

# DIAGNOSIS OF ILLEGAL TRAFFICKING OF SPECIES IN THE COLOMBIAN ANDEAN AMAZON 2010-2020

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## RESUME

According to the consolidated data of the seizures of flora and fauna registered in the annual reports of the Committee of Control and Surveillance of Natural Resources (CVR) of the Territorial Directorate Caquetá of CORPOAMAZONIA between in 2010 and 2020, 51,461 specimens victims of illegal trafficking were seized in the Colombian Amazon basin of the Andes mountain range; in the departments of Putumayo and Nariño. The group with the highest extraction pressure are the Mountain Tapir (*Tapirus pinchaque*), giant otter (*Pteronura brasiliensis*), pastusa frog (*Atelopus sernai*), Palorosa (*Aniba rosaeodora*) and the amanicus turkey. The seizures were made mainly in the Bordoncillo moorland, because it is a town where the migration routes of residents of the different sectors of the department and because it is the exit route to Ecuador. Traffic has increased in the last three years due to the lack of development of environmental education and permanent outreach programs; and in turn, by the pandemic. BOSQUE COLOMBIANO ORG, together with CORPOAMAZONIA with the support of other international entities, we are committed to preserving the natural resources of the Colombian Andean Amazon. In this study, the main threats to biodiversity are identified and the areas with the greatest ecological importance are prioritized.

**Keywords:** Illegal trafficking, wildlife, Putumayo; Colombian Amazonian Andes.

## INTRODUCTION

Colombia is a privileged country for its natural wealth; however, this availability has also made it an important center for illegal wildlife trafficking, and despite the existing legislation and the measures adopted to promote its sustainable use and guarantee its protection, this illegal practice continues. The illicit nature of the

activity, the sub-records available on extraction and commercialization, and the limited resources available to environmental authorities, limit the knowledge of the real situation of this problem and the implementation of measures that prevent the biological impact for each species and ecosystems.

According to CORANTIOQUIA (2011), the overexploitation of wild species has complex effects on biodiversity, such as genetic loss, reduction of population sizes and vulnerability to extinction.

Since the 1960s, regulations were issued by the departmental governments prohibiting the hunting of various wild species, among them the icoteas, charapas and hawksbill turtles; boas, alligators, and babillas (Bakker & Valderrama 1999); Likewise, in Resolution 0787 of June 22, 1977 the INDERENA establishes permanent closures throughout the national territory for the sport hunting of mammals, birds and reptiles of the wild fauna.

Several species of animals have been subjected to illegal trafficking in Colombia, however one of the groups most affected by their trade has been reptiles (Mancera & Reyes 2008), and within these, turtles stand out for their high extraction volumes. . The meaning that their products have for the communities (Arroyave Bermúdez et al. 2014), in addition to the economic and cultural connotation they represent, are one of the most threatened above birds, mammals, fish and amphibians (Van Dijk et al. 2014).

Caquetá is considered one of the routes where the chains of traffic of testudines begin towards places of arrival such as the departments located in the Andean and border areas (Arroyave - Bermúdez et al. 2014).

Currently, the joint and coordinated intra and inter-institutional operation has allowed the strengthening of technical operational capacities to carry out environmental education processes and carry out seizure processes as part of the verification of compliance with national environmental legislation, which aims to eradicate of illegal activities related to wildlife.

In order to analyze the trend of illegal reptile trafficking in the department of Caquetá, the present study was carried out, which provides information that serves as a basis for combining actions aimed at the protection of species and ecosystems, as well as the application of protection programs. environmental education that promotes the preservation of the natural heritage of the region.

**METHODOLOGY**

The information presented comes from the database of wild fauna species seized and registered in the annual reports of CVR in the Caquetá Territorial Directorate of CORPOAMAZONIA between the years 2010 to 2020. The selection criteria for this timeline was given by the discontinuity of the existing information in the years prior to 2010, which is why they were discarded as they did not serve as a tool to infer the behavior of the illegal reptile traffic in the area.

