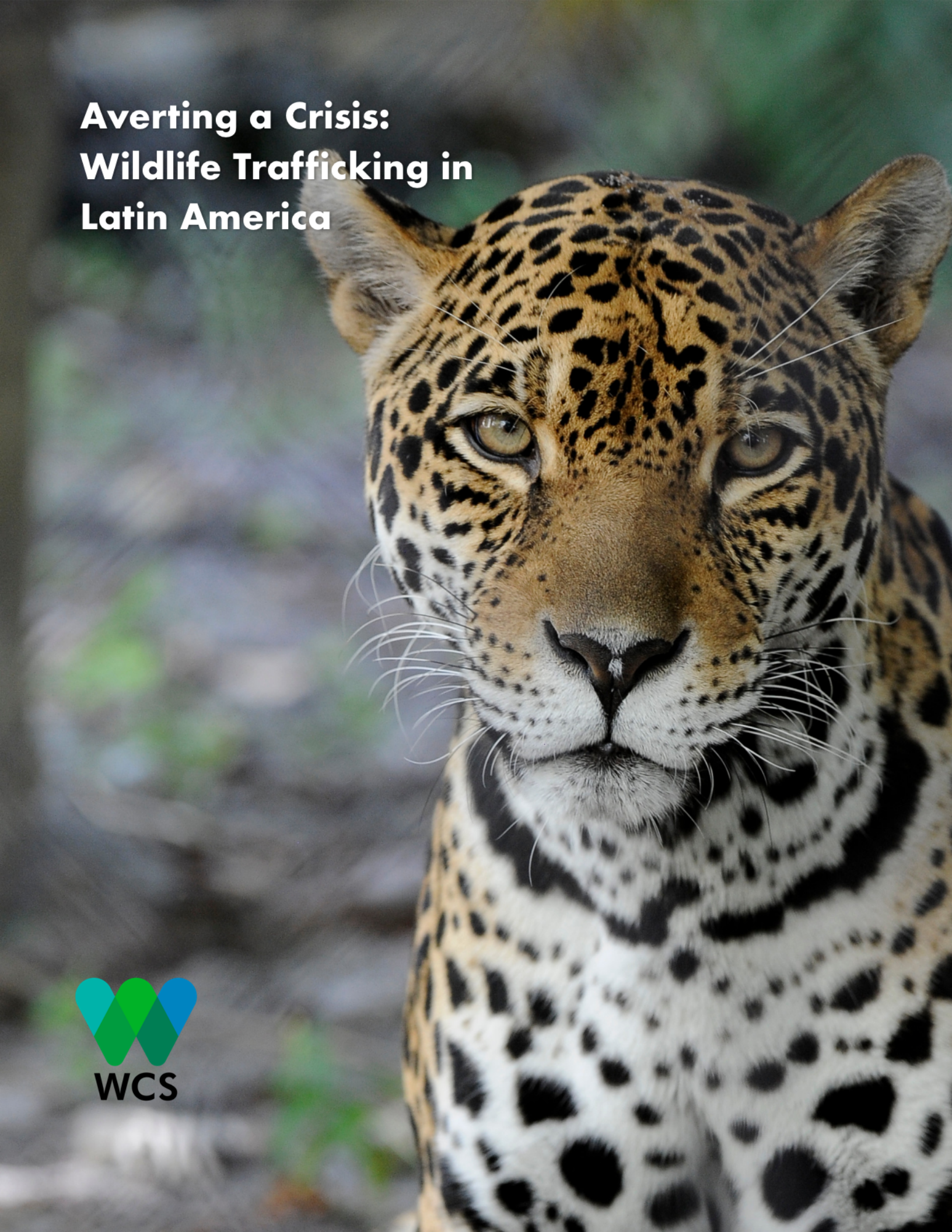
Averting a Crisis: Wildlife Trafficking in Latin America



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About WCS

The Wildlife Conservation Society (WCS) saves wildlife and wild places through science, conservation action, education, and inspiring people to value nature. We envision a world where wildlife thrives in healthy lands and seas, valued by societies that embrace and benefit from the diversity and integrity of life on earth.

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Cover: Jaguar *(Panthera onca)*. Credit: Julie Larsen Maher © WCS

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Executive Summary

Latin America is the single most biologically diverse region of the world, and trade in its wildlife, both legal and illegal, has been prevalent for hundreds of years. Through a variety of law and policy responses, Latin America's wildlife has endured threats from illegal and unsustainable commercial trade both domestically and from the US and Europe. Currently, Latin America's relationship with Asia is undergoing a dramatic change and the rise in transpacific organized crime—including trafficking in persons, drugs, weapons, counterfeit goods, and money laundering—, has accompanied the growth in commerce between the two regions. Much of the attention from the environment sector paid to the growing Asia-Latin America relationship has concerned the direct environmental impacts of Asian investments, yet indications are that trans-Pacific trafficking of wildlife is a rapidly growing problem, and that some supply chains involve professional, organized crime networks that are targeting several high-value taxa.

The current nature of the trade in wildlife and the manner in which this trade is evolving suggest that far greater efforts are needed to mitigate its impacts on a wide range of endangered taxa, such as large felids, parrots, primates, frogs and lizards, species for which the illegal trade is emerging as the primary threat to their survival. Wildlife trade and trafficking in Latin America has not reached the crisis levels that it has in Southeast Asia and Africa. However, Asian demand for wildlife products from a variety of species in Latin America is a growing concern and increasing pressure from international demand is now more evident than in past decades. Similar conditions were present less than two decades ago in Africa prior to the Asian-driven declines in Africa´s megafauna that we see today; preventive measures can and must be taken now in Latin America to prevent a repetition of this.

Currently, the main challenges to addressing wildlife trafficking in Latin America are the lack of information on the extent, dynamics, and structure of illegal wildlife supply chains; that the issue is a low priority to governments in the region; legal frameworks are complex, poorly understood and inconsistently implemented; international and inter-agency enforcement cooperation on wildlife trafficking is weak; there is insufficient capacity to combat wildlife trafficking in key enforcement and judicial agencies; and collaboration between government and civil society to combat illegal wildlife trade is under-used.

In order to address these challenges and emerging trends in wildlife trafficking, this paper proposes a cohesive and systematic approach, which involves:

1. Generating a more systematic understanding of the dynamics of transcontinental trafficking of wildlife from Latin America to Asia
2. Establishing mechanisms for enforcement cooperation between Latin America and Asia
3. Elevating the priority given to wildlife trafficking by governments and regional organizations in Latin America
4. Legal reform that enables greater compliance and promotes the use of ancillary legislation
5. Establish long-term programs to build leadership, commitment and capacity for countering wildlife trafficking.

