WILDLIFE TRAFFICKING: BIRD SMUGGLING IN THE AMAZON AND THE CHALLENGES OF LEGAL PROTECTION AND SUPERVISION

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ABSTRACT

The Amazon has one of the largest concentrations of wild animals in the world, with birds among them which, for their beauty and diversity, are predatorily caught to be sold in national and international markets. This study uses the deductive method, starting from general questions until reaching the most specific questions, with a descriptive and bibliographic proposal. The general objective is to present some consideration on the bird smuggling from the Amazon, focusing on the most targeted species, on the determining factors of the situation and on the critical aspects of legal protection and the actions of inspection and combating this criminal practice. The results show that the birds most targeted are those of the passerine class and the parrots that remain at the top of the black list of trafficking. Among the causal factors are the social vulnerability of the populations of the region and the existence of consumption of these animals on the black market. The attempted confrontation occurs through the Environmental Crimes Law and through the work of the inspection bodies,

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which advances in an attempt to contain criminals, struggling to recover birds from the Amazon and return them to their natural habitat.

Keywords: amazonian fauna; biopiracy; inspection; legal protection; bird smuggling.

TRÁFICO DE ANIMAIS SILVESTRES: O CONTRABANDO DE AVES NA AMAZÔNIA E OS DESAFIOS DA PROTEÇÃO JURÍDICA E DA FISCALIZAÇÃO

RESUMO

A Amazônia é detentora de uma das maiores concentrações de animais silvestres do mundo, dentre eles estão as aves que, por sua beleza e diversidade, são predatoriamente capturadas para serem vendidas nos mercados nacionais e internacionais. O presente estudo utiliza a método dedutivo, partindo de questões gerais até chegar às questões mais específicas, com proposta descritiva e bibliográfica. Tem-se como objetivo geral apresentar algumas considerações sobre o tráfico de aves da Amazônia, centrando análise nas espécies mais visadas, nos fatores determinantes da situação e nos aspectos críticos da proteção jurídica e das ações de fiscalização e combate a essa prática criminosa. Os resultados mostram que as aves mais visadas são as da classe dos passeriformes e os psitacídeos que se mantêm no topo da lista negra do tráfico. Entre os fatores causais estão as fragilidades sociais das populações da região e a existência de consumo desses animais no mercado negro. A tentativa de enfrentamento se dá por meio da Lei de Crimes Ambientais e através dos trabalhos dos órgãos de fiscalização, que avançam na tentativa de conter os criminosos, lutando para recuperar as aves da Amazônia e devolvê-las ao seu habitat natural.

Palavras-chave: biopirataria; fauna amazônica; fiscalização; proteção jurídica; tráfico de aves.

INTRODUCTION

Fauna is an environmental asset essential to an ecologically balanced environment, a right constitutionally recognized in Brazil, being of common use by the people and belonging to the community, and must be protected for future generations. Nevertheless, the trafficking of wild animals in Brazil has been a reality since colonization, when these natural elements began to be appropriated by Europeans and included in world market networks, just as occurred with other elements of biodiversity.

Amazon birds have suffered from this reality, as the international black market shows great interest in their illegal trade, forming an organized and criminal network that crosses national borders, to the detriment of Brazilian socio-biodiversity.

This study seeks to understand these issues, aiming to present some considerations about the trafficking of birds in the Amazon under the perspective of Environmental Law. Therefore, this study proposes a) the analysis of animal trafficking in Brazil; b) the verification of the factors that contribute to the trafficking of birds in the Amazon, including the most targeted species and their exploiters; c) the study of the legislation applicable to the subject in its main aspects, in addition to the analysis of inspection and combating this criminal practice.

For the development of the study, the deductive method was used, with descriptive and bibliographic research. The sample consisted of articles from books and official Internet sites, such as those published in the *Scientific Electronic Library Online* (Scielo) databases, Lilacs and others, with a time frame from 2000, in Portuguese, using the descriptors "wild animal piracy", "threatened birds of the Amazon", "legislation against environmental crimes", "repression of animal piracy in the Amazon", "supervisory body of criminal actions against wild animals", in Portuguese. After searching for materials in electronic data sources, they were selected and analyzed, organizing those that served as a source for the study.

1 WILDLIFE TRAFFICKING IN BRAZIL

With an extension of 8.5 million km², occupying almost half of South America, Brazil has high climatic variation, i.e., different climatic zones are found in each region of the country, influencing the formation of several biomes (Amazon Forest, Pantanal, Cerrado, Caatinga, Pampas fields, and

Atlantic Forest rainforest). Such characteristics reflect the richness found in its fauna and flora, which are known worldwide (SANTOS *et al.* 2015).

In this sense, it should be noted that Brazil is appointed as the country with the greatest diversity of birds in the world, with the highest rates of threatened species, especially due to the illegal sale: "birds stand out from other groups of animals because they are well-known and arouse wide sympathy among the public. In this sense, they contribute to the sedimentation of lists of threatened species", emphasize Silveira and Straube (2018, p. 382).

Producing an opinion on the issue, Ridgely (2008) states that few countries rival Brazil in terms of bird richness: "it is one of the richest countries in terms of birds in the world and its avifauna is also one of the most interesting on the planet. Almost 60% of the bird species in South America occur in the country", the author observes, also recalling that Brazil is the country with the largest number of endemic birds, i.e., they do not exist in any other country, and with the largest number of birds threatened with extinction (around 116 species), which corresponds to more than a quarter of them in South America. Such numbers "demonstrate the urgent need for conservation actions and for increasing public interest in birds which, in other parts of the world, have proved to be an efficient focal point for the development of a "culture of conservation" (RODGELY, 2008).

According to Ortiz (2017, p. 2), the situation is worrying because when a bird is abducted and trafficked from its natural habitat, it can not only die, but also jeopardize the survival of its species and the conservation of the ecosystem itself: "For every specimen of a wild animal (not just birds) that reaches the hands of a buyer, there are another nine animals that suffer along the way", comments the author.

The plunder of the rich biodiversity has been taking place since the first settlers anchored in American lands, to the detriment of the original peoples, whose way of life is linked to the resources of biodiversity⁴. In more recent times, all this diversity, especially the fauna, is threatened by wild animal trafficking⁵, considered one of the most profitable in the world,

⁴ See Shiva (2001), who comments on the plunder of nature and the knowledge of peoples about its use since the arrival of Columbus to the present day. Vandana Shiva is a indian leading and environmental activist who opposes the green economy and the commodification of natural elements.

