

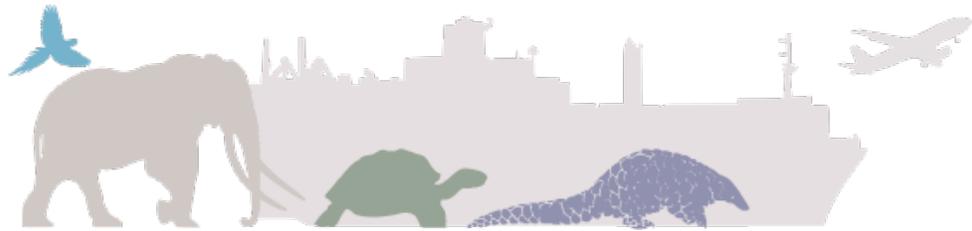
TAKING OFF

WILDLIFE TRAFFICKING IN THE LATIN AMERICA
AND CARIBBEAN REGION



ROUTES

Reducing Opportunities
for Unlawful Transport of
Endangered Species



The USAID Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES) Partnership brings together transport and logistics companies, government agencies, development groups, law enforcement, conservation organizations, academia and donors to disrupt wildlife trafficking activities, and forms a key element of the concerted international response to addressing wildlife poaching and associated criminal activities worldwide.

At the heart of ROUTES is a core group of partners collaborating with the U.S. Government and the transport sector that includes Airports Council International (ACI), the Center for Advanced Defense Studies (C4ADS), the International Air Transport Association (IATA), TRAFFIC and World Wildlife Fund (WWF).

For resources referenced in this document or for more information visit: www.routespartnership.org

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Executive Summary

Wildlife trafficking in the air sector in Latin America and the Caribbean (also known as the LAC region) is a serious and significant problem. As in other regions, the confluence of habitat destruction, economic polarization, and convenient availability of international travel has facilitated wildlife trafficking at a national, regional, and international level. The consequences for wildlife populations have been dire – against the backdrop of a 94% drop in regional animal population sizes between 1970 and 2020, the C4ADS Air Seizure Database shows that seizures of animal products along air routes increased steadily until 2019.

The LAC region poses particular concern for two reasons. First, it is one of the principal remaining repositories of biological and species diversity in the world. Increasing wildlife trafficking will continue to degrade this essential environment. Second, the LAC region is the home to many of the world's most capable and violent trafficking organizations,¹ which raises the risk that wildlife trafficking will empower organizations seeking to impose more direct harms on humans.

This report, produced under the ROUTES Partnership, seeks to synthesize publicly available information to provide an empirical basis for the analysis of wildlife trafficking in the air transport sector within the LAC region.

KEY TAKEAWAYS:

- **In the LAC region, live animals—which have been shown to carry potential to spread zoonotic diseases²—account for 40% of known seizures in the air transport sector.³**
- **LAC region wildlife trafficking was tied to 53 countries globally between 2010 and 2020.**
- **Of all the LAC countries represented in the C4ADS Air Seizure Database, Mexico, Brazil, and Colombia had the highest number of wildlife trafficking instances between 2010 and 2020.**
- **From 2010 to 2020, the C4ADS Air Seizure Database recorded 65 unique species of wildlife trafficked through the LAC region's air transport sector. The most common of these were finches, which were seized 34 times from 2010 to 2020 and constituted 33% of all bird seizures.**

The report proposes key recommendations for different stakeholders to counter wildlife trafficking in the air transport sector within the LAC region.



Introduction

The Latin American and Caribbean (LAC) region holds over 40% of the world's biodiversity,⁴ making it a rich target for exploitation by wildlife traffickers aiming to profit off selling illegal live wildlife or wildlife products. These traffickers exploit the increasing connectivity of inter- and intra-regional aviation to move wildlife—birds, reptiles, marine species, and more—to consumers within the region and outside of it. This illicit trade threatens not only the survival of the LAC region's unique species, but also public health and international security.