Historical context

Latin America is home to 40 percent of the world's biodiversity (UNEP 1999), and the trade of wild species has been prevalent in the region since pre-Hispanic times. Species, their products and derivatives have and continue to be used for a wide range of purposes ranging from the manufacture of clothing, as a source of protein, ornaments, pets, souvenirs, spiritual and medicinal purposes.

Subsistence hunting of wild mammals, reptiles and birds is widespread throughout the region and in many areas remains an important source of protein for communities. There has been significant attention paid to this issue and some debate over how to manage this practice, as well as how the dynamics of subsistence use might be changing in the region given demographic and technological changes, among others (Robinson & Redford 1991; van Vliet et al. 2014; Baía, Guimarães & Le Pendu 2010; van Vliet et al. 2015; Sánchez-Mercado, Asmuessen, Rodríguez-Clark, Rodríguez & Jedrzejewski 2016; Robinson & Bennett 2000). In this paper, however, we focus on commercially-driven poaching and associated trade, particularly international trade, which we believe has received less attention from the conservation community, requires fundamentally different approaches, and is showing signs of rapid growth that may threaten the region's wildlife.

Latin America's wildlife has endured a variety of threats from commercial trade over the past few hundred years. As early as the 17th century, following the arrival of Europeans, the trade of wildlife saw a dramatic increase; at this time species such as the manatee (*Trichechus manatus* and *T. inunguis*) were under significant pressure, with several thousand animals killed per year for meat (Robinson & Redford 1991). Similarly in Ecuador, it is estimated that more than 13,000 Galapagos giant tortoise (*Chelonoidis niger*) were removed from the islands to feed the crews of sailing vessels during the mid-nineteenth century (Townsend 1925).

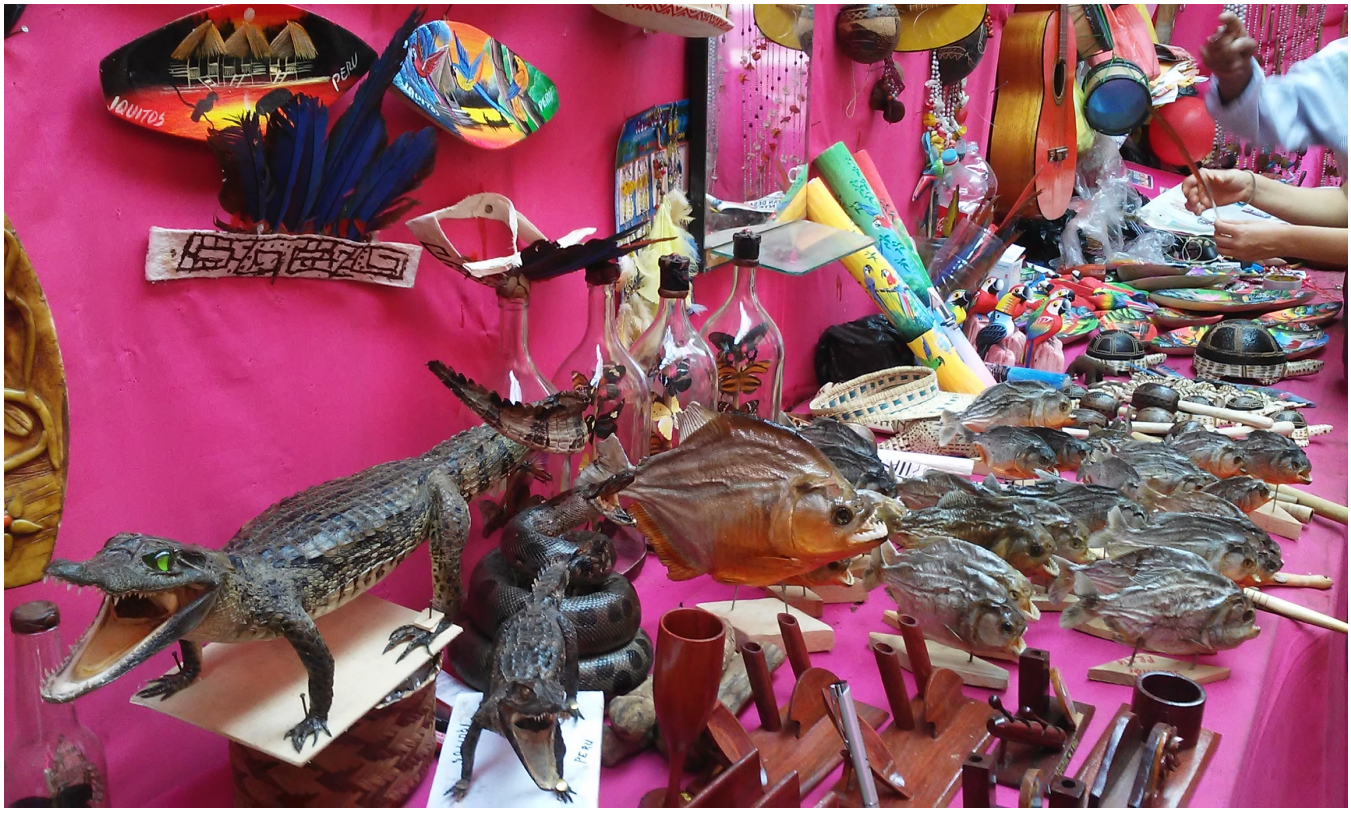
Technological advances and improved transportation routes in the 19th and 20th centuries enabled large-scale international commercial trade of wildlife from Latin American to flourish. A range of wildlife products were involved in this early international trade, such as egret and heron feathers for the fashion industry, where between 1899 and 1920, 15,000 kilos of feathers were exported from Brazil, Argentina and Venezuela, representing an estimated 15-19.5 million birds (Doughty 1975). Live primates for the biomedical trade were also in high demand and it is estimated that 139,000 live primates were exported between 1961 and 1965, and at least 91,662 in 1973 alone (Castro, Revilla & Neville 1975-76; Robinson & Redford 1991).

The most active supply chains in the 20th century were probably those for furs and skins driven by demand from Europe and the US. In Brazil, it is estimated that from 1904 to 1969, some 23.3 million wild mammals and reptiles of at least 20 species were commercially hunted for their hides (Antunes et al. 2016). In the Peruvian Amazon, the giant otter (*Pteronura brasiliensis*) was hunted almost to extinction during the period 1920-1973 to supply the skin trade (Recharte & Bodmer 2009), whilst almost three million peccary (*Tayassu tajacu* and *T. pecari*) were hunted for their skins to export to European and Japanese markets between 1946 and 1966 (Robinson & Redford 1991). Between 1976-1979, Argentina exported pelts of 8,981,596 coypu (*Myocastor coypus),* 423,335 wild cats, 3,612,459 fox (*Dusycion* spp.), 784,974 skunks (*Conepatus* spp.), 371,451 vizcacha (*Lagidium viscacia*), and 223,610 guanaco (*Lama guanicoe*), valued at

over USD 225 million (Iriarte & Jaksic 1986; Robinson & Redford 1991).

