



**Description of projects,
activities and
conservation results
during 2021**

BOSQUE COLOMBIANO ORG

Annual Report 2021

EXECUTIVE SUMMARY

The main objective of the BOSQUE COLOMBIANO ORG Corporation during the year 2021, was the recovery of the species harmed by the fires in the Colombian Amazon forests. Then the initiatives implemented.

In 2021, activities of both conservation and environmental education, which are described in this report. Equally and not least, the fact that there was a significant increase in conservation and ecotourism activities stands out.

Conservation: during 2021, the BOSQUE COLOMBIANO ORG corporation implemented 6 conservation projects successfully (see description, below), financed by international cooperation and small donations through digital media, for a total raised of US \$ 133,000.

A total of 47,000 Hectares for environmental reserves were linked to SINAP. Currently the reforestation project in the Amazon territory for compensation with the LAX consortium, 144 ha were reforested in the Las Tangaras RNA with native species and its maintenance was executed for 6 months; on the other hand, the project of


reforestation and maintenance for compensation with EPSA (Roncesvalles) of 38 ha within the RNA Loros Andinos is in the terminal phase, delivering on time the fourth maintenance of the 6 raised in the agreement; In the Amazon Garden area, the signing of 13 ARAs (Reciprocal Water Agreements) was achieved, representing 552 ha directly under conservation by the community, 17 active and established ecological easements since 2010 located in the San Vicente de Chucuri area they have constant maintenance; Finally, the work carried out within the reservations of the Ticuna and Arahuc indigenous reservations; carried out by the rangers is one of the most important activities of the corporation, monthly

The volunteer rangers carry out activities such as: surveillance and routes along boundaries, reforestation, infrastructure maintenance, trails, main roads, participate in meetings with the community, receive training for population monitoring of species subject to conservation, among other activities.

Environmental education: In 2021, community work and ecological education was carried out in 10 departments of Colombia, we have 89 related Friends Schools, with 16,000 people registered, forming 5 ecological groups for adults with a total of 230 people registered, forming the first Group of Rural Science in the municipality of San Vicente de Chucuri and active participation of 17,450 people among children, youth, adults and older adults in the celebration of 15 mass events (campaigns and festivals).

BOSQUE COLOMBIANO ORG CORPORATION MANAGER

PROJECTS EXECUTED DURING 2021

	STATUS: Finalized
	FOCUS SECTOR: Conservation
	ORGANIZATION: BOSQUE COLOMBIANO ORG Corporation
	CITY/COUNTRY: Caquetá, Colombia.
	IMPLEMENTATION AREA: Amazon forest, Ticuna indigenous territory
	BENEFICIARIES: 300 families; Specie: Spectacled Bear (Tremarctos Ornatus).
	IMPLEMENTATION PERIOD: 17/Nov/2018 to 16/Nov/2021
	IMPLEMENTING PARTNERS: CARSUCRE, WWF, UNISUCRE
TOTAL BUDGET: US \$ 22,000	

STRENGTHENING THE GOVERNANCE OF PROTECTED SPECIES: THE EYEGASSES BEAR CASE (TREMARCTOS ORNATUS)

Colombia is home to the Spectacled Bear (*Tremarctos Ornatus*), which are classified as "critically endangered" on the IUCN Red List and listed in Appendix II of CITES. Their populations are declining rapidly, and an estimate of the number of remaining individuals is not available. They are hunted for their meat and, in particular, for their skin, used in traditional indigenous medicine. Spectacled bear (*Tremarctos Ornatus*) are almost impossible to reproduce in captivity.

Colombia ratified CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) in 2004. A recent decree issued by the Colombian Ministry of Environment aims to strengthen regulation on the protection of forests and wildlife, including the spectacled bear (*Tremarctos Ornatus*). However, biodiversity inventories and protection measures are limited to national protected areas, with no data available for other areas.

The Colombian Amazon is a crossroads in the traffic routes between Peru and Brazil. It is also believed that the Oso de Ojo (*Tremarctos Ornatus*) populations live there, particularly in three villages in the districts of the Ticuna indigenous community.