⁵ Despite the current use of the expression "wild animal trafficking" as a result of the advent of strict conditions for the exercise of trade in wildlife animals, over the years a specific offense with this title has not been defined in the Brazilian legal system. In the legal provisions, it was decided to indicate criminal conduct in the relationship between human beings and wild fauna, involving the live or dead animal, its parts, products or by-products, with established sanctions and, provided that the obtaining of economic gain is characterized, such conduct would be identified as part of the so-called "illegal trafficking" (NASSARO, 2015).

second only to the trafficking of arms and drugs. According to the observations of Hernandez (2002, p. 275):

Animal trafficking is structured on a network formed by a tangle of routes for the movement of animals within and outside the country, political and economic influences and relations, corruption at various levels of agencies related to the repression of trafficking, links with others illicit activities and hierarchical structure typical of an illegal activity [...] traffickers have their own and sophisticated techniques to clandestinely remove animals from the country.

According to the Non-Governmental Organization (NGO) National Network to Combat Wildlife Trafficking (RENCTAS), the movement of clandestine trade can reach 38 million wild animals captured from their natural habitats and exported, especially to Europe and Asian countries⁶ (CRUZ; QUEIROZ, 2015).

Discussing the situation, Hernandez (2002) denounces that intermediaries conduct national and international smuggling with specialized Brazilian and/or foreign traffickers, legally constituted traders and businessmen with connections in the international wild animal market: "international trafficking is highly specialized, familiar with corruption schemes and it is very easy to move from one country to another in case of problems", asserts the author.

According to Mendes (2010, p. 24), Brazil contributes with 10% of the billions of dollars raised with this activity and is appointed as one of the largest suppliers of wild animals in the world. The author asserts that "data are much more alarming, as for every ten specimens captured, only one reaches its final destination, since the rest are killed during capture and/or transport".

The typification of illegal trade in animals and resulting products was generated by the Fauna Protection Law, Law 5,197/67, known as the Hunting Code, which is very close to the protectionist model, later adopted by the Federal Constitution of 1988. Article 3 of the aforementioned code establishes the prohibition of trade in wildlife specimens, their products and objects that involve hunting, persecuting, destroying or harvesting (HERNANDEZ, 2002).

Despite the illegality, wildlife trafficking advances, threatening Brazilian biodiversity and putting several species at risk in the medium and long term. In this sense, Nassaro (2015, p. 17) points out: "The illegal trade

⁶ Wildlife experts claim that Chinese, Japanese, Italian and Russian gangsters are heavily involved in the illegal wildlife trade (HERNANDEZ, 2002).

of wildlife specimens has influenced and continues to influence the extinction of species". The author states that this situation represents part of two of the pressures that most affect biological diversity: the unsustainable use associated with the overexploitation of resources and the presence of invasive alien species, as a reflection of trade across borders that support different ecosystems.

On the premises of Hernandez (2002, p. 278):

The extent of the illegal wildlife trade will vary depending on the level of repression and available distribution channels. The greater the ease, the greater number of animals will be traded, resulting in a greater number of animals taken from nature.

Calculating the size of the illegal market for the purchase and sale of wild animals is, according to Menegassi (2020) and Hernandez (2002), extremely difficult, since the rule of clandestinity is precisely to act free from society's views and from the rigor of the law. Furthermore, sophisticated trafficking networks carry out veritable corruption 'packages' involving forest guards, customs officials, buyers, international transporters, wholesalers, members of the diplomatic corps, among others.

As argued by Mendes (2010), the difficulty involving the trade in wild animals occurs because when one type of fraud is discovered, another is immediately created. Lê Duc (1996), classifies illegal activities into four categories, which are: a) smuggling; b) the use of legal documents to cover illegality; c) use of false documents, and d) other types of fraud. In the author's view, the circumstances in which crimes occur are aggregated, highlighting: a) subsistence trafficking, carried out on the roadsides by the local population, aiming at their own livelihood; b) open-air markets, in which traffic on demand takes place; c) the trafficking of rare animals, which supplies the collection of collectors who work underground and d) the trafficking of eggs, a modality that has been improving and becoming more frequent.

Another modality that has been standing out in this field as a very lucrative market is biopiracy, which refers to the act of appropriating genetic resources (animal or plant) and/or traditional knowledge associated with biodiversity, without the proper authorization of the State from which the resource was extracted or from the community where knowledge had been developed and maintained over time. It is also about the fair and equitable distribution (among States, corporations and traditional communities) of resources arising from commercial or non-commercial exploitation of transferred resources and knowledge (VALÉRIO *et al.* 2010).

In the considerations of Santos et al. (2015, p. 8), he highlights that:

Our country has been suffering from biopiracy since the time of its discovery, when the Portuguese extracted the brazilwood in an exploratory way, with indigenous labor, so that it could be taken to Portugal and, consequently, distributed throughout Europe. This practice can be classified as biopiracy, as indigenous wisdom was used in the manufacture of paint and dyes for fabrics from Brazilwood in Europe.

To get a sense of the advance in the practice of biopiracy in the country, around 20 thousand plant extracts are taken from Brazilian regions to be used in the manufacture of medicines, according to data released by the Brazilian Institute for the Environment and Natural Resources (IBAMA); in 2006, Brazil had a daily loss of US\$ 16 million due to the removal of products in the country's fauna and flora that were patented in other countries. As a result, Brazilian companies are prohibited from selling these products on the international market (SANTOS *et al.* 2015).

The table below, which summarizes the profitability of the practice of biopiracy, highlights the price of the animal sold abroad and the substances extracted from some of them.

Table 1 – Animals sold abroad (price of animal and extracted substances)

Animal	Price (in dollars)	Price (in dollars) of substances per gram extracted from animals
Jararaca (Bothrops jararaca)	1,000.00	433.00
Jararaca-ilhoa (Bothropsisularis)	20,000.00	-
Rattlesnake (Crotalus sp.)	1,400.00	-
Surucucu-pico-de-jaca (Lachesismutamuta)	5,000.00	3,200.00
Amazon toad (several)	300.00 to 1,500.00	
Brown Spider (Loxoceles sp.)	800.00	24,570.00
Spider (several)	150.00 to 5,000.00	
Wasps (several)	50.00 to 350.00	
Urutu (Bothropsalternatus)	-	1,835.00
True coral (Micrurusfrontalis)	-	31,300.00
Yellow Scorpion (Tityusserrulatus)	-	14,890.00

Source: Santos et al. (2015).