This large-scale, international commercial trade was a major factor driving the development of regulations to control and in some cases prohibit the commercial trade in certain species. Some countries, such as Chile, started developing legislation to regulate hunting as early as the 19th Century (1888) and were early adopters of trade prohibitions in species such as the chinchilla (i.e., the 1929 Hunting Law). In 1967, Brazil officially banned hunting through the Faunal Protection Law, but loopholes allowing the selling of stockpiled hides drove illegal hunting and laundering until Brazil's ratification of CITES in 1975, which prohibited all international commercial trade of species such as the giant otter, jaguar (*Panthera onca*), ocelot (*Leopardus pardalis*), margay (*Leopardus wiedii*) and black caiman (*Melanosuchus niger*) (Antunes et al. 2016).

Wildlife trade is thus not a new phenomenon in Latin America; rather, it has been prevalent at international levels for the last few hundred years. However, the current nature of the trade in wildlife and the manner in which this trade is evolving suggest that far greater efforts are needed to mitigate its impacts on a wide range of endangered taxa, such as large felids, parrots, primates, frogs and lizards, species for which the illegal trade—defined as the supplying, selling, purchasing or transport of wildlife and wildlife parts and products in contravention of national or international laws or treaties—is now the primary threat to survival.



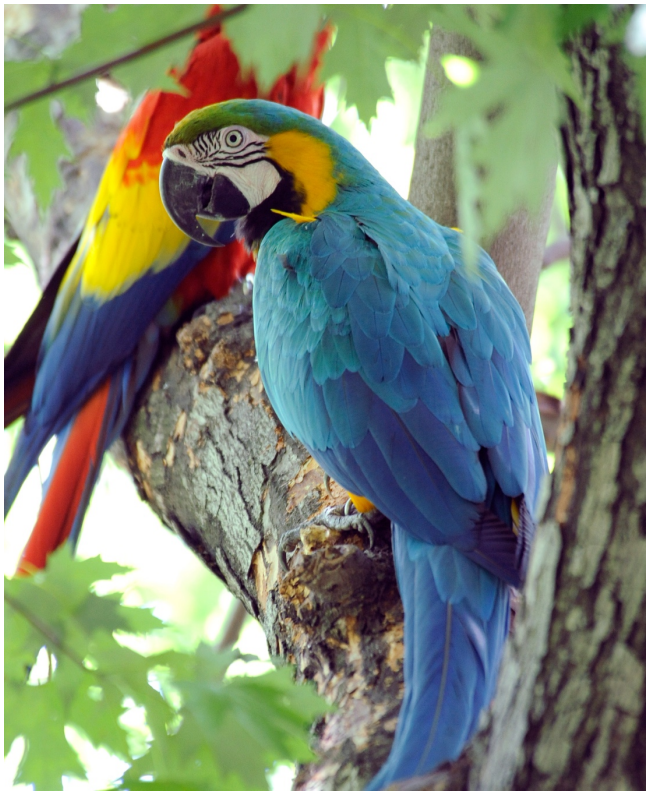
Local crafts market for tourists in Iquitos, Peru. Credit: Adrian Reuter © WCS.

Domestic markets for wildlife in Latin America are growing

Domestic markets for wildlife in Latin America are a concern as they commonly involve the illegal sale of protected species and their products from a wide range of taxa, but particularly birds, reptiles and amphibians for pets, tourist attractions (e.g. zoos and 'selfie' opportunities) and primates, turtles, and ungulates for a growing urban wild meat market.

I. Wild bird trade

Among live animals, birds are probably the most frequently trafficked in Latin America and are in high demand in domestic pet and collector markets. The 1992 US Wild Bird Conservation Act and the 2006 European Union Act prohibiting the importation of wild-caught birds significantly decreased the international trade in many species, particularly parrots and macaws, so currently it is local markets that represent the majority of the live bird trade in Latin America. This is despite the existence of similar legislation regulating or prohibiting trade in wild birds in most Latin American countries (Munn 2006; Weston & Memon 2009; FAO 2011). In Brazil, it is estimated that birds represent 80 percent of the total quantity of all trafficked animals (Neme 2015). Research undertaken in northeastern Brazil found a thriving commercially-driven trade of wild passerines for pet trade and for singing competitions, where a single saffron finch (*Sicalis flaveola*) can be sold for USD 145 in the urban area of Floriano, and even species considered locally abundant are bringing in significant profits (Souto et al. 2017). The result of such practices has been devastating to bird populations and their ecosystems in Brazil (Silva Regueira & Bernard 2012; Nóbrega Alves, De Farias Lima & Araujo 2013). Similarly, a study analyzing the bird trade in Peru found a large illegal domestic market, with 35,279 individuals observed of 130 native species offered for sale in 40 markets over a four-year period, with parrots being the most abundant birds in the markets (Daut, Brightsmith, Mendoza, Puhakka & Peterson 2015). In Central America, Scarlet macaws (*Ara macao*), once widespread across the region, have been reduced to fewer than 1,000 individuals. Guatemala and Belize have been especially hard-hit by macaw poaching. In Guatemala, there are approximately 300 scarlet macaws left in the wild, while in Belize, there are fewer than 250 (Britt, García Anleu & Desmond 2014). Latin American markets for wild birds now source animals both from within the region and internationally. For example, Mexico is probably the most significant importer of wild birds in Latin America, with some 50,000 birds per year imported not only from other Latin American countries but also from Africa (FAO 2011).



Blue-and-yellow macaw (Ara ararauna) and scarlet macaw. Credit: Julie Larsen Maher © WCS.

II. Wild meat trade

Across the region there is a growing trend of urban wild meat consumption in restaurants and from street vendors, a consumption shift similar to that seen in Asia and Africa over the last two decades as a result of increasing wealth and greater transport and communications connections between rural and urban areas. For example, in Ecuador, when the Maxus oil company built a road through highly biodiverse Yasuni National Park, members of the previously nomadic Waorani tribe settled along the road, and used gifts of vehicles and guns to begin commercially hunting wild meat for sale in cities throughout Ecuador. The result was a transition from sustainable, indigenous subsistence hunting to unsustainable commercial hunting that quickly depleted local populations of white-lipped peccary (*Tayassu pecari*), paca (*Cuniculus* spp.), collared peccary (*Pecari tajacu*), and woolly monkeys (*Lagothrix* spp.), and eventually led to a decline of jaguars in the area as well (Mowbray 2015a). Little has been systematically documented at a regional scale on this shift within Latin America, but we know it is affecting turtles in Colombia (Sánchez Jaramillo 2017; Arroyave Bermúdez, Romero Goyeneche, Bonilla Gómez & Hurtado Heredia 2014), crocodilians in Brazil (Baía et al. 2010; Guynup 2015a), and pacas, white-lipped peccary, collared peccary, marine turtles (and their eggs) and woolly monkeys more widely across the region (Robinson & Redford 1991; Neme 2015; Castro et al. 1975-76; Erkenswich 2015a; Erkenswich 2015b; van Vliet et al. 2015; Yashpe in press).