The C4ADS Air Seizure Database records a total of 281 seizures over 11 years that are linked to the LAC region. This figure, however, does not represent the true scale of wildlife trafficking in the region: traffickers may employ a variety of transport methods outside of air transport, and regional governments may not always collect or report data on seizure incidents.⁵ Moreover, the scale of trafficking recorded in the database should not be confused with the sophistication—and potential danger—of trafficking actors. The LAC region has long been recognized as the home turf of sophisticated, large-scale networks that have engaged in the trafficking of weapons,⁶ narcotics,⁷ and human beings,⁸ as well as corruption. That several of these networks have demonstrable links to global wildlife trafficking⁹ should raise concerns of global stakeholders looking to secure international airways.

In the LAC region, live animals—which have been shown to carry potential to spread zoonotic diseases¹⁰—account for nearly 40% of seizures in the air transport sector.¹¹ Additionally, LAC wildlife traffickers have been found to exploit the same hubs and transport routes as traffickers of other illicit products.¹² In Mexico, for example, the totoaba fish trade has been repeatedly linked with organized criminals involved in the narcotics trade.^{13 14 15}

Analysis of the C4ADS Air Seizure Database is, like all analyses of seizure data, inherently imperfect. Seizure counts do not reflect successful smuggling events. Understanding wildlife trafficking in the LAC region is also particularly difficult because of limited reporting on lesser known species^{16 17} and lack of political will, in some cases, to stop the trade.¹⁸ For more information on the caveats that should be considered when analyzing seizure data, refer to the ROUTES Partnership's *Flying Under the Radar* report.¹⁹ Seizure data as a proxy for wildlife trafficking remains, however, a helpful²⁰ and common^{21 22} way to study the routes and methods used by traffickers.

The C4ADS Air Seizure Database, which records publicly reported information about wildlife seizures in the air transport sector worldwide, demonstrates the exploitation of the LAC region by wildlife traffickers. Wildlife trafficking in the LAC region was tied to 53 countries globally between 2010 and 2020. The number of known LAC region wildlife shipments in the air transit sector has grown in recent years, making up 22% of the total number of seizures recorded in the Database in 2020. While this highlights the importance of the region for global trafficking patterns, it is worth noting the potential impact of reduced flights in 2020 due to the COVID-19 pandemic.

As with all previous ROUTES reports, the term “seizure” is used to refer to the number of seizures in a specific country, whereas “trafficking instance” is used to refer to the number of times a product originated, transited, was destined for, or was seized in a location. Thus, trafficking instances will always be the same or more than the seizure instances.

Wildlife Trafficking Trends in the LAC Region

Wildlife trafficking in the LAC region is unique due to the high levels of biodiversity and the variety of end markets for wildlife products from the region. While routes and methods of transportation vary widely depending on the type of wildlife or wildlife product traffickers are smuggling in the air transport sector, a few key patterns were observed in the data:

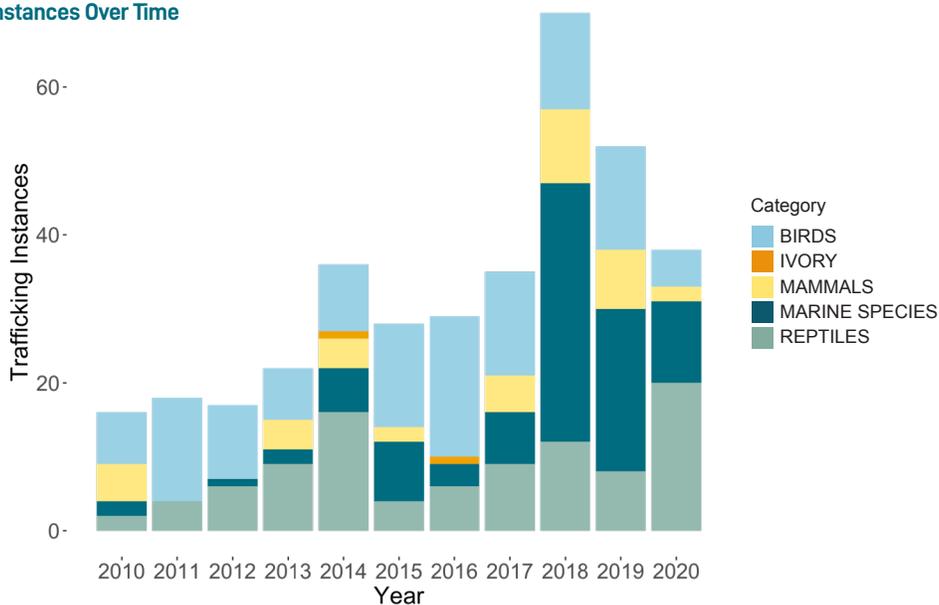
- Live animals were more likely to be shipped in checked baggage or on a passenger’s person than within air freight. By contrast, wildlife products such as totoaba bladders were more likely to appear in air freight.
- The overall number of LAC trafficking instances, 359, was relatively low for the 10-year period, pointing to a paucity of data and the need for improved data reporting by governments across the region. A number of reports indicate that the region supplies international markets for a range of wildlife products, even if these trade flows are not reflected in air seizure data.^{23 24 25}
- Certain countries, such as Brazil, featured high levels of intra-country trafficking, in contrast with nations whose trafficking patterns were mainly oriented towards external destinations.