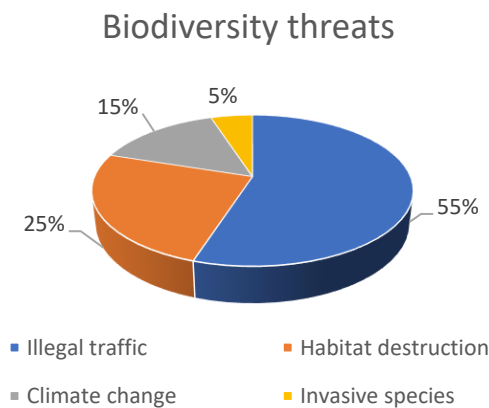
**RESULTS**

Between 2010 and 2020, 106,740 fauna specimens and 51,461 flora specimens were seized in the Department of Caquetá: see table 1:

<b>Number of seizures by species in the Colombian Amazon Andes</b>													
<b>Taxon: Class</b>	<b>Common name</b>	<b>Scientific name</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Mammal	Mountain Tapir	Tapirus pinchaque	1,040	1,248	1,135	1,418	1,773	1,950	2,438	3,047	3,809	4,761	5,237
Mammal	Giant otter	Pteronura brasiliensis	560	672	611	764	955	1,050	1,313	1,641	2,051	2,563	2,820
Amphibian	Pastusa frog	Atelopus sernai	8,600	10,320	9,382	11,727	14,659	16,125	20,156	25,195	31,494	39,368	43,304
Tree; Angiosperm	Palorosa	Aniba rosaeodora	14,500	17,400	15,818	19,773	24,716	27,188	33,984	42,480	53,101	66,376	73,013
Mammal	Jaguar	Panthera onca	1,530	1,836	1,669	2,086	2608	2,869	3,586	4,482	5,603	7,004	7,704
Mammal	Ocelote	Leopardus pardalis	2,300	2,760	2,509	3,136	3,920	4,313	5,391	6,738	8,423	10,529	11,581
Reptile	Taricaya	Podonecmis unifilis	8,000	9,600	8,727	10,909	13,636	15,000	18,750	23,438	29,297	36,621	40,283
Reptile	Babilla	Caiman crocodilus	6,390	7,668	6,971	8,714	10,892	11,981	14,977	18,721	23,401	29,251	32,176

**Table 1.** Number of species seized in the study area. **Source:** Corpoamazonia

In the years 2019 and 2020 there was the highest number of seizures (62,686), which perhaps represents a greater pressure to capture specimens, while in the years 2012 to 2014 seizures decreased significantly (FIGURE 1). This trend may be the result of the continuous awareness campaigns carried out by the personnel of the Caquetá Territorial Directorate of CORPOAMAZONIA, such as inductions to members of the public force in trade and / or illegal trafficking of wild fauna and flora, disclosure through billboards , delivery of flyers to passengers at transport terminals, training of transport company personnel, workshops in educational institutions and awareness-raising through mass media such as the press, radio programs and regional television.



**Figure 1.** Main threats to the biodiversity of the Colombian Andean Amazon. **Source:** Corpoamazonia

The seizures were carried out mainly in operations carried out by the National Police and the National Army in road corridors of the department, especially in the municipality of Florencia, where specimens were seized mainly from San José del Fragua, Cartagena del Chairá, and San Vicente del Caguán. The incidence of cases in Florence is due to the location of the city, since it is the site of road confluence of the towns in the north and south of the department and is the main exit route to the Andean zone and other cities in the interior of the country.

Colombia, as one of the countries with the greatest biodiversity in the world, has a high potential for the trade of goods and services from wildlife based on sustainable use strategies, however, the enormous

supply of biodiversity has also converted the country in an important center of the illegal wildlife trade (Mancera & Reyes 2018).



**Figure 2.** Study site. **Source:** BOSQUE COLOMBIANO ORG

The worrying levels of extraction of some species have motivated the issuance of regulations aimed at controlling such illicit activities and promoting alternative harvesting methods based on the principle of sustainability; However, despite the existing legislation and the measures adopted to guarantee the protection of fauna, the illegal extraction of wild fauna in the country is still considered one of the aspects that generates the most problems in the conservation of fauna (González 2007; Mancera & Reyes 2018) and effective control has been hampered by its particularities and by institutional, technical, operational and financial limitations (MMA 2012).

Among the main limitations in the control of illegal traffic, the management of those specimens of wild

fauna that are subject to confiscation by the regional environmental authorities is probably one of the most complex problems (Gómez 1999). In order to solve this problem, Colombia created in 1996 nine centers for the attention and assessment of wildlife (CAV) as transit centers for confiscated animals (Gómez 2019); However, these centers have technical difficulties that limit not only their management and success, but also the systematization of the information and therefore the effective disclosure of wildlife income (Gómez 2019, PDAA 2016, González 2017), for which they are There are few published reports of wildlife seizures in the country, and these are probably underestimations of the real magnitude of the problem. Based on the existing records, a total of 100,375 specimens is estimated for the period between 1992-1998 (Gómez 1999), 44,374 individuals for the period 2016-2019 (PDAA 2016) and 60,511 specimens seized for the period 2014-2016 (Mendivelso & Montenegro 2017).