The growing urban demand for wildlife within Latin America, combined with improved infrastructure that facilitates transportation of specimens by land, air or water has led to a busy intraregional trade in wildlife to supply this demand. Traffickers move wildlife along the paths of least resistance, and for wildlife—compared to other contraband such as illegal drugs—this movement does not require great sophistication, since most reports find that existing public transportation routes are the most commonly used. Once in urban areas, wildlife is commonly found at physical points of retail (i.e. markets or street vendors) or traded online (e.g. using Facebook or other specialist online forums). In Peru, for example, WCS and Peruvian authorities found that wildlife was stockpiled in key cities near major urban nodes for consumption or in border towns en route to neighboring countries (SERFOR 2017). In some cases, an illegal border market for wildlife has emerged. Research undertaken by WCS in recent years (Mendoza, Cavero & Murillo 2013; Mendoza & Cavero 2014; Mendoza, Cavero & Rynaby 2014; WCS 2015) analyzing wildlife trade in Peru found very active markets along the border with Ecuador, with over 100 different species, including parrots and monkeys, traded in a single day. The same pattern was found along the Peru-Bolivia border, with species such as flamingos and armadillos being offered for food, and endemic species such as the Titicaca water frog (*Telmatobius culeus*) for its alleged medicinal properties (Icochea, Reichle, De la Riva, Sinsch & Kohler 2004; Elbein 2015; Telma 2017). In fact, this species is now listed as critically endangered (Icochea et al. 2004) due to the heavy impact of its illegal trade across the international border between Bolivia and Peru, which also led parties to CITES to include it in Appendix I at the 2016 Conference of the Parties.

Currently, while there are indications of growing levels of organization within regional supply chains, hunting is primarily an opportunistic activity by local people, who see it as a chance to make money or complement their usual sources of income (Pires, Schneider & Herrera 2015). Fortunately, Latin America has yet to experience the same level of organized crime involved in the trafficking of

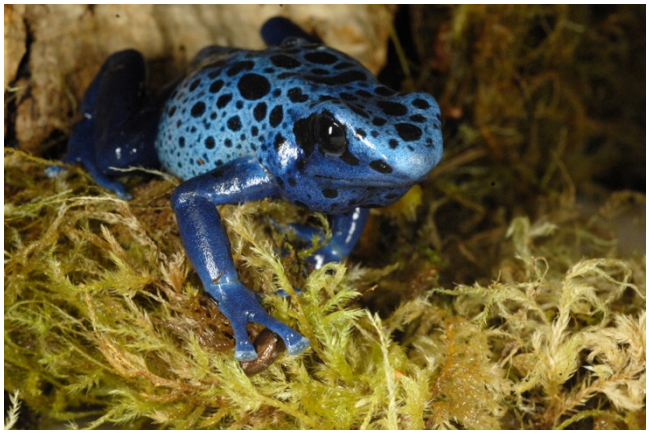
high-value wildlife species that is seen in Africa or Asia, in terms of value and volume (Reuter & O'Regan 2016).

Transcontinental trade of wildlife to North America and Europe

There is a long history of transcontinental trade in wildlife from Latin America to Europe and North America, both of which continue to be important end markets for both legal (e.g. caiman skins) and illegally sourced wildlife.

European and US demand ranges from souvenirs and trinkets bought by visiting tourists (sometimes unaware of national and international regulations), to high-value commodities for the food, medicinal, fashion, pet or collectors' markets. For example, a recent global analysis of publicly reported seizures of wildlife traveling through sea and airports found the most common routes for illicit products follow common air passenger routes, from hub airports near supply markets in the Southern Hemisphere to hub airports near demand markets in the Northern Hemisphere. This same global analysis highlighted Europe as a prominent destination for pet reptiles primarily originating in the Americas (Utermohlen & Baine 2017), while an analysis of seizures recorded from 2004-2013 in the USFWS Law Enforcement Management Information System (LEMIS) revealed that by volume, exotic meat was the most-seized item in the USA from Latin America and the Caribbean (Goyenechea & Indebaum 2015). Over 30,000 kilos of meat was seized in this period, with queen conch (*Lobatus gigas,* previously *S. gigas*) and sea turtle meat and eggs—both CITES listed—most frequently intercepted, particularly in shipments from Mexico and Central America. In addition, products fashioned from crocodile, caiman and sea turtle skin, mostly shoes (5,760 items) and small leather products such as wallets, belts, and watchbands (4,783 items) were also seized in illegal shipments in violation of CITES legislation (Guynup 2015b; Goyenechea & Indebaum 2015).

There is also a very active trade in live specimens from Latin America to Europe and the US including both trade of legally sourced and exported specimens and trade that is in contravention of national laws and/or international treaties. This trans-continental trade includes birds (e.g. macaws and Amazonian parrots); amphibians and reptiles such as poison arrow frogs, beaded and alligator lizards (*Heloderma* sp., *Abronia* sp.); rare species of tortoises and freshwater turtles, including Morafka's desert tortoise (*Gopherus morafkai*), mata mata (*Chelus fimbriatus*), and the Mexican box turtle (*Terrapene Mexicana*); spiders (e.g. tarantulas); Amazonian freshwater ornamental fish and stingrays; and a variety of Central American and Caribbean iguanas (Stephen et al. 2011; Engebretson 2006). Parts and derivatives also include items such as macaw feathers, black coral, hawksbill turtle (*Erethmochelys imbricata*) shell, and fine wool from the Andean camelids guanaco (*Lama guanicoe)* and vicuña (*Vicugna vicugna*). Many of these products are sourced illegally from wild origin and can easily fetch several



Blue poison arrow frog (Dendrobates tinctorius). Credit: Julie Larsen Maher © WCS.

hundred or thousands of dollars, such as camelid wool illegally sourced to supply the fashion industry.

Together with the fact that even the most severe sanctions for illegal wildlife trade are generally mild, international wildlife trafficking can be seen as an activity with the potential for big profits at low risk (UNODC 2016; Xie 2015). With this risk-payoff profile, individuals and criminal networks are both involved, not only in large scale operations that might involve multi-ton shipments of illegal timber (e.g. rosewood) or sea cucumbers, but also smaller operations involving few specimens of highly endangered, rare or recently discovered species for collectors, hobbyists and even scientists unwilling to go through the legal channels to obtain research, collecting or transportation/export permits (Cervantes, Lorenzo & Villa-Ramírez 1995).