From 2010 to 2020, the C4ADS Air Seizure Database recorded 65 unique species of wildlife trafficked through the LAC region’s air transport sector. The most common of these were finches, which were seized in 34 trafficking instances from 2010 to 2020 and made up 33% of all bird seizures. Other common wildlife included lizards (22 instances), snakes (21 instances), and turtles (20 instances).

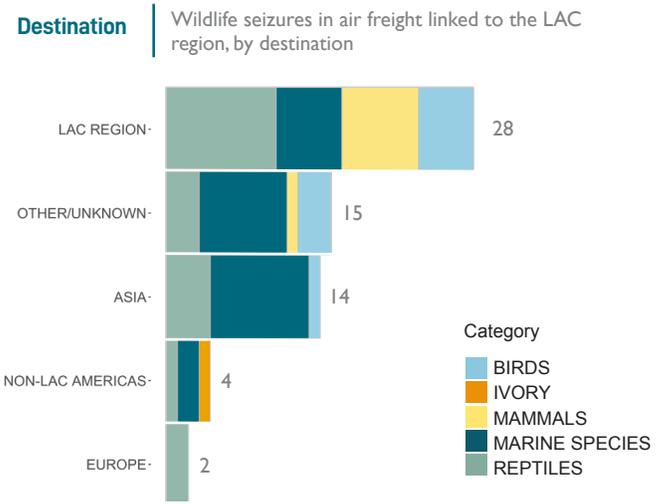
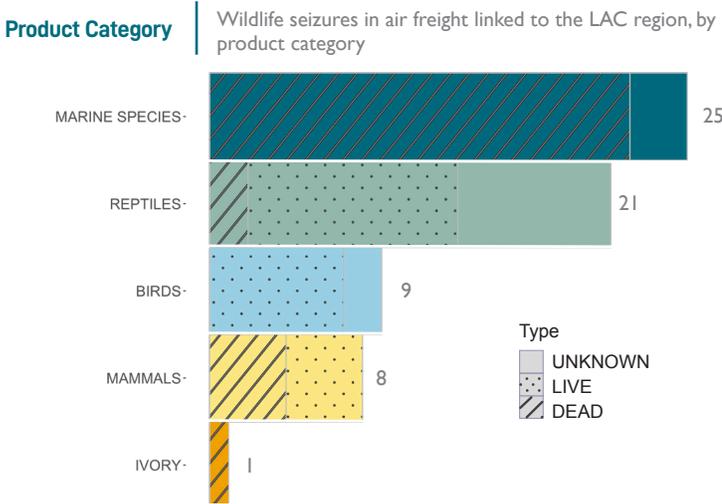
When moving these products, traffickers exploited airports in 84 cities in the region. The most common routes passed through Mexico or Brazil. In fact, seizures in airports in Mexico City, São Paulo, Belem, Manaus, and Tijuana together made up 38% of all seizures in the region from 2010 to 2020.