This project, led by the BOSQUE COLOMBIANO ORG corporation, followed two main lines of action. The first aims to increase awareness of the remaining populations of Eyeglass Bear (*Tremarctos Ornatus*), as well as the dynamics and extent of traffic. In the target districts, maps of the areas that probably contain populations of spectacled bear (*Tremarctos Ornatus*) were drawn up and interviews were conducted. Optical sensors were used to estimate the size of the remaining populations. The main findings will be published.

Local governance of biodiversity conservation was strengthened to safeguard both species. Local authorities will receive training on national and international regulations that apply to protected species and their traffic, and two multi-stakeholder meetings will be organized (local authorities, conservation NGOs, Ticuna indigenous communities). This will lead to the establishment and dissemination of a "Ticuna Action Plan: Spectacled Bear (*Tremarctos Ornatus*) and Biodiversity".



STATUS: Finalized
FOCUS SECTOR: Conservation
ORGANIZATION: BOSQUE COLOMBIANO ORG Corporation
CITY/COUNTRY: Amazonas, Colombia.
IMPLEMENTATION AREA: Caquetá, Colombia.
BENEFICIARIES: 210 families; Specie: Jaguars (Panthera Onca),
IMPLEMENTATION PERIOD: 06/May/2021 to 06/Dic/2021
IMPLEMENTING PARTNERS: CARSUCRE, STALEY FOUNDATION, UNISUCRE
TOTAL BUDGET: US \$ 8,000

STRENGTHENING THE CONSERVATION OF JAGUAR (PANTHERA ONCA) IN THE COLOMBIAN AMAZON FORESTS.

The objective of this project was to protect the Jaguars (Panthera Onca), a species classified as critically endangered on the IUCN Red List and listed in Appendix II of CITES. Jaguar (Panthera Onca) are directly threatened by commercial hunting of wild meat, poor management of forest and mineral resources and traditional logging and burning agriculture.

The project was executed in the Amazonian forests of Caquetá. Conservation efforts focused on the surrounding Villao, an unprotected area extremely rich in biodiversity, located within a forest concession. It is an ecological corridor between the National National Park

This project, directed by BOSQUE COLOMBIANO ORG Corporation, aimed to strengthen the conservation of Jaguar (Panthera Onca) through a better knowledge of the big cats, awareness among different stakeholders, the development of alternatives to hunting and the improvement of Local governance.

Knowledge of the big cats and their habitats was improved through scientific monitoring and data collection in Caquetá. To this end, a study of the corridors of feline movement will be carried out. A survey on the meat of wild animals sold in the markets of Mitu will also be carried out. Initiatives were carried out to increase local awareness about the conservation problems of large cats with the objective of reducing the consumption of wild animal meat, particularly in camps / compounds of forestry and mining companies. Environmental education activities were carried out in schools within the project area. The socio-economic impact of conservation in Caquetá increased through support for banana producers, generating economic alternatives to hunting. The institutional legitimacy of Colombia was strengthened and the governance of the district of Caquetá was improved.



STATUS: Finalized
FOCUS SECTOR: Conservation
ORGANIZATION: BOSQUE COLOMBIANO ORG Corporation
CITY/COUNTRY: Amazonas, Colombia.
IMPLEMENTATION AREA: Amazon forest, Arawak indigenous territory
BENEFICIARIES: 300 families; Specie: Condor of the Andes (Vultur gryphus)
IMPLEMENTATION PERIOD: 21/Ene/2021 to 31/Dic/2021
IMPLEMENTING PARTNERS: CARSUCRE, RUFFORD, UNISUCRE
TOTAL BUDGET: US \$ 10,000

Community participation and habitat restoration to protect the Condor of the Andes (Vultur gryphus), Critically Endangered

This project aims to protect Cónдор de los Andes (Vultur gryphus), one of the most threatened birds in the world, listed as Critically Endangered by IUCN and the red lists of Colombia. The species has a very small population of less than 215 adult couples in the wild, which survives in a patch of 28,000 km² of remaining wet forest habitat along the Andes mountain range. 130,000 people also depend on the stream and springs that flow along these slopes. A long history of misuse and mismanagement of water resources has caused a reduction in water outflow, mainly due to deforestation, forest fires and losses in existing water collection systems and pipes.