The Asia-Latin America nexus – growing opportunity for trafficking

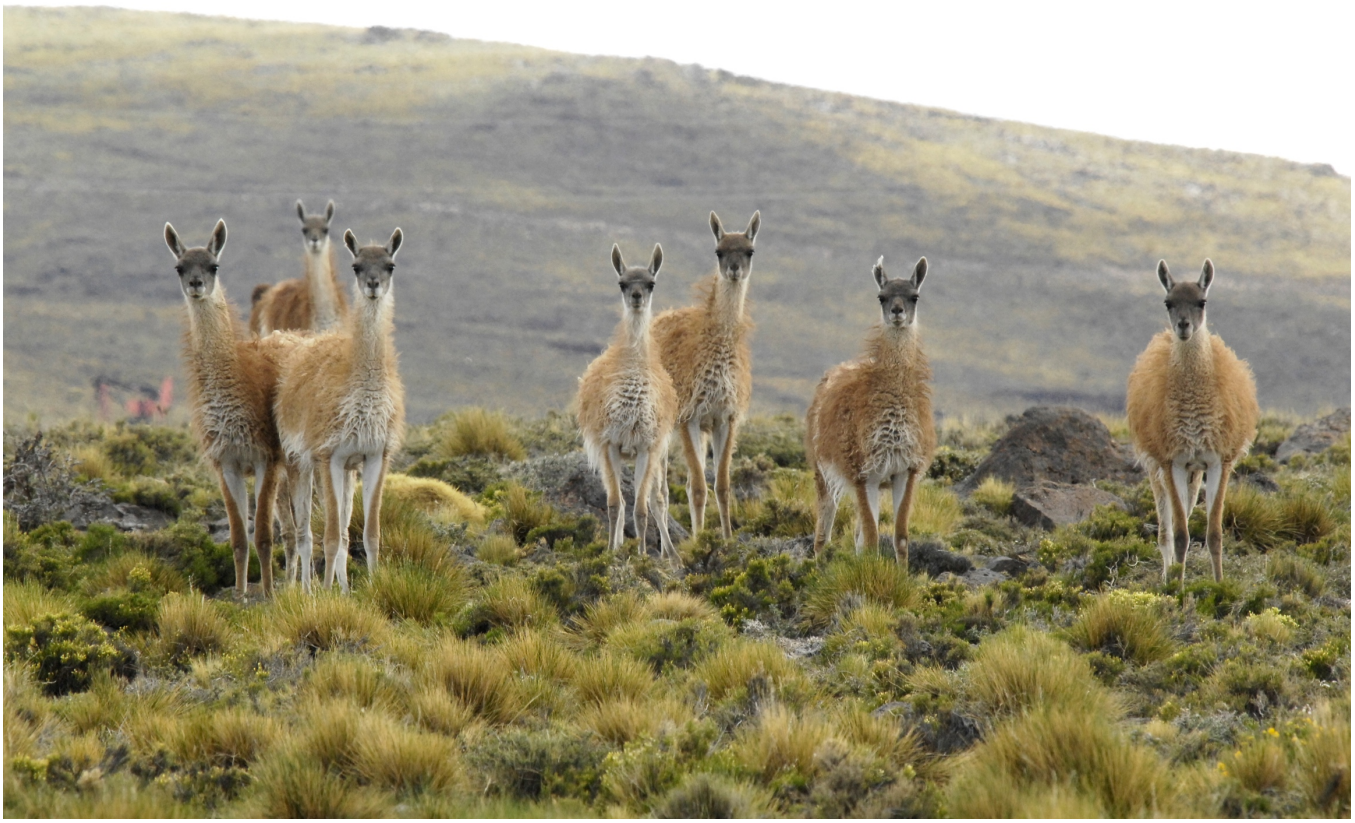
Beyond the US and Europe, Latin America's relationship with Asia is undergoing a dramatic change. Trade between Asia and Latin America is expanding at an annual rate of approximately 20 percent, with two-way annual trade doubling over the last decade, reaching USD 500 billion in 2014, and the number of bi-lateral free trade agreements between Asian and Latin American countries increasing from two in 2004 to 22 in 2013 (Estevadeoral, Kawai, Mashahiro & Wignaraja 2014). While a number of countries have seen dramatic increases in trade and cooperation—for example, the Vietnamese Ministry of Industry and Trade states that bilateral trade between Vietnam and Latin America increased from tens of millions of dollars in 1990 to USD 9.5 billion in 2014 (VNP 2012)—, the country accounting for the greatest share of trade with Latin America is China. China is already the top trade partner for Brazil, Argentina, and Chile (Ellis 2013).

China has a long history in Latin America, but in the last decade the expanding engagement has profoundly changed the region, economically and politically (Ellis 2013). There has been a large increase in bilateral trade rising from approximately USD 12 billion in 2000 to USD 285 billion in 2014 (IMF 2015) and a corresponding growth in Chinese foreign direct investment and Chinese-led infrastructure projects, particularly in the Amazon basin. At the first China-Community of Latin America and Caribbean States (CELAC) meeting in 2015, Chinese leaders highlighted that cumulative Chinese investment in the region may reach USD 250 billion over the next decade (Ellis 2015). At the second, in January 2018, China and the 33 Latin American nations represented by CELAC signed a new cooperation agreement, the Santiago Declaration, that embraces China's One Belt, One Road initiative, which proposes deepening economic and financial collaboration, including the investment of hundreds of billions of dollars in infrastructure in Latin America.

The growth in commerce between China and the region has been accompanied by an explosion of transpacific organized crime, including trafficking in persons, drugs, weapons, counterfeit goods, and money laundering (Myers & Wise 2017). Chinese organized crime groups are not new to the region, but what is evolving is the nature of the criminal activity. Previously, Chinese organized crime groups such as the Red Dragon Group in Peru had focused their attention on extortion of the resident Chinese community (Ellis 2012). Over the last decade, Chinese mafias have increased their engagement in serious transnational organized

crimes. Smuggling of persons from Asia through Latin America to the U.S and Canada has increased over the last decade. There has been an increase in trade of precursor chemicals for the production of methamphetamine from Asia to Latin America and indications that new routes for cocaine and heroin are opening up from Latin America to Hong Kong, via crime groups including the notorious Sinaloa Cartel which, prior to the arrest of its leader 'El Chapo,' was forging partnerships with the 14k and Sun Yee On mafia groups of Hong Kong (Ellis 2012; Buskirk 2013). The trade in counterfeit products (e.g. pirated software, electronic equipment, and brand name clothing) from China to Latin America has also seen an increase, particularly in the tri-border area of Paraguay, Brazil and Argentina (Buskirk 2013). Similar growth has been reported in arms trafficking, where some sources suggest that China, through the black market, is one of the principal providers of military-grade munitions to the region (Neme 2015).