Clarifying the discrepancies between the price of the animal and the substance extracted from it, as shown in the table, Santos *et al.* (2015)

explains that these prices are established as a result of the pharmaceutical interest that only targets the toxins that the animal produces, since it is in them that the pharmaceutical potential is found and that, therefore, contains the asset of economic interest for the development of new drugs to treat various diseases.

Exemplifying the situation, Santos *et al.* (2015) cites the case of the substance extracted from the snake *Bothrops jararaca*, patented by foreign pharmaceutical companies, and that of the frog *Phellomedusaoreades*. In the case of *Bothrops jararaca* venom, its substance (active ingredient pyroglutamyl) was used to develop the drug Captropil used to treat people suffering from hypertension. The drug, which was developed in the 1970s by American researchers at the Squibb Company and approved by the US *Food and Drug Administration (FDA)*, became known as a billion-dollar drug due to its high use in the world market.

As for the case of the frog *Phellomedusaoreades*, explains Santos *et al.* (2015) that the animal has become a symbol against biopiracy in Brazil, as it had its active principle (found in its skin region) patented abroad, where they discovered it as an excellent antiparasitic against *Trypanossomacruzi*, which is the parasite that causes the disease of Nasturtium

Thus, such examples show that Brazil is at the mercy of piracy in the field of biodiversity, in its various forms. In this sense, Santos *et al.* (2015, p. 13), ponders that "the Brazilian people have been watching, blindfolded, the "cheap" sale and the increasingly "expensive" purchase of products that were extracted from our natural wealth".

Positioning himself on the configuration of this lucrative illegal trade, involving wild animals, Pontes (2003) states that it follows some distinct phases, as shown in the table below.

Table 1 -	Phases	of identification	on of the	wildlife trade

First phase	Animal capture phase, which corresponds to the first link in the chain, considered the <i>damage point</i> , from which the greatest damage occurs, most often irrecoverable, since the removal of the animal from its habitat already is in itself a significant harm.	
Second phase	Corresponds to the transport phase, which is the removal of the animal from the forest to a waiting place (warehouses)	
Third phase	It refers to the keeping of the animal, usually carried out in sheds in distant neighborhoods (outskirts of the city) or in sites near urban areas.	

Fourth phase	It is the stage of document fraud (animal washing) that occurs during the guarding of the wild animal, as there is almost always corruption by government officials or the involvement of registered breeding sites.	
Fifth phase	Final transport phase, usually carried out by outsiders, who are recruited as 'mules', as occurs in drug trafficking.	
Sixth phase	Sales phase, which can take place both in the country of origin and abroad.	

Source: Pontes (2003)

Regarding the profile of the consumer market, Charity⁷ and Ferreira⁸ denounce that there are different consumer markets being supplied, both domestically and transnationally to different locations around the world, with different uses and different species being explored (MENEGASSI, 2020). In an interview with Menegassi (2020, p. 2), Ferreira explains:

We have a large illegal trade in the US, ranging from ornamental fish to birds and reptiles, with a growing trade for arapaima leather. It has a huge market for bird collectors, mainly for Europe, and reptiles and amphibians, mainly for Germany; of birds of prey to the Middle East. There is also all traditional Asian medicine [which consumes] sea cucumber, sea horse, shark fin, jaguar. And the number of both tortoises and freshwater turtles has been growing in the pet market and in traditional Asian medicine.

Brazil also supplies neighboring countries such as Argentina, Bolivia, Guyana, Paraguay, Suriname and Uruguay, which receive smuggled animals with false documentation. The illegal trade in wild animals is also large on the borders of the states of the Amazon region, mainly on the borders with the Guianas, Venezuela and Colombia, due to the lack of Brazilian inspection, highlighting in this criminal scheme the cities of Tabatinga (AM) and Letícia (CO), as well as Manaus (AM), Rio Branco (AC), Porto Velho (RO), Bonfim (RR), Uruguaiana (RS) and Foz do Iguaçu (PR) (ABDALLA, 2007).

In short, wildlife trafficking is becoming a massive global industry, attracting criminal groups especially encouraged by low risks, high profits and low punishments. In addition, as a result of its great profitability, trafficking finances new illegal fronts and transnational crimes, generating economic losses and political destabilization in countries where endangered species cannot be easily protected and where criminal actors hinder

⁷ Sandra Charity, interim director of Proforest, an entity that aims to support responsible agricultural and forestry production and purchase. Information available at: https://www.proforest.net/pt/.

⁸ Juliana Ferreira, executive director of Freeland Brasil, an institution aimed at conserving biodiversity by combating the trafficking of wild species. Information available at: https://www.freeland.org.br.

development, the investment and tourism in the country (DESTRO, 2018).

At the heart of this market is the Amazon, which every year loses millions of wild animals to the trafficking network, according to data provided by the new report by the British organization *Traffic*. Among the animals removed from nature are the birds that, when imprisoned, face the risk of extinction, which can even affect other species, given the interactions of the natural environment (RIBEIRO, and SILVA, 2007).

2 THE AMAZON CONFISCATED BIRDS: THE MOST TARGET/THREATENED SPECIES AND THE CONDITIONS THAT FAVOR BIOPIRACY IN THE REGION

As noted before, since its discovery, Brazil has always attracted attention for its rich and diverse wildlife. In the eyes of those who arrived here, it seemed abundant and inexhaustible, with special attention being paid to the birds. According to a report by RENCTAS (2019), in the 16th century (the time when the world was opened to European exploration), returning to the old continent with unknown animals was a source of pride for travelers, as it was a proof of the encounter with the so-called "new world".

On April 27, 1500, at least two macaws and some parrots, the fruit of bartering with the indigenous peoples, were sent to the king of Portugal [...]. The impression these birds caused was such that for about three years Brazil was known as the Land of Parrots [...]. In 1511, the Bertoa ship took 22 parakeets and 15 parrots to Portugal [...]. In 1530, the Portuguese navigator Cristóvão Pires took 70 birds with colored feathers [...]. These were the first records of sending Brazilian wild fauna to Europe (RENCTAS, 2019, p. 13).

The occupation of the Amazon in the 16th century provoked even more the greed of the colonizers, because in front of them was a forest with one of the largest concentrations of birds in the world. According to Marceliano (2018, p. 3), "the Amazonian avifauna is notable for the large number of species (biological types) and for the fact that these birds are not found in other regions of the world".

Complementing his speech, the author expresses the impressions obtained about the birds:

Here live birds of the most varied sizes and colors, from small hummingbirds to the majestic harpy eagle. Amazon birds have, among other particularities, the vivacity and richness in the color of the plumage that can be decorated with dots, stripes, bars and beautiful combinations of colors and metallic tones (MARCELIANO, 2018, p. 3).

