

# Flying Under the Radar

## Wildlife Trafficking in the Air Transport Sector

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## Introduction

Wildlife trafficking is one of the most prominent forms of international organized crime in the world, ranking just behind drugs, human, and arms trafficking in estimated annual value.<sup>i</sup> The illegal wildlife trade is driven by both legal and illegal demand for wildlife products. A 2016 UNODC report found that traffickers that launder their illicit goods through legal commercial systems have access to substantially larger demand markets than those relying on the black market alone.<sup>ii</sup> The size of the legal wildlife trade can therefore give some indication of the growth of illegal wildlife trafficking; according to one estimate, the legal trade in wildlife products grew from around \$60 billion in the 1990s to over \$323 billion in 2009, a 438% increase.<sup>iii</sup>

In *Flying Under the Radar*, C4ADS, as part of the USAID Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES) Partnership, focuses on ivory, rhino horn, live reptile, and live bird seizures to establish a baseline of information that can be built upon moving forward. Focus on these particular species and categories, rather than the entirety of wildlife trafficking,<sup>iv</sup> allows us to obtain results that are both detailed and broadly representative of wildlife trafficking. Together, these four categories represent 66% of trafficked wildlife products in UNODC's World Wildlife Seizure Database (World WISE).<sup>v</sup>

### *Air Transport Sector*

Illegal wildlife traffickers heavily rely on legal transportation systems, including the air transport sector, to move their goods. An airport's exposure to trafficking of illicit goods can generally be determined by assessing the airport's size, flight routes, screening procedures, and infrastructure.<sup>vi</sup> Large international hubs with high passenger and cargo volumes are particularly vulnerable;<sup>vii</sup> these airports present traffickers with both plentiful flight options and a low risk of interdiction, since screening for illicit goods is often focused on the point of arrival, rather than in transit. Of these high-risk airports, the ones that are in the process of expansion are the most vulnerable. Traffickers seem to pay particular attention to opening flight routes, perhaps believing that enforcement and staff along new routes will be less aware of the wildlife trafficking risk than those on well-established ones.<sup>viii</sup>

### *Associated Risks*

The high profits and low risk associated with trafficking through airports have attracted the attention of sophisticated criminal networks. These criminal organizations are able to exploit high corruption levels in some airports to move large quantities of illicit goods. Even in airports with little corruption, criminals of all types can manipulate common security vulnerabilities to bypass existing security procedures.

Beyond the environmental and security implications of wildlife trafficking, the illicit trade in live animals presents a potential health risk to other animals and even humans. For example, one strain of bird flu, H5N1, has a mortality rate of about 60% according to the World Health Organization.<sup>ix</sup> To combat the risk of imported birds importing diseases, the United States Department of Agriculture (USDA) currently prohibits the importation of birds or bird eggs from 49 different countries "due to the presence of highly pathogenic avian influenza."<sup>x</sup> Despite this ban, 38% of bird seizures within C4ADS' Air Seizure Database originated in one of these 49 prohibited countries.

### *Wildlife Trafficking by Air*

Wildlife trafficking is a global problem that takes advantage of enforcement loopholes, lack of awareness, limited public and private sector coordination, capacity gaps, and lagging technology and procedures to move illicit products through the licit transportation system. As international travel continues to exponentially increase, particularly in the air transport sector, enforcement and the private sector should make immediate changes to better stem the international flow of illicit wildlife. Without such changes, wildlife traffickers will continue to find the illegal wildlife trade a profitable, comparatively easy and low-risk enterprise, at substantial detriment to ecosystems, economies, and global security.

## Trends and Totals

Identifying and tracking patterns in combined seizure data provides insight into international wildlife trafficking and how it has shifted, or remained the same, over time. This type of information has myriad uses. It can, for example, help direct anti-poaching efforts on the ground as emerging poaching and trafficking hot spots shift, help enforcement agencies anticipate the most likely next moves of trafficking networks, and track relative enforcement success rates over time. In Trends and Totals, we examine the geographic spread of wildlife trafficking, as well as fluctuations in the number and size of seizures made each year. Overall, according to C4ADS' Air Seizure Database, 114 countries had at least one instance of wildlife trafficking in the air transport sector between January 2009 and August 2016.

The seizure counts for each category (ivory, rhino horn, reptiles, and birds) reveal at least one consistent trend; seizures in each category were low in 2009 and 2010. Although seizures in the rhino horn and birds categories increased slightly but remained comparatively low in the years after 2010, seizures in both the ivory and reptiles categories experienced sharp increases. This pattern across all four categories – low seizure numbers followed by sharp or slight increases – is likely due to steadily increasing media and public focus on wildlife trafficking, rather than an actual pattern in trafficking activity.