The control measures are also carried out by CORPOAMAZONIA and by the Control and Surveillance Committee, following the regulatory protocol; After the seizure, the specimens are taken to the “Hogar de Paso” of the University of Amazonia for the respective biological assessment and veterinary clinic, where the eating habits, diets and other procedures that allow defining the final destination of the individuals are evaluated. Relocations and releases are carried out in a timely manner in the possible places of origin.

although the data on adult seizures in the last two years show a significant reduction (FIGURE 2); the illegal trade in their specimens is high and this is compounded by the disproportionate looting of their eggs on the nesting beaches, which constitutes a considerable threat to the conservation of these wild specimens.

The traffic of boas (*Boa constrictor*), iguanas (*Iguana iguana*), babillas (*Caiman crocodilus*) and turtles (*Kinosternon scorpioides*, *Mesoclemmys* spp, *Chelonoidis denticulata* and *Podocnemis* spp.) Has been fluctuating and constant; while seizures of other species of snakes (*Spilotes pullatus*, *Oxybelis fulgidus* and *Micrurus lemiscatus*), lizards (*Anolis nitens*, *Amphisbaena fuginosa*) and other turtles (*Mesoclemmys* sp., *Platemys platycephala*, *Chelonoidis carbonaria* and *Trachemys* spp.) have been confiscated from eventual form. The figures for the extraction of turtle eggs show that it is an activity carried out on a massive scale, with a continuous trend. Although there is no information for the year 2011, the high seizure values in the evaluated period are evident (TABLE 2).

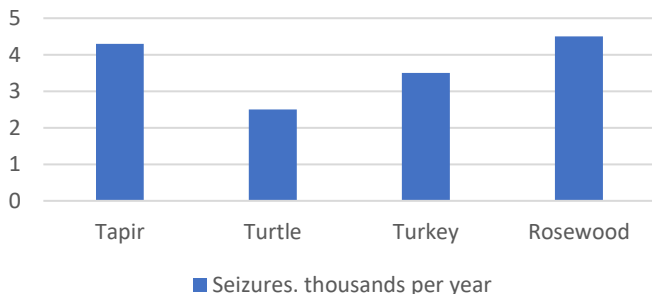
**DISCUSSION**

According to CORPOAMAZONIA (2017), during 2016 14,444 *Podocnemis unifilis* eggs were recovered from the beaches of the Caguán River in the municipality of Cartagena del Chairá; This report confirms the activity as persistent, with the risks it represents for the species. Similarly, morrocoy turtles (*Chelonoidis denticulata*) are extracted from the natural environment to be marketed as pets (CORPOAMAZONIA 2007).

The exuberance of the ecosystems that occur in the department of Caquetá favors the diversity of reptiles, which have been subject to constant traffic to be consumed or used as pets; lizards and turtles, both adults and eggs, are the most demanded in urban areas.

The city of Florence has become the main route for wildlife trafficking, despite inter-institutional efforts to carry out controls. The problem lies in the culture of the inhabitants, for which CORPOAMAZONIA has focused its efforts on education and awareness programs to change the behavior of people who

Seizures. thousands per year



**Figure 2.** Main trafficked species. **Source:** Corpoamazonia

The species with the highest capture pressure in the last five years was the Taricaya turtle (*Podocnemis unifilis*),

RECOMMENDATION

consume, offer and benefit from illegal wildlife trafficking. Demand is driven by consumer trends, however there is minimal knowledge about the actual provenance of the specimens and consumption habits in markets where there is demand.



**Figure 3.** Main sources of illegal trafficking in the Colombian Amazon Andes. **Source:** BOSQUE COLOMBIANO ORG

Prevent illegal trafficking and international poaching of wild fauna and flora species, as well as attack their root causes, involving public administrations and civil society. Apply and enforce existing regulations more effectively and combat related illegal activities more effectively.