Intra-regional demand, as measured by the number of trafficking instances for wildlife, is higher in the LAC region than in almost all other regions covered by the C4ADS Air Seizure Database, except Asia. The scope is wide: of the 27 countries with instances of wildlife trafficking from 2010 to 2020 in the LAC region, 5 were also destinations for illegal wildlife either domestically or from elsewhere in the region. This intra-regional trade is driven largely by demand for wildlife as pets^{26 27} particularly birds and reptiles, in countries such as Brazil and Mexico.

LAC Wildlife Trafficking Instances Over Time

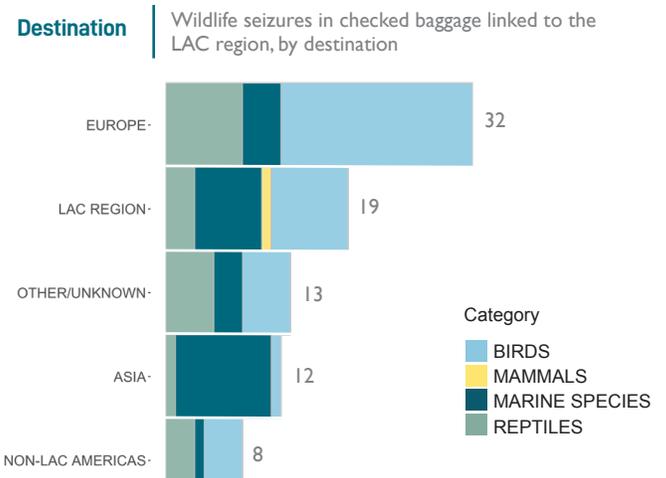
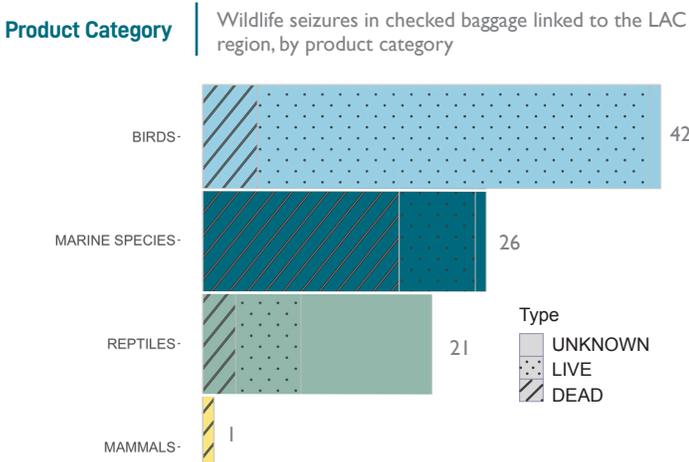


AIR FREIGHT



Among the trafficking methods used by traffickers in the LAC region, air freight is especially common for marine species and reptiles being sent within the LAC region and to Asia. Among marine species sent by air freight, totoaba fish bladders—often to be used in traditional medicine²⁸—and sea cucumbers, which are consumed as a luxury food item, are most prevalent.²⁹ Reptiles sent through air freight often remain within the region, destined for LAC countries at least 53% of the time. The disproportionate use of air freight for trafficking fish and reptile species is likely due to the relative ability of these species to withstand cramped conditions, as opposed to other species such as birds. Mexico represents a large proportion of the demand for lizards and snakes, some of the most commonly trafficked reptiles. Within LAC, the most seizures of air freight occurred in Tijuana, Mexico, representing 19% of all LAC air freight seizures.

CHECKED BAGGAGE



Birds, the most commonly trafficked animal category by air in the LAC region, were found in 45% of seizures of checked baggage, with 95% of birds in checked baggage smuggled live, likely to meet the demand for songbirds in countries such as Brazil, Netherlands, and the United States.³⁰ Birds likely account for such a high proportion of wildlife found in checked baggage because they can fit in small spaces and are very profitable, and because their physical delicacy demands the close level of attention that trafficking in checked baggage provides.