The objective of this project, implemented by BOSQUE COLOMBIANO ORG Corporation, was to protect and restore the habitat of endangered birds in Amazonian territory from community participation and the planting of native forests. Water conservation was promoted through the participation of the Arawak indigenous community. Local communities of women who use this spring to wash clothes were identified, as well as local stakeholders. A participatory discussion was conducted and a low impact water collection device was designed and built. An evaluation was carried out before / after.

Deforestation and habitat loss caused by forest fires in Amazonian forests was reduced. Basic equipment was provided for public firefighters in the municipality of Crato. The fire emergency was improved through better coordination and communication. An integrated fire response was consolidated with local brigades and other selected stakeholders. Bird habitat was restored, including the key nesting habitat. Exotic and invasive species were mapped and controlled. Native seeds were collected, seedlings were produced and sown, with the support of a botanist and a local restoration expert.

The population of Condor de los Andes (Vultur gryphus) in critical danger was monitored. Subsidies were distributed for the management plans of private reserves and protected public areas on the Colombian Amazonian plateau. The conservation status of Cónдор de los Andes (Vultur gryphus) was updated for the red lists of Colombia and IUCN.



STATUS: Finalized
FOCUS SECTOR: Conservation
ORGANIZATION: BOSQUE COLOMBIANO ORG Corporation
CITY/COUNTRY: Amazonas, Colombia.
IMPLEMENTATION AREA: Amazon forest, Ticuna indigenous territory
BENEFICIARIES: 300 families; Specie: Pink dolphin (Innia geoffrensis)
IMPLEMENTATION PERIOD: 02/Jan/2018 to 30/Dic/2021
IMPLEMENTING PARTNERS: STALEY FOUNDATION, CARSUCRE, UNISUCRE
TOTAL BUDGET: US \$ 14,600

PROTECTION OF THE PINK DOLPHIN (INNIA GEOFFRENSIS) THROUGH RESEARCH, CONSERVATION AND DISSEMINATION.

Pink dolphin (*Innia geoffrensis*) is classified as "endangered" according to IUCN. As main predators, they play an essential role in maintaining balanced and healthy ecosystems. But, as the species evolves in shallow water, it is exposed to human activities (pollution, depletion of dams, coastal development, illegal fishing, undeclared and unregulated).

The project was located in the Amazon River, a nursery area of great ecological importance. It is also designated as a Marine Fisheries Management Area (the Colombian equivalent of a Marine Protected Area). This region was directly supporting five fishing communities, which traditionally depend on local fish populations for their livelihoods. Although the dolphin population in the region is unknown, the aerial reconnaissance techniques used as part of the project have confirmed a minimum population size of 32 individuals. The objective of this project, implemented by the BOSQUE COLOMBIANO ORG Corporation, was that the populations of Pink Dolphin (*Innia geoffrensis*) be actively protected, which will increase the health of the population and the ecosystem. It will use a combination of natural and social science techniques to gather solid scientific data on the abundance, distribution, residence, critical habitats and threats of dolphins.

First, the knowledge gaps about the dolphin population were covered. Behavioral observations were made from land and ships in the study area using, among others, photo identification techniques. Passive monitoring was established using C-POD and a real-time hydrophone to record and collect acoustic data. All stranding and incidental catches reported to the project team were answered.

Outreach activities were also used to target community fishermen and government officials to raise local awareness about the Pink Dolphin (*Innia geoffrensis*). To do this, a community outreach event was held with each of the five communities of the Colombian Amazon. At the same time, 10 citizen science participants collected daily data on whale watching.

Project scientists worked in collaboration with the Cambodian Fisheries Administration at all times, with mutual goals to design conservation legislation for Pink Dolphin (*Innia geoffrensis*) tailored for the region. It was designed based on data analysis and habitat mapping.



STATUS: Finalized
FOCUS SECTOR: Conservation
ORGANIZATION: BOSQUE COLOMBIANO ORG Corporation
CITY/COUNTRY: Amazonas, Colombia.
IMPLEMENTATION AREA: Caquetá, Colombia.
BENEFICIARIES: 300 families; Specie: Iguana (Iguana Iguana)
IMPLEMENTATION PERIOD: 02/Jan/2021 to 30/Nov/2021
IMPLEMENTING PARTNERS: CARSUCRE, WWF, UNISUCRE
TOTAL BUDGET: US \$ 22,000

RESTORING THE IGUANA (IGUANA IGUANA), IN AMAZONIAN FORESTS

It is not evaluated by IUCN, however, it is the third most illegally trafficked species in Colombia. According to the Humboldt Institute and different national environmental authorities, 11,882 iguanas were seized between 2005 and 2009. The main reason for illegal trafficking in the case of this species is the high demand for their eggs for some seasons of the year.