There are few analyses available that look at the drivers of this evolving trans-Pacific crime, but there is consensus among the authors of the studies that do exist that the criminal ties are opportunistic in nature, an artifact of the growing contact between the two regions. Growth in Asian investments and trade with Africa has witnessed a parallel growth in illicit trade and criminality (Yuan Sun, Jayaram & Kassiri 2017; Outhwaite, & Brown 2018). There is also a consensus that the conditions in Latin America will mean crime will continue to grow as bi-lateral engagement increases in the coming years, replicating the African pattern, including the impact of trans-Pacific crime on wildlife.



Guanaco herd. Credit: Julie Larse Maher © WCS.

Transcontinental trade of wildlife to Asia

Much of the attention from the environment sector paid to the growing Asia-Latin America relationship has concerned the direct environmental impacts of Asian investments in sectors such as construction and oil. Few analyses have gathered information on trends in trans-Pacific trafficking of wildlife, yet indications are that it is a rapidly growing problem, and that some supply chains involve professional, organized crime networks. Several high-value taxa have experienced rapid increases in trade to Asia over the last two decades, whether legal or illegal, including:

- Freshwater turtles and tortoises. For example, Peru recorded that in 2007, 600 live individual yellow-spotted river turtles (*Podocnemis unifilis*) were legally exported to China. In 2015, the number was 356,394 individuals (CITES n.d.).
- Sea cucumbers, traded to Asia for both culinary and medicinal purposes, have seen huge numbers of specimens collected for export, leading to population crashes across the region. In June 2015, a single illegal shipment of 10,852 sea cucumbers was seized at Ecuador's Galapagos San Cristobal airport en route to China (Neme 2015).
- Sharks are killed at an industrial scale in Latin American waters for their fins to supply the Asian market for shark fin soup (Mowbray 2015b). In October 2015, Mexican authorities seized 3.5 tons of dried shark fins from Sinaloa in northwest Mexico bound illegally for Hong Kong (Neme 2015; TRAFFIC 2016). More recently, in Providencia, Chile Greenpeace released photographs showing approximately 100 shark fins being dried on the roof of the Vietnamese Embassy Commercial Offices next door to the Official diplomatic residence whose legal origin is being investigated by authorities at the time of writing (Cossío López 2018).
- Totoaba (*Totoaba macdonaldi*), an endangered fish endemic to Mexico found only in the Gulf of California, is targeted for its swim bladder, one of the most valuable wildlife products by weight. The bladders sell for up to USD 25,500 per kilo in Chinese markets (Environmental Investigation Agency [EIA] 2016). The fishery for this species is prohibited under Mexican law, while international trade is prohibited by CITES. The illegal trade of totoaba bladders has become high stakes enough to attract Mexican drug cartels. In 2013 alone, Mexican officials seized illegal totoaba bladders worth more than USD 2.25 million. Sadly, the impact of this trade extends beyond the totoaba fish itself to the critically endangered, near-extinct vaquita (*Phocoena sinus*), the world's smallest porpoise, whose population has dwindled to the brink of extinction due to incidental capture in the gillnets of the illegal totoaba fishing industry (EIA 2016).

Perhaps of greater concern for the future are the growing number of reports and seizures that indicate Asian individuals are operating within Latin America, particularly in the Neotropics, to source species of high-value wildlife that are analogous to species currently trafficked to Asia from other parts of the world, whose populations are dwindling. In Latin America, these include jaguar, Andean bear (*Tremarctos ornatus*) and anteater, which are analogous to tigers, bears and pangolins, and listed as CITES Appendix I in the case of jaguar and Andean bear with the giant anteater (*Myrmecophaga tridactyla*) as Appendix II, so trade in these species is either prohibited or regulated. A study analyzing illegal trade in Andean bear specimens from 2002 to 2007 in Peru recorded parts and derivatives offered in 27 of 45 markets in 14 of the 24 visited regions in the country. Locally, parts and derivatives

were sold for medicinal, magical, aphrodisiac and alimentary purposes, with the sale of bear bile specifically for people from Asian origin in Amazonas and Cusco at a price of USD 580 (Figueroa 2014). In March 2015, a Chinese person who had been doing business in Bolivia and was returning to China via Paris to Beijing was arrested with 119 jaguar incisors, 13 jaguar claws and 2 anteater claws in his luggage. This individual received a prison sentence of 4.5 years and RMB 50,000 fine from Beijing No.4 Middle People's Court (Xin 2016).

There is growing concern from experts across the region that poaching of jaguars, is increasing in a number of countries, and there are indications that Asian middlemen are buying up jaguar products (i.e. teeth, claws). From August 2014 to February 2015, Bolivian authorities intercepted and confiscated eight mail shipments from Santa Cruz and Cochabamba departments to destinations in China containing a total of 186 canine teeth, implying the killing of at least 50 jaguars. Seven of the eight senders of these parcels were Chinese citizens residing in Bolivia (Choque 2015; Nuñez & Aliaga-Rossel 2017). In a single seizure in August 2016, Brazilian authorities intercepted the trade of five jaguar heads and 25 paws ("Ministro do Meio Ambiente" 2016). In some areas, criminals have started using bold tactics to source jaguar products using radio or television advertisements and leaflets to find local suppliers (Nuñez & Aliaga-Rossel 2017). Similarly, our own information suggests that Chinese traders in Bolivia are using WeChat, the most popular Chinese social media platform, to sell items locally to the Asian community in-country as well as in China. There is no clear evidence that trade in jaguar parts is the main driver of poaching. However, given most of these reports have come to light by chance, and the general lack of intelligence on wildlife trafficking in the region it is plausible that we are observing a small segment of the full picture.

Wildlife trade and trafficking in Latin America has not reached the crisis levels that it has in Southeast Asia and Africa, where familiar and well-documented examples of population declines due to international trafficking exist for species such as freshwater turtles, tigers, elephants and rhinos. However, Asian demand for wildlife products from a variety of species in Latin America is a growing concern and increasing pressure from international demand is now more evident than in past decades. Similar conditions were present less than two decades ago in Africa prior to the Asian-driven declines in Africa's megafauna that we see today; preventive measures can and must be taken now in Latin America to prevent a repetition of this.

Hawksbill turtle items seized by authorities in the Dominican Republic. Credit: © Adrián Reuter.

Challenges to addressing wildlife trafficking in Latin America

1. Insufficient information on the extent, dynamics, and structure of illegal wildlife supply chains

Very little attention has been paid to wildlife trafficking in Latin America, and as a result hard data and information are scarce. While there is a general understanding of some of the principal countries involved, the species in trade in most countries, and patchy knowledge of regional trade flows, our understanding of the dynamics, structure and operation of illegal wildlife supply chains in Latin America and its relationship to security and organized crime is insufficient to guide national or regional government enforcement strategies or identify required law and policy reforms. In the case of the Asian-led networks, this is compounded by an inability to penetrate Asian communities and a lack of ethnic Asian officers in law enforcement or officers with Chinese and other Asian language abilities.