When the animal trade became a highly profitable business (with commercialization expanding in Europe) from the 19th century onwards, the birds of the Amazon became an object of desire for many. According to a report by RENCTAS (2019), hummingbirds began to be exported by the thousands to supply the fashion industry, to be embalmed and used as ornaments in European rooms, as well as herons and guarás, whose feathers were used as female adornments in Europe and North America.

So intense was the slaughter of these animals that in 1895 and 1896, Emílio Goeldi – at the time director of the Museum of History and Ethnography in Pará) – sent two representations to the government of the State of Pará, protesting against the killing of these animals on the Ilha de Marajó (RENCTAS, 2019).

However, the framework of unrestrained exploitation of Brazilian fauna, involving birds in particular, continued in the Amazon for decades. In the reflections of Gonzalez (2019, p. 2), around 1914, in a region of the Rio Negro, a merchant hired 80 men to hunt and kill herons. "All this supplied the feather and fur market in the 19th and 20th centuries: for a kilo of feathers, 300,000 would have to be killed", denounces the author.

According to the RENCTAS report (2019, p. 14):

In 1932 about 25,000 hummingbirds were killed in Pará and their feathers were destined for Italy, where they were used to decorate chocolate boxes. In 1964, the absurdity of importing a French cannon to shoot at flocks of marrecas in the Amazon was reached, with the death of 60,000 (sixty thousand) marrecas on just one farm in Amapá.

Nowadays, although there is great concern to protect bird species and their breeding sites, these animals are still under the gun of wild animal trafficking. According to IBAMA, around 80% of animals confiscated and sold on the black market belong to the group of birds (MENDES, 2010).

Part of the capture of these birds is sent to the domestic market, especially due to the Brazilian culture of having birds in cages. "There are bird breeding clubs that organize disputes aimed at judging the quality of the songs", says Abdalla (2007, p. 186), adding: "unfortunately, it has been found that some members of these clubs actively participate in the illegal trade in birds, encouraging the capture of songbirds in the wild".

The birds are removed by criminals from their nests in tree trunks while they are still in their eggs⁹ or do not have the feather to fly. Hruby (2020, p. 2) narrates the situation:

⁹ Interpol points out that a new type of trafficking, which is the eggs of endangered birds, may be being carried out by diplomats and officials with diplomatic immunity (HERNANDEZ, 2002).

The crime is done in the following way: an illegal hunter in the Brazilian forest, for example, takes eggs from a nest. Then, he or a partner attaches the eggs to the body – in order to hatch them – and takes them to Europe, mainly Portugal, where people travel with fewer connections. In Europe, eggs are taken to a legitimate aviary. The aviary staff incubates the eggs, cares for the chicks and puts metal rings in their paws, which remain on the birds' ankles for the rest of their lives and are considered proof that the bird was raised in captivity. With the breeders' anklets and *pedigrees*, the birds can be legally sold all over the world.

This is, therefore, the arrangement outlined by buyers of pirated eggs in Brazil: to sell the hatchlings born as offspring of birds kept in captivity. "The "washing of eggs" makes it appear that the bird comes from a reliable source, that is, it can be sold legally without arousing suspicion". In this sense, Hruby (2020, p. 2)recalls that one day, in the midst of a crowd of tourists returning from Brazil, a passenger caught the attention of Swiss customs agents at Zurich airport, for his clumsy walk.

The guy had a "funny" walk. Suspected of carrying drugs in his body, agents searched him. When they arrived in their underwear, they didn't find narcotics, but 25 eggs from parrots and macaws smuggled from Brazil. He trapped the eggs in his belly to keep them warm during the 11-hour flight (HRUBY, 2020, p. 2).

Citing another case involving bird trafficking, the same author reports that once in Zurich, investigators discovered a Swiss egg smuggler at the airport who, when questioned, reported that he worked with another Swiss in a remote location, in the mountains, where he kept exotic birds. Upon arriving at the aforementioned location, the researchers were impressed by the amount of exotic birds found. However, one in particular caught the attention of investigators: the Hyacinth Macaw¹⁰, a blue and yellow bird known as the "queen of the macaws". The documentation presented, says Hruby (2019) seemed to be in perfect order, the rings on the paws also avoided suspicion and the several young macaws, according to the collector, were young of the adult macaws¹¹ under his care. Furthermore:

The only way to determine if the claim was true would be to run a DNA test to discover the paternity of the bird. Feathers from the adult and young macaws

¹⁰ The popularity of this bird, which lives in the Amazon rainforest biomes, and especially in the savannah and wetlands, has almost led to its extinction. It is estimated that, in the 1980s, around 10,000 hyacinth macaws were removed from their natural habitat to supply the world trade in cage birds. In 1990, the population reached its lowest number, 1.5 thousand individuals. Currently, the trade in hyacinth macaws is strictly prohibited, with national laws and international agreements that protect the species (RUBY, 2019).

¹¹ An important fact about this is that hyacinth macaws are known to have difficulty breeding in captivity and no one knows why. Even when they lay eggs, embryos often die or are not successfully fertilized (HRUBY, 2020).

were removed and sent to a laboratory. The results showed that three hyacinth macaws and four other protected birds were not offspring of the birds declared in the documentation. The seven birds were worth over \$100,000. With that result the only logical concussion was that they had been trafficked. The court agreed and [...] ordered the two men to pay fines. But both are still allowed to breed and sell exotic birds (HRUBY, 2020, p. 4).

From this perspective, the truth is that it is not known for sure how many birds are kept in captivity and how many manage to reproduce successfully. What is known is that demand is much greater than supply and that smuggling eggs is a crime that is growing because they are easier to transport than live birds. "They are smaller, do not make noise, do not squeak and can be easily destroyed before a baggage inspection" (HRUBY, 2020, p. 3).

As for the type of birds most targeted, 90% of them are passeriformes (¹²Goldfinch, ¹³ Bullfinch, Earth Canary, Sparrow, Lark and Thrush, Amazon Cardinal) and *psittacids* (mostly parrots, followed by jandaias, parakeets and macaws) that remain on the blacklist of trafficking and are very common in the cages of many countries (GUYNUPa, 2020; POLICIA FEDERAL..., 2012).