Research in the early 2000s showed that the species was suffering a rapid decline in its range. In 27% of the sites, it became virtually extinct while suffering a rapid decline in another 30% of the sites. Only 8% of the sites admitted stable populations. The main threats to the population are the loss of wetlands and the consumption of turtles by impoverished local communities.

Currently, one of the most important sites for Iguana (Iguana Iguana) is the Amazonian forests, where the species is found in three main lakes: Ticuna and Arawak. Lake Ticuna is the most important for the species. In addition, it is a sacred lake with great cultural importance for the local population and an additional well-defined set of traditional rules for the use of resources for the six surrounding villages is established through a GPT. This project, implemented by the BOSQUE COLOMBIANO ORG Corporation, aimed to restore the Iguana population (Iguana Iguana) using the species as a flagship to restore local wetlands.

First, the real population was reinforced in Ticuna through liberations of initiated individuals. Pre and post-release monitoring will be used to assess the conservation impact of this intervention. In March 2015, there was a single launch in Ravelobe of 114 people with annual post-launch monitoring. This project allowed a second release of 44 people in March 2021 when water levels are at their highest point.

Second, the team worked with local communities and law enforcement to increase the number of night patrols and, therefore, reduce the amount of illegal fishing in the lake. Since 2016, members of the Ranger Association have conducted weekly patrols. In addition, quarterly mixed patrols are conducted that include members of the local police and government and quarterly night patrols with the military to maintain and strengthen the relationship between them and the local communities. As most of the illegal activities occur at night, this project allowed to increase the frequency of night patrols to weekly. Data on effort, confiscations and arrests were collected using the SMART system and compared with previous years.



STATUS: Finalized
FOCUS SECTOR: Conservation
ORGANIZATION: BOSQUE COLOMBIANO ORG Corporation
CITY/COUNTRY: Amazonas, Colombia.
IMPLEMENTATION AREA: Caquetá, Colombia.
BENEFICIARIES: 300 families; Specie: White-headed marmoset (<i>Saguinus oedipus</i>),
IMPLEMENTATION PERIOD: 17/Nov/2018 to 16/Nov/2021
IMPLEMENTING PARTNERS: CARSUCRE, Government of Canada, UNISUCRE
TOTAL BUDGET: US \$ 8,000

PARTICIPATORY MONITORING AND MANAGEMENT OF THE TITCIB CABECIBLANCO (SAGUINUS OEDIPUS)

It was declared endangered in 1973 and since then illegal trade has increased its threat conditions. In Colombia it is located between the Atrato River and the Magdalena River, in the departments of Atlántico, Bolívar, Sucre, Córdoba, and the Northeast Antioqueño. The destruction of their habitat is the main danger in the country for this species that can produce more than 40 vocalizations to communicate with their families. (CR)

White-headed marmoset (*Saguinus oedipus*), with an estimated population size of 400 to 900 individuals, is classified as critically endangered on the IUCN Red List. It is one of the rarest and most endangered primates worldwide. The species, endemic to a part of the Colombian forests, is found in lowland coastal habitats on the continent. It is likely that the island's core and the mainland of this primate are currently disconnected due to the construction of a waterway that artificially separated both areas. Finally, there is a lack of recent information on the current conservation status of this species, since the last population survey was conducted in 2008.

The main objective of this project, implemented by the BOSQUE COLOMBIANO ORG Corporation, is to improve our knowledge about the distribution and abundance of Tití cabeciblanco (*Saguinus oedipus*) and the environmental predictors of the species, while establishing a long-term population monitoring program Employing local people.

First, the area of occupation of the species was estimated and a map was produced, including potential groups living outside the two protected areas. Relevant information was provided for the two park management plans. The possible management actions of the population in situ and ex situ that can be recommended to minimize the impacts of the identified threats (for example, yellow fever) were supported. In addition, members of two local communities with previous experience in monitoring this primate received training to conduct research on established transects.

