiatives such as CITES rules contributes to controlling trade, exploitation, and smuggling of these products. The anatomical identification of wood veneers is limited due to the loss of several anatomical characters in the production process of the veneers. For this reason, we propose the Near-Infrared Spectroscopy technique associated with chemometric tools for the discrimination of wood veneer of woods with similar general characters: *Swietenia macrophylla* King (mahogany), *Carapa guianensis* Aubl. (andiroba), *Cedrela odorata* L. (cedro), *Micropholis venulosa* Pierre (curupitá), and *Hymenaea coubaril* L. (jatobá) using a portable spectrometer. The development of the discrimination models was performed using the PLS-DA (Partial Least Squares for Discriminant Analysis) algorithm. The detection and subsequent exclusion of outliers were performed based on Hotelling T², Q residuals, and errors in estimating class values. The PLS-DA models showed an efficiency between 96.5% and 100% in the samples' discrimination among the five forest species. In conclusion, the portable NIRS technology and the PLS-DA models were suitable for the rapid identification and discrimination of the wood veneers.'

A delegation from the Ministry of Environment of Ecuador paid a technical visit to the headquarters of the ACTO

The purpose of this visit was to learn about the Amazon Regional Observatory and the Water Resources Situation Room.



FOTO: BANCO DE IMAGENS DA OTCA

Delegation of Ecuador is received by the ACTO Board of Directors in the room of the Regional Observatory Amazonian

A team from the MAATE took part, today (10), in a technical visit to the headquarters of the Amazon Cooperation Treaty Organization (ACTO) in Brasilia, in the company of the Ambassador of Ecuador in Brazil, Carlos Alberto Velastegui. Directors and technicians from the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama) were also present. It was intended to participate in a technical meeting on the Amazon Regional Observatory (ARO), which was developed by ACTO and has the support of MAATE.

The Amazon Regional Observatory is a Reference Center of Information related to the Amazon region, which facilitates the flow and exchange of information among institutions, government authorities, the scientific community, academia and civil society of the Member Countries of ACTO, on issues related to biodiversity, species listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), water resources, forests and indigenous peoples; and it also provides data and thematic indicators of the Amazon Region

ACTO's Secretary General, Alexandra Moreira, welcomed the team members and recalled that CITES CoP 19 will be held in November. "It is important that the countries should recognize the importance of the Amazon Region and, at the same time, the relevance of ARO as a tool for information management in the Amazon that has been developed with the cooperation of all Amazonian countries," she said.

The Executive Director of ACTO, Ambassador Carlos Lazary, pointed out that among the premises of the Amazon Cooperation Treaty (ACT), signed in 1978 by the eight Amazonian countries – Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela – are the promotion of scientific research and exchange of information and technical personnel among the competent agencies within the respective countries so as to increase their knowledge, and establish a regular system of proper exchange of information on the conservationist measures adopted or to be adopted by each State in its Amazonian territories. "By determination of the Treaty, ACTO is always engaged in promoting South-South cooperation", he said.

The Ambassador Carlos Alberto Velastegui, stated that the MAATE team's visit to Brazil has the purpose of promoting capacity building and exchange of experiences with ACTO and Ibama on biodiversity monitoring, combating species trafficking, CITES-listed species, among others. "We value the efforts made in collaboration with ACTO and Ibama", he said.

The MAATE team, comprising six technicians from Ecuadorian territories, will be visiting different institutions in Brazil, assisted by the Ibama team in Brazil.



Delegation of MAATE (EC) visits ACTO headquarters in October 2022.

Videos



Watch the video

Rapid Identification in the Palo Rosa Field by NIRS Technology

that demonstrates the technology that allows the identification and determination of the purity and authenticity of the oil to guarantee the quality of the product and the advances in the sustainable cultivation of the *Aniba rosiodora* species.

The studies for the development of the rosewood oil analysis method through NIRS technology was supported partially by the ACTO Bioamazon Project.

Video with narration in Portuguese and subtitled in English.

Watch on this link <https://www.youtube.com/watch?v=hAN82W-AXiE>

Publications



The Bioamazon Newsletter, #16, in PDF format, is available on this link

http://otca.org/en/wp-content/uploads/2022/09/2022_ACTO_Bioamazon_NEWSLETTER-016_ENG.pdf

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.

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Amazon Cooperation Treaty Organization – Permanent Secretariat (PS / ACTO): General Secretary, Alexandra Moreira López; Executive Director, Carlos Alfredo Lazary; Administrative Director, Carlos Salinas Montes. Communication Advisor, Frida Montalvan.

Bioamazon Project: Coordinator, Mauro Luis Ruffino; Administrative, Technical Expert, Vicente Guadalupe; Amazon Regional Observatory (ARO) Data Science Expert, Isaac Ocampo Yahuarcani; ARO Data Technician, Lelis Anthony Saravia Llaja; Financial and Procurement Manager, Sergio Paz Soldán Martinic; Administrative Assistant, Janet Herrera Maldonado; Communication Advisor, Denise Oliveira.

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