Based on the analyzes of Ribeiro and Silva (2007), some specimens of the Psitacidae family, such as the Great Blue Parrot (Amazona aestiva) and the Mangrove Parrot (Amazona amazonica) arouse great interest due to their ability to imitate the human voice, intelligence, beauty and docility. Because of this, this group of birds has the largest number of species listed in the Brazilian Fauna Threatened with Extinction. However, the authors clarify that some specific birds have high prices on the international market, among which the Lear's Macaw (Anodorhynchusleari), sold for 60 thousand dollars, and the red-tailed parrot (Amazona brasiliensis), sold for 6,000 dollars (both sold to private collections and zoos) and others such as the red macaw (Ara chloroptera) and the toco toucan (Ramphastos toco), which sell for 3,000 dollars and 2,000 dollars respectively, acquired as pets.

In the domestic market, where prices are lower, the most valued

¹² The Bullfinch of the Oryzoborusangolensis species is one of the most valuable songbirds in the country, and a specimen can even be exchanged for a brand new car. In the Amazon there is the porophilaango lensistorridus (Scopoli), very similar to Oryzoborusangolensis, but smaller in size, which corresponds to the nominal subspecies. Its name, in indigenous language, means 'friend of man' (CRIADOURO RIO DE JANEIRO, 2021; LORDELLO, 1951).

¹³ Species widely targeted by animal traffickers or illegal breeders, due to its aggressive territorial behavior, which is why it is widely exploited in fights.

species are oxblood or tiêsnague (Ramphocelusbresilius), goldfinch (Carduelisyarrellii), sable(Tangara painter's fastuosa), canary (Sicalisflaveola) and Blue-fronted Parrot (Amazona aestiva), sold for prices ranging from R\$30 to R\$200. These birds, coming from the North and Center-West regions, are considered rare, as finding them becomes increasingly difficult, certainly due to the indiscriminate capture of these animals. It should be noted, however, that males are the most targeted because they have greater singing ability and more attractive plumage, an aggravating factor for the population balance, since according to experts around 90% of bird species are monogamous, that is, they mate with a single female during their reproductive period (RIBEIRO and SILVA, 2007).

As for the causes of this illicit trade, Destro (2018) points out that the motivation is generally attributed to the socioeconomic characteristics of countries and their regions, particularly in nations that have high biodiversity and great social inequality, high unemployment rates and low educational level, that end up favoring these illegal activities, which can be very profitable and therefore provide income for families.

In this regard, Duarte (2010, p. 2) comments that in Brazil, small communities that suffer from a high degree of poverty end up being the main 'suppliers' of animals for trafficking. With financial shortages, especially in times of drought, some populations in the country resort to this way of obtaining income, that is, they sell the animal species available in their region as a means of survival, fueling the trafficking of wild animals.

This practice is common in the state of Amazonas, where, according to Federal Police Chief Franco Perazzoni, an expert on the issue, the chain of smuggling wild animals has the poverty of traditional populations as one of its bases. With different hierarchical levels, the organizational base of trafficking is made up of capturers of animals, generally riverside or indigenous people, who are subjected to a high degree of poverty. In addition, the smuggling scheme involves everything from owners of small boats to aircraft that fraudulently transport animals (TRÁFICO..., 2015).

Some recent studies reveal that the international trade in South American birds has been significantly reduced in recent times. But for many experts, this is happening because the bird species most sought after by collectors are already present in most consuming countries. In other words, the exploitation was so great that native species simply ceased to exist or began to be found in countries that consume them (GONZALEZ, 2019).

In short, animal trafficking is an illegal, intolerable and cruel act, revealing a condition that, in addition to promoting the destruction of Brazilian fauna, causes suffering to animals with the simple objective of financially satisfying the traffickers. In this sense, Silva (2018, p. 2) ponders:

The person who acquires a wild animal by any means, or at a fair, for example, may not be aware that they are feeding the traffic, perhaps they believe that they are all legalized, and because they are such beautiful and diverse animals, they end up acquiring and feeding this whole chain and vicious circle.

In addition to this "cultural" component, however, it is worth considering that there is also a perception in common sense that the applicability of the law is soft and does not fulfill the fundamental role of inhibiting this practice in the country. On the other hand, monitoring and combating biopiracy also face challenges.

3 ON THE LEGISLATION AND OFFICIAL SUPERVISORY BODIES: THE COMPLEX FIGHT AGAINST POULTRY BIOPIRACY IN THE AMAZON

Since colonization, there was already a concern with the legislative issue involving Brazilian biodiversity, aiming at its protection through Royal Letters, laws, Decrees and Regulations. However, such measures never produced a practical effect and it was only after the creation of the Forest Code in 1921 that something began to change, that is, there was greater attention and objectivity to the issue (MENDES, 2010).

In 1924, legal protection against violence to animals began in the country, with Decree 16,590 of 1924, which regulated the Public Entertainment Houses, and prohibited, among other acts of cruelty, bullfights, bullfights and steers, cockfights and canaries. Later, other laws were created, among which was Law 5,197/67, known as the Fauna Protection Law, which gave Brazil the title of first country in South America to prohibit the trade of wild animals. According to this law, animals of any Brazilian species, which live outside of captivity, as well as their nests, shelters and natural breeding sites are State property, therefore, their use for adornment, persecution, destruction and hunting is not allowed. This was a way that the government at the time found to stop the abuses, after decades of intense exploitation that caused the extinction of many species, including birds (ALMEIDA, 2013; GONZALEZ, 2019; MENDES, 2010).

In the international field, in March 1973, the Convention on International Trade in Endangered Wild Flora and Fauna (CITES) was signed. This important instrument in the fight against the illicit trade in protected species came into force on July 1, 1975, with the mission of regulating the import and export of live or dead plants and animals.

CITES was the starting point for both the establishment of the regulation of the international trade in wild animals and for the establishment of trade rules in Brazil. Since its entry into force, the rules established in the convention plan must be observed and applied by all signatory States, being recognized as a normative instrument capable of regulating the international trade of protected species (ALBUQUERQUE, 2014, p. 152).

The primary objective of CITES was to standardize the international trade in species, with the aim of eradicating the illicit trade. In this sense, Albuquerque (2014, p. 152) points out that the objective was not to completely prohibit the trade of species, but to regulate it given the need to protect the fauna, given that the uncontrolled trade in animals is a of the main causes of its depletion.

With regard to the implementation of the provisions of Cites in Brazil, it is observed that they were determined by Decree No. 3,696 of 2000, which, among other measures, legitimated the Brazilian Institute for the Environment and Renewable Resources (Ibama) as the competent administrative authority for issue licenses for international transactions of any species listed in the Appendices of Cites (BORGES, 2019).