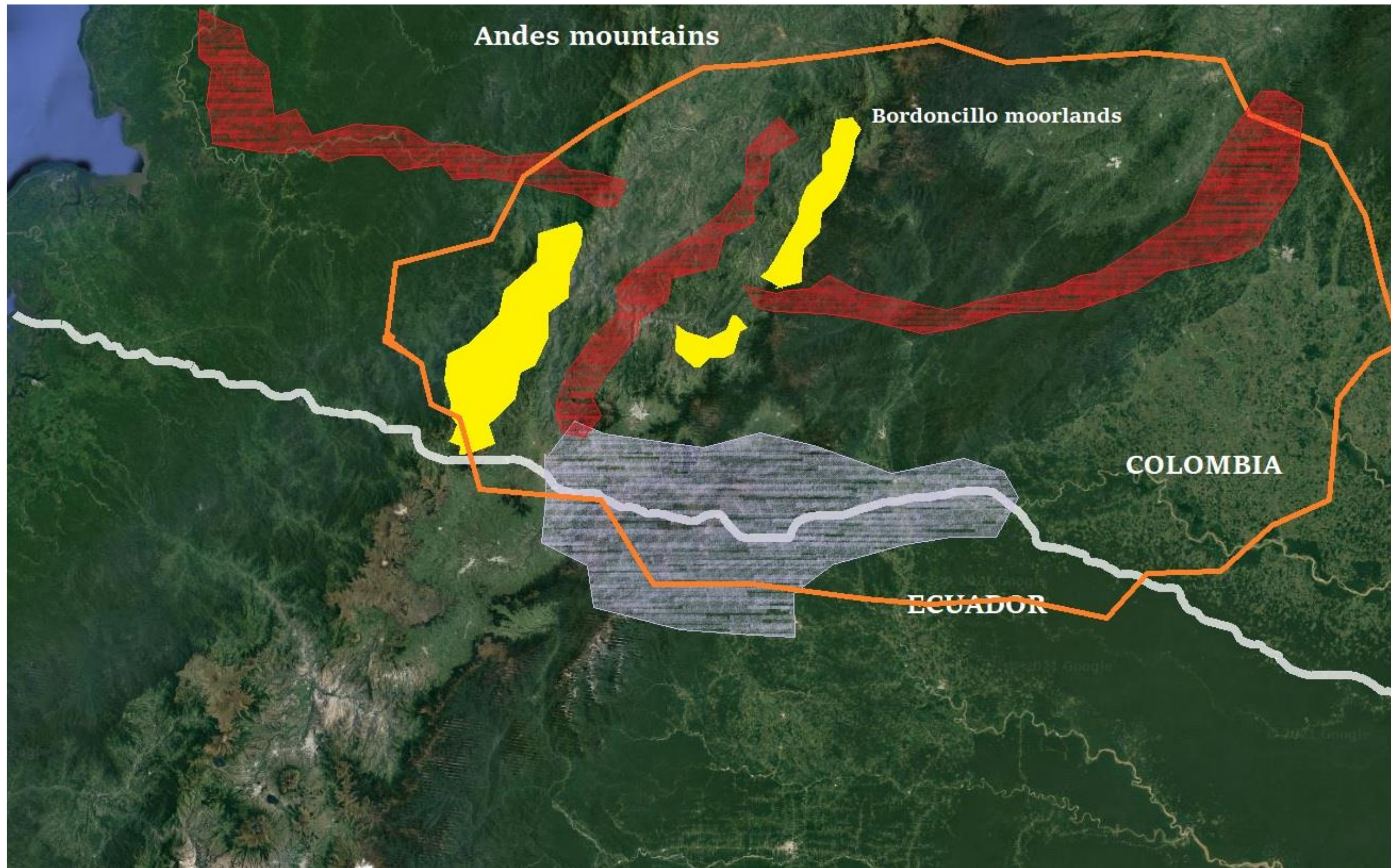
Third, to strengthen the global cooperation of the countries of origin, consumption and transit to combat illegal trafficking and international poaching.

States must fulfill their commitments to further increase collaboration between CITES and the World Heritage Convention, and take comprehensive and coordinated actions throughout the value chain. Several states have already demonstrated their commitment to interagency collaboration on crimes against nature. The European Union, the Netherlands, Sweden, the UK and the US contribute to ICCWC204 and other countries, such as Switzerland, Thailand and Finland have previously committed to taking action to combat wildlife trafficking. China's recent decision to ban all ivory trade at the end of 2017 is a unique commitment that could provide a powerful push that other countries can join and support.<sup>205</sup> These countries are important agents of change that can influence others. countries support greater collaboration between CITES and the World Heritage Convention. There is growing momentum for greater coordination between CITES, the World Heritage Convention and other conventions on biodiversity. In 2016, the United Nations Environment Program (UNEP) developed a manual outlining opportunities to enhance cooperation among biodiversity-related conventions.<sup>206</sup> The study

It highlighted what can be achieved at the national and regional levels by those responsible for implementing the conventions. Both CITES and the World Heritage Convention recognize the need for greater collaboration between the two bodies, and the respective leaders have endorsed further collaboration.<sup>207</sup> In 2016, the World Heritage Committee formally welcomed collaboration with other biodiversity-related conventions in an official decision, and invited the Heritage Center UNESCO World Cup to seek commitments in this matter.