At the same time, the NGO team participated in the semiannual meetings of the two Parks Councils to inform the actions / results of the project and promote it. Finally, an integrated action plan for the White-headed Tití (*Saguinus oedipus*) based on the IUCN Protocol was developed.

1. PROJECTS AND CONSERVATION PLANS IN PROGRESS AND INITIATED IN 2021:

AQUA-PROGRAM FOR THE CONSERVATION OF BORDONCILLO MOORS OF THE AMAZON BASIN, IN COLOMBIA

SUMMARY

Moors are ecoregional ecosystems whose main characteristics are to be between 2,000 and 3,500 meters high. They are generators of water in the water cycle, hence their importance, and their vegetation is adapted to extreme atmospheric conditions. This plan includes a set of strategies to sustainably conserve 144Km² of Bordoncillo moors of the amazon basin, in Colombia. These ecoregions are under stress due to the influence of threats of anthropic origin in the area: Deforestation for agriculture and grazing activities; heavy metal contamination from illegal artisanal mining activities; and climate change. Currently, the Kamsá indigenous communities, who coexist in these ecosystems, have shown interest in implementing conservation strategies and healthy productive practices with the environment, for which, the Fuverde corporation, together with representatives of the indigenous community, formulate this plan as a starting point in the moors conservation agenda. In this plan, we propose educational, conservation, sustainability, monitoring and communication programs, addressing the transition of the Kamsá indigenous community, from an extractive economy to a sustainable economy with the environment. We propose afforestation and reforestation processes with 3 species: walnut cedar (*Juglans neotropica*; Endangered, EN; IUCN global Redlist); Ceiba Tolúa (*Bombacopsis quinata*; Vulnerable, VU; IUCN global Redlist) and Pino de Pasto (*Podocarpus oleifolius*; Vulnerable, VU; Colombian Redlist), through the planting of 120,000 trees, in a period of 2 years.

Also, a delimitation of priority ecological areas and corridors is carried out in the target moor, to focus efforts on areas with urgent environmental restoration. Finally, there are recommendations to implement these strategies in the moor under study.

Keywords: Ecological restoration, Kamsá Communities, moor, Delimitation, Bordoncillo moors of the amazon basin.

Ver en: <https://BOSQUE COLOMBIANO ORG.org/wp-content/uploads/2021/10/AQUA-PROGRAM-FOR-THE-CONSERVATION-OF-AMAZON-MOORS-IN-COLOMBIA.pdf>

2. PLAN FOR THE CONSERVATION OF THE MOORLAND FROG (*Atelopus pastuso*), IN BORDONCILLO MOORLAND, KENSÁ INDIGENOUS TERRITORY, MOORLAND OF AMAZON BASIN, COLOMBIA

SUMMARY

The Moorland frog (*Atelopus pastuso*) is a species of amphibian endemic to Colombia, in Kensá indigenous territory, which inhabits the montane forests and páramos of the western mountain range in the Moorland of Amazon basin, between 2500 and 3500 m (Moorland). Currently, according to the International Union for Conservation of Nature (IUCN), this species faces several threats such as a restricted, fragmented or discontinuous range of distribution in ecosystems highly susceptible to the loss of natural cover due to the increase in the agricultural and livestock frontier, which have led it to be categorized Critically Endangered (CR), in Kensá indigenous territory. The panorama it presents is more serious, since these practices are being

carried out in the natural forest areas that are outside the protected areas, reducing their habitat to fragments without any form of legal protection. It is noteworthy that there are few works that develop research on its biology, being only restricted to what is mentioned in its original description.

This plan becomes the only instrument in Colombia, focused on the management and conservation of this species. In which population issues and habitat requirements are addressed, which together allow us to know the state of conservation for the Moorland of Amazon basin. Thus, in search of its protection and conservation, we present the current status of the populations of the Moorland frog (*Atelopus pastuso*), the formulation of a management plan and action plan for the Moorland of Amazon basin, in Kensá indigenous territory, whose main objective will be the conservation of the only and few viable and ecologically functional populations of this species.



ACTIVITIES PHOTOS