The heat maps in Trends and Totals portray all countries that have been associated with at least one ivory, rhino horn, live reptile, or live bird seizure in the air transport sector over the time period of interest. In the individual heat maps, focus shifts from Africa and Asia in the ivory and rhino horn maps, to Southern and Eastern Asia in the reptiles map, to the Americas in the birds map. The combined seizure data, however, reveals wildlife trafficking to be a truly global issue.



Figure 1. Seizure count timeline by category (January 2009 to August 2016)

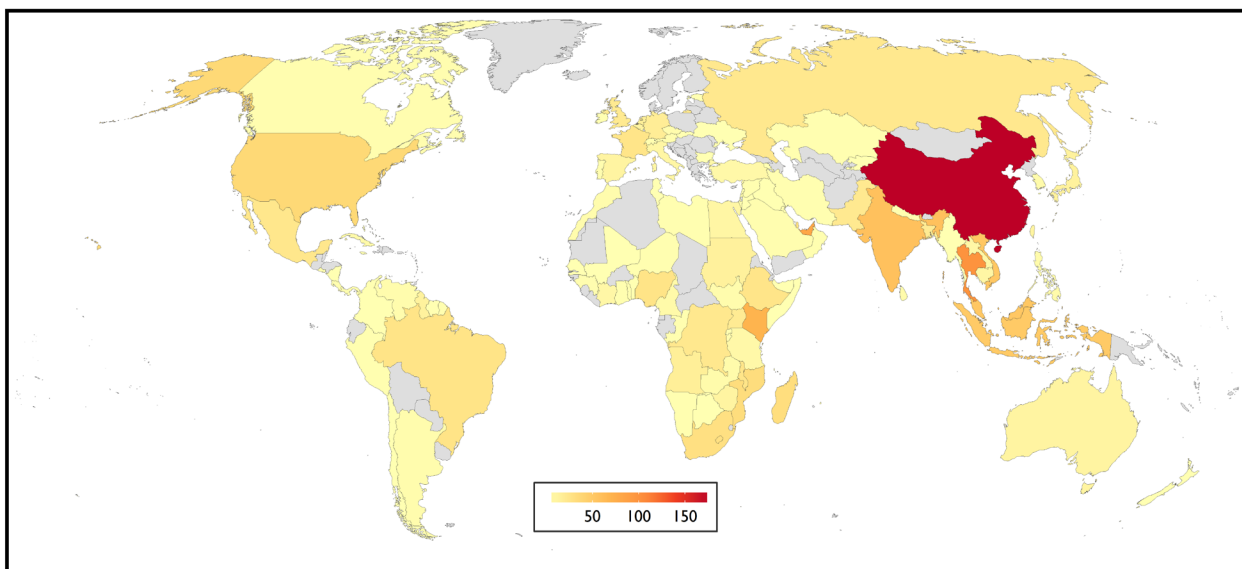


Figure 2. Global heat map for all ivory, rhino horn, reptile, and bird trafficking instances in the C4ADS Air Seizure Database (January 2009 to August 2016)

## Airports and Routes

Analysis based on seizure data naturally over-emphasizes countries with good enforcement and under-emphasizes, or even fails to mention, countries performing poorly. This can be partially addressed by collecting detailed and thorough data on the actual or intended transit routes of illicit shipments. Compiled transit route data can therefore help to reveal the scope of wildlife trafficking in previously overlooked jurisdictions, the overall flow of the wildlife trade over time, as well as those airports that traffickers may consider less risky.<sup>xi</sup> Although transit route information cannot be considered directly reflective of the success of enforcement in certain airports, it can direct customs and enforcement to the weakest points in the air transport sector. Understanding how common transit routes shift over time in response to pressure, such as improved enforcement capabilities, can help customs anticipate changes in trafficking activity.

The specific roles that airports play within the international trafficking system are largely dependent on their geographic location. For instance, most African airports are origin points for illicit ivory shipments, but airports in the Greater Horn of Africa are generally transit points. Similarly, Middle Eastern airports serve as common transit points for ivory moving from East or Southern Africa to Asia, while European airports are frequently used to move ivory from West Africa to Asia. Southeast and East Asian airports are predominantly destinations.