Commonly trafficked species included finches, toucans, cardinals, and tanagers. Although marine species are frequently trafficked by freight, they are also found in checked baggage. Among aquatic species, totoaba fish and zebra pleco, an ornamental fish from Brazil prized as a pet,³¹ were the most commonly trafficked species in checked baggage.

PASSENGER CLOTHING/ITEMS



Of those seizures where wildlife was hidden on a trafficker's person or in their personal effects, at least 77% featured live animals. Birds made up 92% of seizures in this category, 38% of which were finches destined for the United States. Demand for finches in New York City, where the songbirds are sought after for singing contests has driven traffickers to send finches from Georgetown, Guyana.³² In addition to finches, passengers have been found to smuggle canaries, macaws, parrots, and mammalian species such as monkeys within the LAC region.

Of all the LAC countries represented in the C4ADS Air Seizure Database, Mexico, Brazil, and Colombia had the highest number of wildlife trafficking instances from 2010 to 2020. Although these statistics may reflect higher exposure to wildlife trafficking risks, they may also simply reflect higher levels of interdiction or reporting. Examining the wildlife trafficking instances of each country in detail provides more insight into the species, smuggling routes, and trafficking methods common within the region.

COUNTRY DEEP DIVE

Mexico



Wildlife trafficking thrives in Mexico, despite public reporting on wildlife trafficking routes^{33 34} and international pressure to stop the trade.^{35 36} Both domestic and international wildlife trafficking into and out of Mexico make the country one of the largest consumers and exporters of wildlife and wildlife products moving by air in the LAC region. Between 2010 and 2020, 36% of trafficking instances in the LAC region occurred in Mexico.

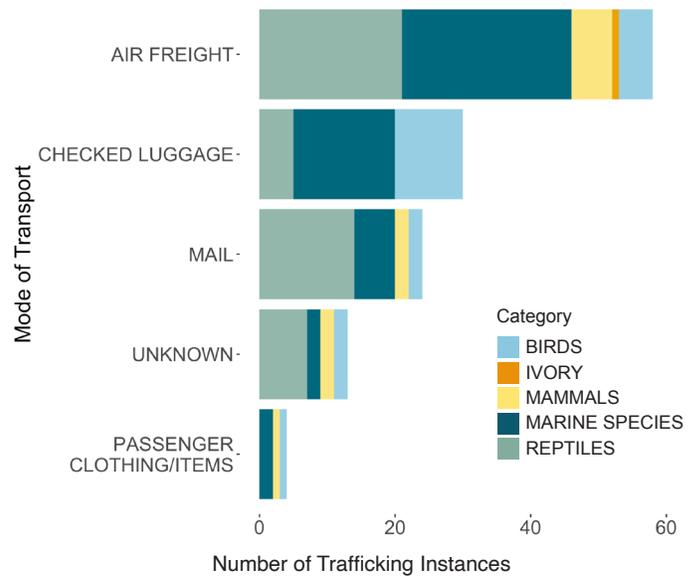
CASE STUDY: TOTOABA TRAFFICKING, 2020



Despite a dramatic slow-down in air traffic as a result of COVID-19,³⁷ wildlife traffickers in Mexico continued to exploit the air transport sector to ship totoaba bladders overseas. The swim bladder of the totoaba fish are sought for their perceived medicinal and nutrition benefits.³⁸ The nets used to catch the fish also result in the bycatch of the vaquita porpoise, which like the totoaba is endangered. In September 2020, the Mexican federal government announced sweeping new restrictions prohibiting the sale, possession, transport, and use of nets used in totoaba fishing.³⁹

Just one month prior to the announcement of the legislation, Taiwanese police and customs officials intercepted an air freight shipment destined for Guangzhou containing 161 dried totoaba bladders weighing 16 kilograms and worth an estimated USD 900,000.^{40 41} Authorities arrested a customs broker suspected of shipping the swim bladders from Mexico to China via international express courier delivery service.