With the evolution of Environmental Law, according to Stifelman (undated), fauna passes from the status of State property to the current condition of a diffused asset, that is, of the entire community. For this reason, art. 225, item VII, of the Federal Constitution protects fauna as one of the elements of the natural environment and, therefore, as a common good for the people¹⁴.

In December 1998, following international guidelines to criminalize actions that are harmful to the environment, Law 9,605/98 was enacted, known as the Environmental Crimes Law, considered as a landmark of the Brazilian legislative apparatus, ensuring environmental protection in the

¹⁴ According to Albuquerque (2014, p. 158): "The Magna Carta dedicated an exclusive chapter to environmental protection. She deals with the protection of fauna in her art. 225, § 1, VII, such protection being incorporated into the regional legislation of the Brazilian states. On the one hand, the device prohibits practices that endanger the ecological function and practices that lead to the extinction of species, showing a somewhat utilitarian character, as the animal is protected as part of ecosystems and biodiversity. On the other hand, the article also prohibits practices that subject animals to cruelty, guaranteeing a moral and ethical value to the animal, aiming at its respect and well-being".

criminal sphere (TAKADA; RUSCHEL, 2012).

In Borges' arguments (2019, p. 2), Law 9,605/98, in addition to providing for criminal and administrative sanctions arising from practices harmful to the environment, made important changes to Law 5,197/67, affecting jurisdictional jurisdiction and the criminal procedure concerning the matter and changing the penalties signed in case of committing any of the crimes against wild fauna. The author emphasizes that "with this law, damage to fauna is now treated as a crime", recalling that crimes against fauna are provided for in articles 29 to 35 of the aforementioned legal diploma.

On July 22, 2008, Decree No. 6,514 came into effect, which addresses administrative infractions and sanctions to the environment, determining a federal administrative process through which infractions will be investigated, in addition to regulating and tightening Law 9,605/98. One of the important innovations observed came in the form of article 24, which, referring to the classification of the crime of animal trafficking, establishes as a crime:

Art. 24 Killing, chasing, hunting, catching, collecting, using specimens of wild fauna, natives or on a migratory route, without the proper permission, license or authorization of the competent authority, or in disagreement with the obtained:

[...]

 $\S 3$ – Incurs the same fines:

I – whoever prevents the procreation of fauna, without a license, authorization or in disagreement with the one obtained;

II - whoever modifies, damages or destroys a nest, shelter or natural breeding; or

III – whoever sells, exposes for sale, exports or acquires, keeps, has in captivity or deposits, uses or transports eggs, larvae or specimens of wild fauna, native or on a migratory route, as well as products and objects originating therefrom, from breeding sites unauthorized, without the proper permission, license or authorization of the competent environmental authority or in disagreement with the obtained one.

In October 2017, Decree 9,179 was issued, bringing changes to the text of Decree 6,514/08 (regulating law 9,605/98), and started to allow the environmental fine to be converted into provision of environmental improvement services, in two modalities: the direct agreement, in which the assessed company performs the agreed environmental service and the indirect agreement, which occurs through the financing of structuring projects previously defined by the Federal Government (BORGES, 2019).

However, both Law 9,605/98 and Decree No. 6,514 have some points that are criticized, given the fragility of some provisions in light of the

reality of animal trafficking. According to what is defended by Borges (2019), in various situations the application of Law 9,605/98 is not efficient, for example, in the case where an international animal trafficker is equated by law to a person who holds a bird in the cage to place him in his residence and that, as a result, he receives a conviction. Thus, there is a disproportionality in the establishment of penalties, so that, in relation to the trafficker, the penalty remains absurdly insignificant, however, in full accordance with current legislation.

Pointing out other conditions that affect the effectiveness of Law 9,605/98, Borges (2019), warns that its article 30 characterizes as a crime the illegal export of skins and hides of amphibians and reptiles, but does not speak of other animals, leaving, according to the author, a regrettable loophole in the law. Other legal omissions in the fight against wildlife trafficking are also identified:

It does not typify illegal trade between member states of the federation, declaring as punishable, thus, only international trafficking [...] does not address the issue of illegal trade through the world wide web. In a world whose extraordinary dynamism is largely due to the intense use of the internet, this gap in legislation is particularly relevant (BORGES, 2019, p. 3).

Therefore, from the point of view of the aforementioned author, Law 9,605/98 is insufficient to combat the trafficking of wild animals, since it does not cause real harm to those who remove animals from nature. On the issue, Borges (2019, p. 3) emphasizes that "the only penalty actually applied is the fine, which, however, if not paid, does not negatively affect the criminal", emphasizes Borges (2019, p. 3).

In Silva's Opinion (2018, p. 4), there is an enormous difficulty in punishing wild animal traffickers precisely because of the criminal weakness of law 9,606/98 and the absence of a specific type that aims to curb the criminal practice. The author also considers the absence of opening a police investigation and bringing criminal action to prosecute and judge those who commit crimes of this nature.

In Menegassi's considerations (2020), the Environmental Crimes Law defines the trafficking of wild animals as having less offensive potential (art. 29) and this creates an impediment for the crime to be included in the UN Convention on Organized Crime, since one of the requirements is to be a crime with high offensive potential, a condition that generates a sense of impunity and encourages recurrence. Furthermore, the same author emphasizes that the aforementioned legislation represents an international

challenge for Brazil, as the Amazon covers nine countries, each with its own rules on the ownership and commercialization of wild animals.

In the case of Decree No. 6,514, the criticisms involve the application of fines¹⁵. It is argued that the Executive went too far by abusively increasing them, deviating from the educational purpose of the law to simply punish the offender, with the intention of ensuring the public interest. In other approaches, the reverse is considered, since the administrative fine of up to BRL 5,000.00 per animal that has suffered any of the violations provided for in the *caput* or in the items of §3 of article 24 of the Decree, is considered irrelevant given the breadth and profitability of the illicit wild animal commercial network (BORGES, 2019).

As noted, until 2015, the legal tools for combating biopiracy basically resided in the Federal Constitution, the Environmental Crimes Law, and Decree No. 6,514. When access to biodiversity and genetic heritage involved associated traditional knowledge, Provisional Measure n. 2,186-16, of August 23, 2001. This Provisional Measure remained in force until 2015, when Law 13,123, known as the New Legal Framework for Biodiversity, was enacted.

The referred law regulated item II of § 1 and § 4 of art. 225 of the Federal Constitution, some provisions of the Convention on Biological Diversity, promulgated by Decree No. 2,519, of March 16, 1998, and provided for access to genetic heritage, protection and access to associated traditional knowledge, and benefit-sharing for conservation and sustainable use of biodiversity.