Figure 3 displays the wildlife trafficking routes recorded in C4ADS' Air Seizure Database. The most common routes for illicit products tend to follow frequent air passenger routes from hub airports near supply markets in the Southern Hemisphere to hub airports near demand markets in the Northern Hemisphere. Since hub airports are more likely to have a variety of international flight routes available for traffickers to choose from, they are more likely to be exploited by traffickers than smaller, regional airports. As a result, international airlines based at major hub airports are disproportionately exposed to trafficking. Targeting these chokepoints will have a larger impact on traffickers' operations than focusing on regional airports alone.

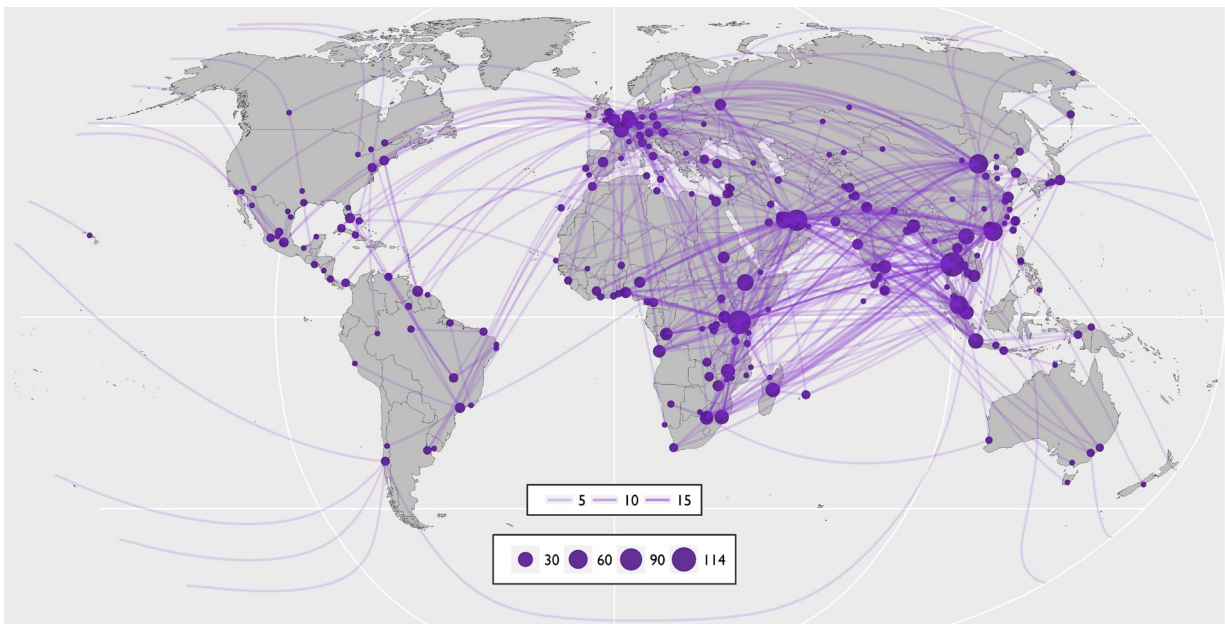


Figure 3. All air trafficking routes for ivory, rhino horn, reptile, and bird seizures in the C4ADS Air Seizure Database (January 2009 to August 2016). The transparency of each line represents the number of times that route was used. The bubbles represent the total number of flights to and from each city.

## Modus Operandi

Tracking wildlife seizures over time reveals certain patterns in the various ways that traffickers move their contraband through the air transport sector. Seizures reveal that traffickers often rely on the same methods to move goods over time; for instance, tin foil has been used for years to hide ivory and other illicit products. In other cases, traffickers' modus operandi shift over time in response to heightened or changed enforcement efforts, and to some extent, vary depending on the species or product being trafficked. Note that less effective trafficking methods are more likely to be caught, and therefore included in our analysis, and that the most effective tactics may never be identified. Still, understanding the various strategies that traffickers utilize, frequently successfully, to evade detection will allow enforcement to develop better targeting mechanisms, and can lead to substantially decreased vulnerability to trafficking within airports.