Number of Trafficking Instances per Mode of Transport in Mexico



Mexican airports are the primary point of origin for wildlife products moving out of the LAC region by air. Of illicit wildlife shipments with known origin countries in the LAC region and destined for consumer markets outside of the LAC region (113 seizures), 33% originated in Mexico, with the majority of these seizures also occurring in Mexico. Most of these seizures were of totoaba bladders smuggled in checked baggage.⁴²

Mexico is also a common destination for wildlife products. According to the C4ADS Air Seizure Database, 50% of intra-regional trafficking shipments were destined for Mexico. Unlike the aquatic species that were trafficked out of Mexico, the Mexico-destined shipments were mainly of lizards, big cat products, and crocodile products moving via air freight. According to the Mexican government agency PROFEPA, local demand for illicit wildlife products is often driven by their function as symbols of social status in the form of exotic pets, hunting trophies, and unique jewelry.⁴³

Studies indicate that criminal groups in Mexico primarily devoted to narcotics⁴⁴ and human trafficking⁴⁵ have become active in the illicit wildlife trade to diversify their sources of revenue.⁴⁶ Despite the convergence of Mexican drug trafficking and wildlife trafficking organizations, however, no single seizure of both drugs and wildlife has been publicly recorded in the country's air transport sector.⁴⁷

COUNTRY DEEP DIVE

Brazil



Brazil stands out among other countries in the LAC region for the size of its domestic market. Of the 46 Brazil-linked seizures with a known destination, 17 were intra-Brazil shipment routes. Additionally, 71% originated domestically (when the origin is known) while the remaining shipments were from Europe (8%), North America (5%), or elsewhere in the LAC region (5%). The illegal pet trade is suggested to be the strongest incentive for wildlife trafficking in Brazil.⁴⁸

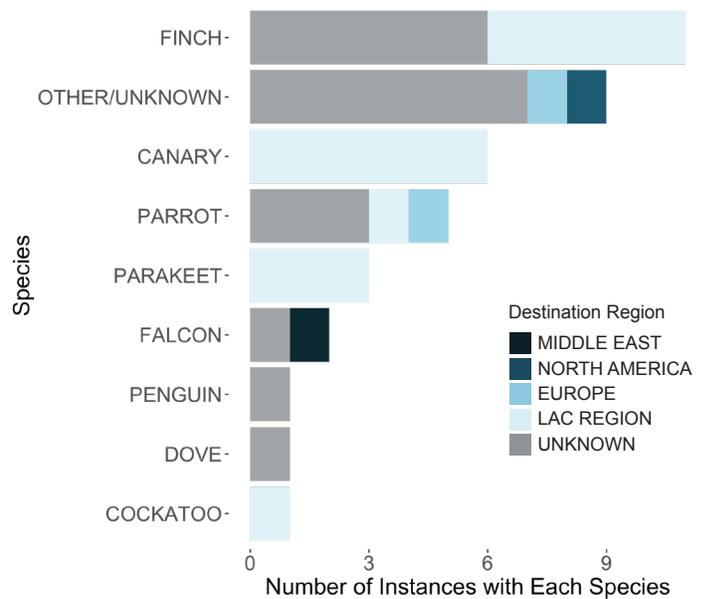
CASE STUDY: TRAFFICKING FROM BRAZIL TO EUROPE

Between 2015 and 2019, the WCO Customs Enforcement Network (WCO CEN), which collects voluntarily submitted seizure data from member administrations throughout the world, recorded 30 seizures in Europe of wildlife sent via air from Brazil, one of the most significant trafficking volumes sent from Brazil to any other region. Many were shipped from São Paulo, and most were destined for Germany (18) or the Netherlands (6). Most seizures in Germany were of aquatic species, while most seizures in the Netherlands were of birds.

The data included an April 6, 2017 event, for instance, where a passenger in Frankfurt, Germany was randomly set aside for additional inspection after arriving from São Paulo, Brazil. The passenger was found with 50 Queen Conch shells hidden in their handbag.

According to WCO data, wildlife smuggled from Brazil to Europe by air moves through the commercial air sector 83.8% of the time. Where the concealment method was known, the majority of wildlife was transported in checked or hand baggage. This indicates that increased vigilance of passengers on Brazil to Western European routes should be exercised by stakeholders in the air transport sector.