The natural next step is for CITES and World Heritage representatives to better coordinate their activities at the national level, and attend the meetings that they both convene. While the CITES Secretariat and the UNESCO World Heritage Center already take steps to increase coordination between the two conventions, more action could be taken at the national level, as government representatives from the different biodiversity conventions often work independently

MAP 3. GEOGRAPHIC DYNAMICS OF ILLEGAL BIODIVERSITY TRAFFIC IN COLOMBIAN AMAZON ANDES.







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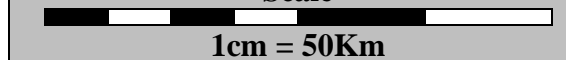
**CONVENTIONS**

	Kamsá indigenous territory
	Higher density of pockets of illegal traffic
	Routes of illegal trafficking of biodiversity
	Purchase and sale of poachers and intermediaries

**Elevations**

	0m – 1,000m
	1,000m – 2,000m
	2,000m – 3,000m
	3,000m – 4,000m

**Scale**

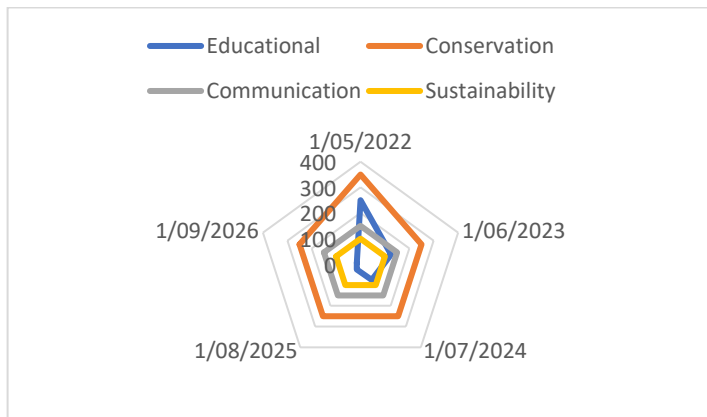


**Source:**

- Corpoamazonia, 2020.
- BOSQUE COLOMBIANO ORG, 2020.
- Google maps, 2020.



towards your missions. 209 So a natural step to improve coordination would be for both the national representative of each country to the World Heritage Convention and CITES to meet and coordinate their work periodically, as appropriate. This could be scaled up internationally, and CITES representatives could attend World Heritage Committee meetings, and vice versa. Countries should prioritize collaboration and coordination as an integral part of your national biodiversity management structure, and provide sufficient funding and capacity to support this.



**Figure 5.** Weighting of strategies for the fight against illegal trafficking in the Colombian Amazonian Andes. **Source.** BOSQUE COLOMBIANO ORG

Implementing these activities and properly addressing the problem of illegal extraction of CITES-listed species from world heritage sites will require additional funding from donor parties and organizations. Both CITES and the World Heritage Convention operate on tight budgets, with few staff and limited scope of the activities. The main budget for CITES activity between 2014 and 2016 was only about US \$ 6 million per year, and CITES relies on external contributions to fund work programs outside its core.

Similarly, the World Heritage Fund has an annual budget of around US \$ 3 million to support activities requested by the World Heritage Committee.<sup>213</sup> Additional funding is required to increase the scope and level of activities with both conventions, which will be vital to reversing and stopping the illegal extraction of CITES-listed species from World Heritage sites.

Stakeholders recognize the urgency of the challenge, and must now take the necessary steps to prevent

irreversible damage to some of the world's most iconic species and places. Left unchecked, poaching, illegal fishing and illegal logging could lead to the extinction of many valuable species. It could also lead to 14 World Heritage sites losing their status, as well as the social, economic and environmental benefits it provides on a local and national scale. As demonstrated in this report, the speed and the degree of site and species degradation underscores that there is very little time to act. Despite these alarming trends, both the growing momentum and support of the international community, as well as the initial commitments to conventions and actions by

Some countries suggest that countries should and can do more to end the illegal trade in the world's iconic species from the world's most precious places.

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