The law established the creation of the Genetic Heritage Management Council (Cgen), whose functions include monitoring the access and shipment of samples that contain genetic heritage. In addition, the regulation includes some controversial aspects such as the prohibition of access by foreign natural persons, which also generates criticism:

With regard to biopiracy, which is a matter of concern when it comes to biodiversity, the New Legal Framework prohibits all access to the national biological and cultural heritage by foreign natural persons, in order to curb biopiracy practices in Brazilian territory, with any access being to biodiversity by a foreign natural person considered illicit (LIMA; DANTAS; GUIMARÃES, 2015, p. 390).

¹⁵ The fine for anyone caught with wild birds without authorization from Organs competent bodies is R\$ 500 per individual of a species not included in official lists of risk or threats of extinction and R\$ 5,000 per individual of a species included in official lists of Brazilian fauna endangered (http://gl.globo.com/pa/santarem-region/noticia. Accessed September 9, 2020).

The measure, seeking to protect biodiversity and counteract the ineffectiveness of previous norms, opted to establish a stricter ban, but which, on the other hand, could compromise research involving Brazilian biodiversity.

With regard to the permitted activities, it is observed that the law, in its art. 12, determines that activities of access to genetic heritage or associated traditional knowledge within the country or abroad must be registered. In this case, access is characterized as research or technological development. The norm also regulates the shipment of a genetic heritage sample abroad for the purpose of accessing and sending a sample containing genetic heritage by a national legal entity, public or private, to provide services abroad as part of research or technological development.

The law establishes some requirements for remittances abroad, for application of intellectual property rights, or for the commercialization of the intermediate product, or for the dissemination of results, final or partial, in scientific or communication media, or for the notification of the finished product or reproductive material, whenever developed as a result of access.

Among the measures requested, there is a need for registration, which must be accompanied by Cgen, so that all these activities can be carried out, including the shipment of birds abroad. Nevertheless, the possibility opened by the law to legitimize shipments, to the detriment of the interests of the Brazilian population, is observed as critical, only fulfilling the registration requirements. At this point, the weaknesses are evident, since:

Pursuant to art. 13, of Law n. 13,123/2015, the only activities for which prior authorization may be required, and even so, at the discretion of the Union, is access to genetic heritage or associated traditional knowledge: in an area essential to national security, which will be given after consent of the National Defense Council; and in Brazilian jurisdictional waters, on the continental shelf and in the exclusive economic zone, which will take place after the consent of the maritime authority. The notification of the finished product or reproductive material to the CGen, which is merely declaratory, is required for the economic exploitation of the finished product or reproductive material arising from access to genetic heritage or associated traditional knowledge (MIRANDA, p. 153).

Thus, a considerable part of biopiracy activities can continue to be carried out with the legitimacy of registration. The fact is that the aforementioned law receives several criticisms with regard to the protection of biodiversity and, with regard to animal trafficking, it does not offer better solutions¹⁶.

16 For further details, consult: MOREIRA; PORRO and SILVA, (2017).

In short, there are many challenges to be overcome in the field of legislation, which, fortunately, has already been observed by the Brazilian Legislative Power, which at the moment has two proposals for toughening measures against animal trafficking in the country. According to the Federal Senate news agency:

The proposals were presented after the denunciation of the existence of an animal trafficking network in Brazil, revealed a month ago, after a young university student from Brasília was bitten by a cobra, a poisonous snake brought clandestinely into the country. The penalty provided for in these cases is imprisonment from three months to one year, and a fine. Senator Rose de Freitas (Podemos-ES) proposes doubling this penalty in the case of a venomous animal or carnivorous predator that poses a risk to human life. This is what the PL 3,947/2020 provides (AGÊNCIA SENADO, 2020).

In addition to PL 3,947/2020, PL 4,043/2020 was also presented, whose proposal is to apply double the penalty for repeat offenders in the crime of animal trafficking (AGÊNCIA SENADO, 2020).

Despite recent initiatives, while legislation proves unsatisfactory in combating the trafficking of wild animals, such as birds in the Amazon, the inspection, seizure and combat actions that are carried out by agents of the Brazilian Institute for the Environment (Ibama), Amazonas Environmental Protection Institute (Ipaam) and by forest police officers, advance in an attempt to contain criminals, but facing many challenges and difficulties. "In the northern region, due to the very large territorial dimensions, inspection is difficult", emphasizes Mendes *et al.* (2016, p. 661).

This finding is also reinforced by Nunes (2017) when he argues that the immensity of the Amazon rainforest represents an extra challenge for those trying to combat wildlife trafficking, since there is no possibility of being everywhere and this ends up imposing on the tax an arduous and smartest task possible in monitoring illegal activities.

The Brazilian Institute for the Environment (Ibama), in addition to inspecting environmental degradation, with great effort from inspectors, works to recover the birds of the Amazon and return them to nature, natural habitat or conservation units. In one of its actions in 26 municipalities in the Center-South, Inhamuns, Sertão Central, Vale do Jaguaribe and Sertões de Crateús, more than 400 canaries, hundreds of ducks, more than four thousand flyers were apprehended. , in addition to generating the arrest of numerous hunters, seizure of equipment and application of fines that exceeded R\$ 3 million (ANDA, 2014).

The challenges are many, as the agency generally has few inspectors

to work in very wide areas, but with a growing number of traffickers in practically all Brazilian municipalities. Ibama tries to react, usually through complaints, with the partnership of the Environmental Military Police, which greatly contributes to the fight against wild animal trafficking (ANDA, 2014).

The State of Amazonas, adopting a commitment to the preservation of species, has been developing work involving the State Secretariat for the Environment (Sema) and the Environmental Protection Institute (Ipaam), in articulated actions with other Municipal, Federal and Non-Governmental Organizations – Governmental (NGOs), including the Military Environmental Battalion, which in 2019 reached a record number of rescues: 676 animals, the triple recorded in 2018, among them are the birds that only in the first two months of 2020 totaled 62 species redeemed (G1 AM, 2020; DUTRA, 2018).

The Amazonas Environmental Protection Institute (Ipaam) has also been engaged in this work to recover birds in the Amazon. In the first half of 2019, the agency recorded a 40% increase in the number of wild animals rescued compared to 2018, including 223 birds such as Parakeet-maracanã and Socózinho, 85 of which were offspring (AMAZONAS, 2019).

It is also worth highlighting the work of the National Center for Research and Conservation of Wild Birds (Cemave/ICBio) to combat bird trafficking, which has been constantly implementing action plans for the conservation of endangered wild birds. According to Lima (2014), in many of these plans, the biggest problem is trafficking. As a result, the actions and strategies need to be thought out and implemented together with the inspection bodies of the different spheres (federal, state and municipal).