Bird Trafficking Instances In Brazil by Final Destination



Historically, the illegal wildlife trade in Brazil has consisted mostly of live birds bound for both domestic and regional markets,⁴⁹ driven largely by a market for songbirds in Brazil.^{50 51} Birds accounted for 41% of wildlife seizures at airports in Brazil between 2010 and 2020, totaling more than 2,843 individual specimens.⁵² About half of all Brazil bird trafficking instances were seized at airports in Belem or São Paulo.

2019 saw a sharp increase in aquatic species trafficking. The Zebra Pleco, an ornamental freshwater catfish prized as a pet for its unique colors,⁵³ and pirarucu, a large fish from the Amazon prized for its meat and skin are some of the most common aquatic species trafficked in Brazil.⁵⁴ Aquatic species seizures often occurred at airports in cities near large rivers, particularly in Altamira and Manaus. 80% of seizures involving aquatic species for which a method of transport was reported were made in checked baggage.

COUNTRY DEEP DIVE

Colombia



Annual seizures of wildlife shipments originating in, destined for, or seized in Colombia have increased in recent years. This trend may reflect increased trafficking activity, heightened media attention, or simply greater attention dedicated to the issue by law enforcement.

The Colombian National Police (PNC) appears to recognize wildlife trafficking as a growing problem. In 2020, for example, one of the largest seizures of reptiles in the LAC region was of 2,000 freshwater turtles seized in Colombia destined for the US and Japan.⁵⁵ Similarly, on 3 June 2020, Colombian authorities conducted an operation across 20 cities to seize 502 animal specimens and arrest 50 people on charges of wildlife trafficking.^{56 57} In a 2020 report, the PNC identified three primary international wildlife trafficking routes from Colombia to countries in North America, Europe, and East Asia.⁵⁸ This report also identified three domestic trafficking routes, all of which end in Bogotá or other areas along the country's international borders.

As Colombia's largest city and hub for international air traffic, Bogotá plays a central role in the country's wildlife trade, serving as both a domestic marketplace and global connection center.⁵⁹ Of the seizures in the C4ADS Air Seizure Database that occurred in Colombia, half took place in Bogotá. This was followed by Leticia, a city on the Amazon River bordering Brazil and Peru, which was the location for 31% of all Colombian seizures. In recent years, a majority of wildlife trafficked through the Alfredo Vásquez Cobo International Airport in Leticia has been freshwater wildlife products such as the pirarucu fish or catfish.

CASE STUDY: INTRA-REGIONAL TRAFFICKING IN COLOMBIA



On April 9, 2019, after receiving a tip from a parcel delivery service, Colombian authorities seized 1,359 Mata Mata turtles that were being shipped from Bogotá to Leticia. The turtles, live specimens, were stored alive inside plastic bags filled with water that were hidden in cardboard boxes. Upon inspection, twenty-eight of the turtles had died due to low temperatures, lack of oxygen, and overcrowding.⁶⁰ Although many of the largest shipments of turtles in the LAC region were destined for Asia, where the animals are kept as pets or used for human consumption, this shipment was headed for Brazil, where they are more frequently used for food.⁶¹

As the table below shows, air freight was the most common method of smuggling wildlife products of any category in Colombia, making up 59% of Colombia-linked seizures. Over 69% of wildlife seized in Colombia was either dead or processed.

TRAFFICKING METHOD, %	REPTILES	MARINE SPECIES	MAMMALS	BIRDS	TOTAL
AIR FREIGHT	23	17	12	6	58
CHECKED BAGGAGE	6	12	-	-	18
UNKNOWN	6	6	-	6	18
PASSENGER CLOTHING / ITEMS	-	6	-	-	6
TOTAL	35	41	12	12	100

Conclusions & Recommendations

International discussions around wildlife trafficking usually center on the role of Africa and Asia, and the plight of well-known species such as elephants, rhinos, and pangolins.^{62 63} But with a 94% drop in animal population sizes between 1970 and 2020 as measured by WWF, wildlife in the LAC region is in peril.⁶⁴ Wildlife traffickers exploit the aviation industry to move live animals and wildlife products within the LAC region and beyond. The demand for their unique colors, perceived health benefits, and value as pets leads birds, reptiles, and marine species to be trafficked regularly in the region. Countries that deserve special attention are those such as Mexico and Brazil that function as both transit hubs and destination countries for a range of species from the region.