2. Wildlife trafficking is a low priority to governments in the region

Many governments in the region have relatively high capacity to apply strategic intelligence-led law enforcement operations from decades of experience addressing the trafficking of drugs, but none apply these skills or resources to tackle wildlife trafficking. The prevalence of subsistence hunting and use of wildlife across the region and a long-held tradition of keeping wild animals as pets or other domestic uses clouds perceptions around the issue for enforcers. This indifference emboldens wildlife traffickers, as can be seen by the use of mainstream media to seek parts of protected wildlife species in some countries. The low priority afforded to wildlife trafficking means that punishments that would deter criminals are rarely applied and, combined with corruption and impunity, commonly leads to seizures without any arrests or prosecutions, and therefore negligible risk to criminals and minimal disruption to criminal networks.

3. Legal frameworks are complex, poorly understood and inconsistently implemented

At a national level in each country, a variety of legal documents establish the framework under which wildlife is managed and protected. In order for this framework to be effectively enforced, it should be consistent, clear, and devoid of legal loopholes or vagueness that could lead to lack of enforcement action. One challenge facing many law enforcement agencies and regulatory bodies is that many laws depend upon knowledge of a species' origin, such as whether it was born in captivity or the wild, and the nature of the transaction that is leading to its trade, such as whether this trade is international and therefore potentially subject to the provisions of CITES, as trade can be legal or illegal, depending on circumstances. Authorities rarely have sufficient understanding of such details to any level of confidence, meaning ensuring compliance with wildlife laws is inconsistent at best.

4. International and inter-agency enforcement cooperation on wildlife trafficking is weak

While there are regional and, in some cases, bilateral mechanisms to facilitate enforcement cooperation on wildlife trafficking in Latin America, these require political commitment and trust between officers to be activated. Agencies rarely share wildlife crime intelligence in a proactive manner with each other or between neighboring countries. Governments rarely plan or coordinate wildlife trafficking enforcement actions, and there are no standardized measures of crime or indicators of enforcement effectiveness. Critically, no forums where enforcement cooperation between Latin America and Asia

on transnational organized crimes are being discussed where wildlife is incorporated.

5. Insufficient capacity to combat wildlife trafficking in key enforcement and judicial agencies

Law enforcement and judicial authorities across the region, with the exception of those agencies specialized in forest or wildlife management, lack the necessary understanding, skills, and equipment required to undertake effective investigations that lead to arrests, prosecutions, and convictions of wildlife traffickers – the outcome that matters the most. This includes customs and border patrol as well as judicial officers such as prosecutors and judges. Currently, authorities have limited access to, and are generally unable to generate data, intelligence and the means to access technical advice to support law enforcement and prosecutorial agencies during the investigation and prosecution of wildlife crimes.

6. Collaboration between government and civil society to combat illegal wildlife trade is under-used

Civil society plays an important role in addressing illegal wildlife trade globally, from conducting research and gathering intelligence, to undertaking campaigns to reduce preferences for wildlife consumption, advocating for legal and policy reform, and providing on the job technical support for enforcement operations. In Asia and Africa, we have found that where these partnerships are strong, we are having the greatest impact on combatting wildlife trafficking. Strengthening government-NGO collaboration in Latin America is therefore of the utmost importance. NGOs can assist with technical expertise, long-term monitoring, and intelligence gathering, and where risk management can be applied, in supporting enforcement actions to combat illegal wildlife trade. International NGOs with experience in these issues in particular are in a unique position to facilitate collaboration between authorities both in source countries in Latin America and in transit and destination countries such as those in Asia.

Andean bear. Credit: Julie Larsen Maher © WCS.

A proposed strategic approach to addressing wildlife trafficking in Latin America

Africa experienced a rapid growth in transcontinental wildlife trafficking at the time that Asian investments in the continent increased dramatically (Yuan Sun, Jayaram & Kassiri 2017; Outhwaite & Brown 2018). There are now indications that this pattern is repeating in Latin America, especially in the Amazonian countries. Governments across the region are unprepared to respond, and in most cases do not have the capacity to even detect or assess Asian criminal networks. The required response to combatting wildlife trafficking in Latin America is the same regardless of whether this trade is driven by growing domestic consumption, trade to the US and Europe, or the emerging pattern of increased trafficking to Asia. We therefore believe that strategic focus should be placed on the emerging transcontinental trafficking of wildlife from Latin America to Asia to prevent a similar wildlife crisis to that facing Africa, but that doing so would also strengthen national responses to other forms of wildlife trafficking in the region. Crucially, through the proposed approach, expertise and experience will be shared from Asia, where efforts to combat trafficking of wildlife derived from other regions of the world have been underway for almost two decades. The following critical components represent a cohesive and systematic approach to addressing wildlife trafficking in Latin America:

1. Generating a more systematic understanding of the dynamics of transcontinental trafficking of wildlife from Latin America to Asia

Drawing in expertise from Asia, including personnel with appropriate language and cultural knowledge, is required to understand the extent and dynamics of Asian-driven wildlife trafficking in the Amazon region. Capacity to gather information, establish informant networks, manage sources and carry out intelligence analyses into wildlife trafficking networks is required in government agencies and NGOs. Systems to professionalize intelligence analyses are required to assist authorities in identifying central individuals (e.g. through social network analyses), companies and their modus operandi. This intelligence should be deployed to inform arrests, prosecutions, and convictions.

2. Establishing mechanisms for enforcement cooperation between Latin America and Asia

With an initial focus on Amazonian countries, and led by information to prioritize Asian countries gained via actions under the previous point, efforts should be made to establish formal legal mechanisms (e.g. Mutual Legal Assistance Treaties (MLATs), enforcement attaché deployments) to enable cooperation and coordination on enforcement efforts. In parallel, events should be held gathering officers from Asian and Latin American counterpart agencies to build trust, mutual understanding, clarity on legal frameworks and trafficking dynamics affecting each country, and to establish contact points and informal communication groups (e.g. WeChat, WhatsApp) to share information.

3. Elevating the priority given to wildlife trafficking by governments and regional organizations in Latin America

Developing an understanding of the relationship between wildlife trafficking and regional security, including links to other forms of organized crime, impact on the rule of law, role of corruption, and connection to deepening economic cooperation among countries will assist countries in understanding that combatting wildlife trafficking is not just about species protection. In developing this understanding and communicating a powerful narrative about the larger societal implications

of wildlife trafficking, efforts should prioritize engagement with legislators, law enforcement agencies and judicial agencies over the traditional audiences of environment, forestry, or wildlife authorities who play a critical role in leveraging support from these other agencies. Opportunities to sensitize governments to the impacts and implications of wildlife trafficking and leverage their support include regional and transcontinental forums, such as the Forum for East Asia and Latin America Cooperation, China-Community of Latin America and Caribbean States, the Community of Latin American and Caribbean States (CELAC) or the International Economic Forum on Latin America and the Caribbean.