It appears, therefore, that important actions of apprehension of birds are carried out in the fight against trafficking in the country, especially in the Amazon and specifically in the State of Amazonas. But, as cited by Guynup (2020b), these actions are difficult to follow because the data on seizures represent only a fraction of the animals illegally removed from Nature.

Corroborating the difficulties regarding the issue, Bucheroni (2020, p. 2) recalls that the inspection of animal trafficking is also fragile, which makes it difficult to combat this crime. According to the author, although the environmental agencies can count on inspectors and employees who are extremely dedicated and motivated to work, most of the times they are not offered the necessary conditions to perform the function with satisfactory results.

A study by Mendes *et al.* (2016) aimed to evaluate wild animals apprehended in the states of Pará and Amazonas, in the period 1999 to 2007, through tax assessment notices¹⁷. As a result, it was revealed that, in the case of IBAMA, even though there is action in the states of Amazonas and Pará, its diligence has been challenged, according to the Reports of Infraction Notice (RAI) analyzed, which point to sporadic action in these states. It was also shown in the study that, even though the two states are located in the Amazon, there is a certain divergence in the number of wild animal seizures, since, in the state of Pará, IBAMA apprehended more birds and in Amazonas, more reptiles .

The truth is that the situation so far does not look promising. In addition to the problems that reveal weaknesses in the legislation, environmental agencies and bodies are practically without structure in the current government. In this sense, Bazaglia (2019) argues that the country has been seeking to take a firm legislative stance in defense of animals, but faces many challenges in applying all this legislation and legal understandings. It is important to point out that this condition only worsened with the new coronavirus pandemic, which made inspection even more deficient at the peaks, in the capture sites and in the animals' transport routes.

Is it an evil demand? Yes and no. There's the evil ones in the middle who know what they're doing and there's the people who don't. But there are only those who sell because there are those who buy. It's a matter of behavior change, education and awareness. And also passion and addiction. Obviously there is economic interest, there are people earning money from it, very, very little, but there is. And there is a lack of connection between people, not just with the volume of what is trafficked, but with what that volume means in terms of consequences and impacts. What does this mean in nature? There are birds that are not reproducing, that are not dispersing seeds, that are not pollinating and a lot of ecological functions that may be related to ecosystem services (MENEGASSI, 2020, p. 5).

Thus, one solution would be the development of a national strategy in the country to combat wild animal trafficking, with the creation of a multi-agency committee that promotes institutional cooperation, data management and sharing between institutions and improvements in the quality of collection (MENEGASSI, 2020). In addition, there is a need to strengthen the legislation, starting to consider the trade in wild animals as a serious crime.

¹⁷ Environmental crimes are investigated through modalities of procedures, including the Notice of Violation (RAI), which after completion is sent to the Common or Federal Courts, according to the jurisdiction in question (MENDES, 2016).

The fight against the trafficking of birds and other wild animals has, therefore, been discussed by control and inspection agents and many agree that, in addition to greater investment in the area and in training to improve inspection and combat actions, there must be an evolution, not only from a legal and legal point of view, but also from a social point of view, mobilizing the population through education, so that they become aware that it is neither acceptable nor ethical to withdraw their freedom from an animal.

FINAL CONSIDERATIONS

This study, aiming to present some considerations on the trafficking of birds in the Amazon, focused on the analysis on the most targeted species, on the determining factors of the situation and on the critical aspects of legal protection and inspection actions and combating this criminal practice.

Based on bibliographic findings, it was found that the trafficking of wild animals is one of the most profitable illicit activities in the world, second only to drug and arms trafficking. Brazil, contributing 10% of the billions of dollars collected, is known as one of the largest wild animal suppliers in the world, supplying different consumer markets, both domestically and transnationally.

In this massive and global illegal trade, which attracts transgressors from all over the world, encouraged by high profits, low risks and low punishment, is the Amazon, which has been losing millions of wild animals to trafficking, being among the different species Birds are explored, the most targeted being those of the passerine class (Gardfinch, Bullfinch, Earth Canary, Sparrow, Lark and Thrush, Cardinal-da-Amazônia) and parrots (parrots, jandaias, parakeets and macaws) that remain at the top of the trafficking blacklist.

As for causal factors, the revised literature pointed out that a relevant factor in the Amazon is the poverty of the communities, which suffer from extreme financial shortages and make this activity a way of obtaining income. Thus, the search for animals for trafficking is a common practice in the state of Amazonas, for reasons of survival.

In 1998, following international guidelines to criminalize actions that are harmful to the environment, Law 9,605 was enacted, also known as the Environmental Crimes Law, and seen as a landmark in the legislative apparatus for the care and penal protection of the environment. As noted, the law became more severe with Decree 6514 of 2008 whose most important

innovation came in the form of article 24, which refers to the classification of the crime of animal trafficking. As noted, Law 13.123/2015, which established the new Biodiversity Framework, also did not bring measures considered effective on the subject and has several flaws, contributing little to the protection of Brazilian biodiversity.

In the field of institutions, on the other hand, there are inspection bodies such as the Brazilian Institute for the Environment (Ibama), state bodies such as the Amazonas Environmental Protection Institute (Ipaam), in addition to forestry police, who work in an attempt to contain the criminals, struggling with great effort to recover the birds of the Amazon and return them to their natural habitat.

Despite this, the trafficking of birds in the country and in the Amazon continues to act, indifferent to the penalties imposed by the law (which for many is inefficient in view of the problem of trafficking in wild animals, especially as it gently punishes offenders). As a vicious circle, which continues to have serious impacts on efforts to safeguard wild animals, piracy unprotects and affects the maintenance of ecosystems, leaving deep marks on each of the animals forcibly removed from their habitat, as many, even if rescued, they don't always return to free life. The practice proves to be harmful, therefore, for the environmental balance and for the maintenance of environmental services dependent on the presence of avifauna.

Thus, given the verifications that the law is incapable of illegal trade in wild animals such as birds and considering that inspections are limited by the difficulties imposed even by the characteristics of the Amazon region, it is necessary to develop a partnership between the Government and society aiming at a greater awareness of the importance of protecting fauna and the harmful impacts of piracy actions. It is also important that there is investment in the construction of control bases, increasing the number of police garrisons and inspection agents, including monitoring those who buy the animals. As theorists claim, there is only trafficking because there is a market, and those who participate in the plot are responsible for the same responsibility as the traffickers.

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