Countering this activity in the air transport sector requires not only an understanding of the methods used to transport wildlife, but also awareness-raising among enforcement and market actors to ensure they can combat trafficking. Enforcement authorities, the aviation industry, and non-governmental organizations each play a part in understanding and dismantling the illicit wildlife trade in the LAC region. Recommendations for consideration, based on capacity and role, are below. Actors that would play the most primary role in implementing each recommendation are listed in bold text.

Recommendation	Actor
Increase behavior change and demand reduction efforts across the LAC region with support of airlines and airports to raise awareness of impacts of exotic pet trade on biodiversity and public health	<ul style="list-style-type: none"> ● AIRLINES ● NGO'S ● AIRPORTS ● LAC GOVERNMENTS
Maintain and support open source data collection on wildlife seizures in the airline industry, building on efforts such as the C4ADS Air Seizure Database	<ul style="list-style-type: none"> ● AIRLINES ● NGO'S ● AIRPORTS ● ENFORCEMENT AUTHORITIES
Increase collaboration with key transport and logistics companies in the LAC region (e.g., postal, courier, ground) to increase vigilance of wildlife traffickers exploiting the transport sector supply chain	<ul style="list-style-type: none"> ● AIRLINES ● NGO'S ● AIRPORTS ● ENFORCEMENT AUTHORITIES
Engage customs, law enforcement, and environment ministries in exploited jurisdictions to publish more detailed reporting on seizures	<ul style="list-style-type: none"> ● ENFORCEMENT AUTHORITIES ● ENVIRONMENT MINISTRIES
For example, work to consistently publish information on new seizures to aid the creation of a centralized database	
Define common standards for collecting information related to seizures, and train enforcement agencies to use this standard	
Customize country- and typology-specific reports for law enforcement and aviation stakeholders to better understand risks at a granular level.	<ul style="list-style-type: none"> ● ENFORCEMENT AUTHORITIES

Recommendation	Actor
<p>Tailor wildlife trafficking training to airline and airport personnel in country- and typology-specific trafficking methods</p> <p>In Brazil, for example, target training towards bird trafficking and the emerging marine species trafficking threat</p> <p>In Colombia, for example, focus training on identifying illegal wildlife in air freight</p> <p>In Mexico, for example, target training to identify routes of both intercontinental shipments (such as totoaba bladders to China) and domestic shipments (such as lizard and big cats)</p>	<p>● AIRLINES ● AIRPORTS</p> <p>● NGO'S ● ENFORCEMENT AUTHORITIES</p>
<p>Amplify collaboration between enforcement authorities and intergovernmental agencies in the LAC region to increase identification of, and investigative responses to, regional wildlife trafficking</p>	<p>● ENFORCEMENT AUTHORITIES</p>
<p>Increase collaboration with Asian, European, and US enforcement authorities and intergovernmental agencies to fully address the LAC region's role in disrupting global wildlife crime</p>	<p>● ENFORCEMENT AUTHORITIES</p>
<p>Adopt a corporate zero-tolerance policy and strategy to combat wildlife trafficking, and educate staff</p>	<p>● AIRLINES ● AIRPORTS</p> <p>● ENFORCEMENT AUTHORITIES</p>
<p>Undertake industry and consumer behavior change research in LAC to target strategic interventions to raise awareness and change behavior for those audiences where it could make a difference.</p>	<p>● AIRLINES ● AIRPORTS</p> <p>● NGO'S ● ENFORCEMENT AUTHORITIES</p>

Detailed information about wildlife trafficking and the efforts to stop it in the aviation industry worldwide can be found on the ROUTES website (<https://routespartnership.org/>). More information about wildlife trafficking, including routes, risks, and commodities, can be found on the ROUTES Dashboard (<http://www.routesdashboard.org/>).

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