As part of this, it is critical to ensure media professionals understand and can communicate the implications of wildlife trafficking for regional security, corruption, and the rule of law. The media has an important role to play in publicizing the implications of trafficking for security and the rule of law, as well as in exposing the corruption often underlying trafficking. If targeted correctly, an educated and outspoken media, including digital media, also plays a role in influencing the behavior of potential buyers of illegally trafficked wildlife or derivatives.

4. Legal reform that enables greater compliance and promotes the use of ancillary legislation

Analyses are required to develop a legal reform agenda for each country that identifies weaknesses based upon case-process reviews, and ancillary legislation (e.g. corruption, anti-money laundering, customs laws) that could be used to strengthen wildlife protection regulations and increased deterrence to criminals. Analyses should also identify effective mechanisms for inter-agency coordination being used for other transnational crimes, such as illicit drugs, to inform efforts to strengthen cooperation between agencies responsible to combat wildlife trafficking and highlight opportunities for wildlife to be added to the mandate of existing cooperation mechanisms.

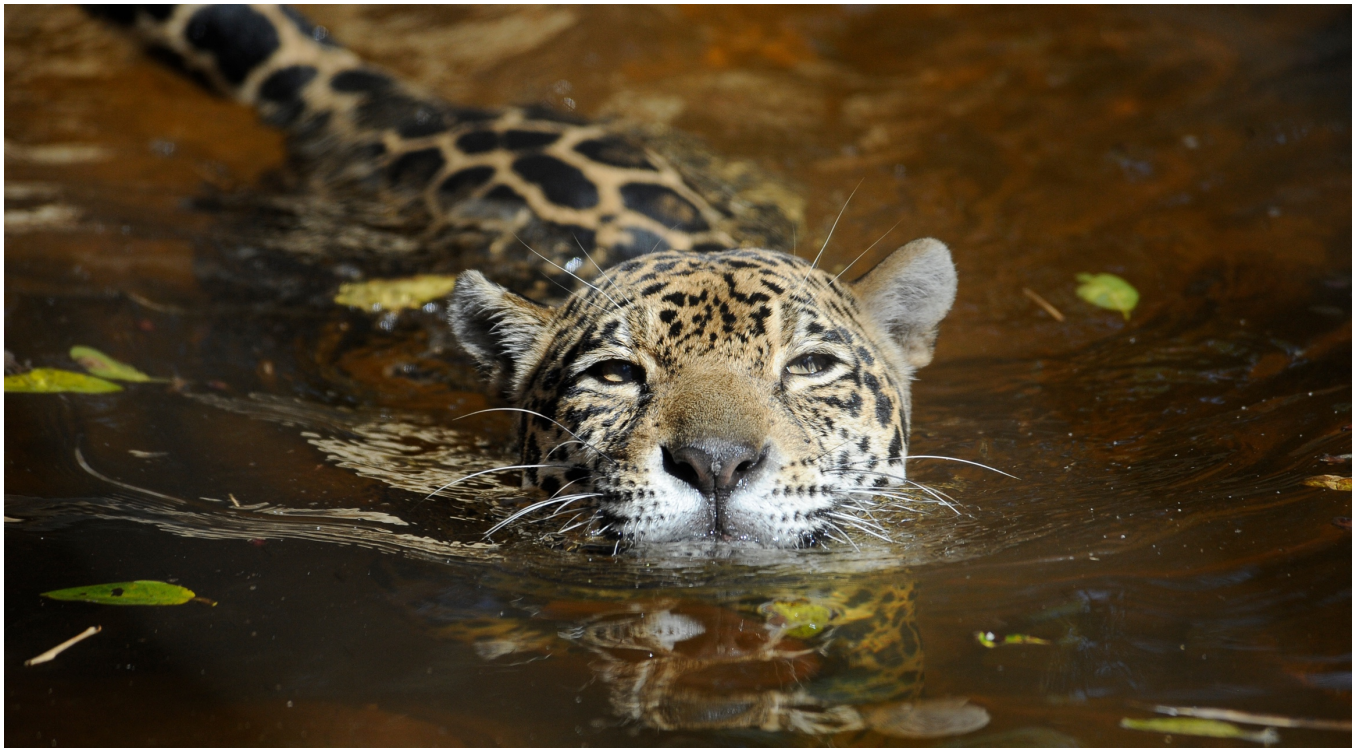
5. Establish long-term programs to build leadership, commitment and capacity for countering wildlife trafficking

Our experience demonstrates that traditional, classroom-based training programs, while useful in raising awareness of wildlife trafficking issues, do not result in long-term knowledge retention or effective crime prevention or deterrence. A more strategic and sustainable approach should be taken to ensuring that enforcement and judicial agencies have the required competencies and access to expertise. This should include long-term leadership programs, supplemental curricula at training colleges/academies, mechanisms to embed expertise in frontline enforcement agencies, and the provision of on-the-job support and assistance.

Squirrel monkey (Saimiri sp.). Credit: Julie Larsen Maher © WCS.

Conclusion

Latin America is the single most biologically diverse region of the world. Trade in wildlife, both legal and illegal, has been prevalent for hundreds of years and through a variety of law and policy responses, Latin America's wildlife has endured threats from illegal and unsustainable commercial trade both domestically and from the US and Europe. Latin America's relationship with Asia is undergoing a dramatic change and a rise in transpacific organized crime, including trafficking in persons, drugs, weapons, counterfeit goods, and money laundering, has accompanied the growth in commerce between the two regions. Much of the attention from the environment sector paid to the growing Asia-Latin America relationship has concerned the direct environmental impacts of Asian investments, yet indications are that trans-Pacific trafficking of wildlife is a rapidly growing problem, and that some supply chains involve professional, organized crime networks and are targeting several high-value taxa. The current nature of the trade in wildlife and the manner in which this trade is evolving suggest that far greater efforts are needed to mitigate its impacts on a wide range of endangered taxa, such as large felids, parrots, primates, frogs and lizards, species for which the illegal trade is emerging as the primary threat to their survival. Wildlife trade and trafficking in Latin America has not reached the crisis levels that it has in Southeast Asia and Africa. However, Asian demand for wildlife products from a variety of species in Latin America is a growing concern and increasing pressure from international demand is now more evident than in past decades. Similar conditions were present less than two decades ago in Africa prior to the Asian-driven declines in Africa´s megafauna that we see today; preventive measures can and must be taken now in Latin America to prevent a repetition of this.



Jaguar. Credit: Julie Larsen Maher © WCS.

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