Across all four categories covered in the report, checked luggage appears to be the most common transport method used by wildlife traffickers. Beyond transport method, the various modus operandi addressed in *Flying Under the Radar* include:

- Obfuscation methods (tin or aluminum foil, paper, various agricultural products, etc.)
- Prominence of repeat offenders
- Abandoned or exchanged luggage
- Use of multiple suitcases
- Incorrect or incomplete customs declarations
- Circuitous air transit routes
- Use of shell or cover companies
- Custom clothing
- Taxidermy
- Use of ketamine and other drugs to sedate live animals

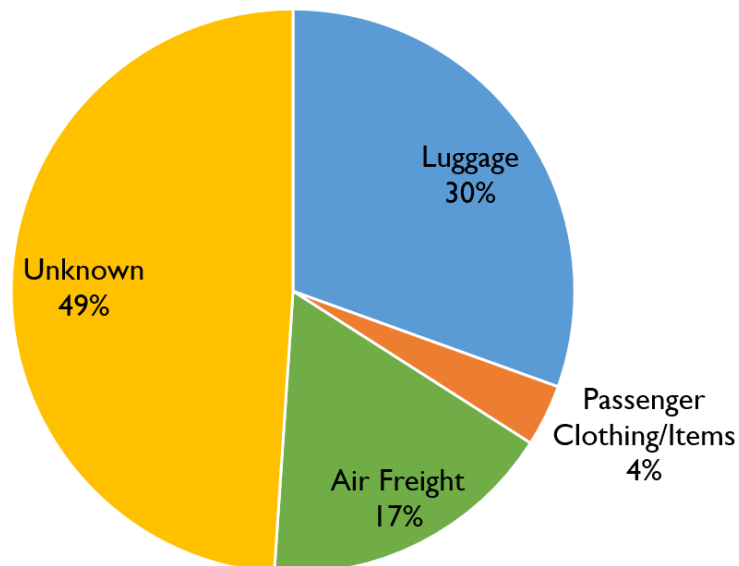


Figure 4. Transport methods for all ivory, rhino horn, reptile, and bird seizures in the C4ADS Air Seizure Database (January 2009 to August 2016)

## Conclusions & Recommendations

Wildlife trafficking is a global problem that takes advantage of enforcement loopholes, lack of awareness, limited public and private sector coordination, capacity gaps, and lagging technology and procedures to move illicit products through the licit transportation system. As international travel continues to exponentially increase, particularly in the air transport sector, enforcement and the private sector should make immediate changes to better stem the international flow of illicit wildlife. Without such changes, wildlife traffickers will continue to find the illegal wildlife trade a profitable, comparatively easy, and low-risk enterprise, at substantial detriment to ecosystems, economies, and global security.

In *Flying Under the Radar*, we find that ivory, rhino horn, reptile, and bird traffickers seem to heavily rely on large hub airports, and often exploit the same vulnerabilities within the air transport sector. Given the truly global nature of wildlife trafficking, and therefore the number of regions that we found to be impacted by it, we have refrained from producing regional recommendations. Instead, we chose to take a wider approach, in an effort to produce broadly applicable recommendations that, if implemented, could have a large impact on global wildlife trafficking by air. Our recommendations are grouped below by topic, and are meant to be applicable to enforcement, industry, and nongovernmental organizations.

### *Awareness*

- Increased awareness among air passengers, airline and airport employees, and enforcement officials.
- The adoption or creation of a tool to help customs and enforcement identify restricted species commonly trafficked through their territory.

### *Enforcement*

- Develop clear escalation procedures upon discovery of potential illegal activity.
- Dedicate additional resources to combatting the illegal wildlife trade in hub airports frequently exploited by wildlife traffickers.
- Develop or enhance screening procedures for transit flights.
- Develop and maintain a comprehensive internal database of entities previously involved in wildlife seizures.
- Develop a system to test wildlife seizure protocols.

### *Training*

- Further training on red flag indicators associated with wildlife traffickers and shipments.
- Create and provide training for airline staff on how to safely handle trafficked live or dead animals after discovery.
- Incorporate training on wildlife protocols into existing training programs.

### *Seizure Reporting*


- Develop a reporting mechanism for seizures.
- Store collected seizure information in one centralized database in each country.
- Publicly release non-sensitive seizure information.

### *Prevention*

- Pursue a shift towards electronic paperwork for air freight and updated technology for screening.

## Notes

- i Nellemann, C. (Editor in Chief); Henriksen, R., Kreilhuber, A., Stewart, D., Kotsovou, M., Raxter, P., Mrema, E., and Barrat, S. (Eds). *The Rise of Environmental Crime – A Growing Threat To Natural Resources Peace, Development And Security*. United Nations Environment Programme and RHIPTO Rapid Response–Norwegian Center for Global Analyses, 2016. [http://unep.org/documents/itw/environmental\\_crimes.pdf](http://unep.org/documents/itw/environmental_crimes.pdf).
- ii UNODC. *World Wildlife Crime Report: Trafficking in Protected Species*. UNODC, May 2016. [www.unodc.org/documents/data-and-analysis/wildlife/World\\_Wildlife\\_Crime\\_Report\\_2016\\_final.pdf](http://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf).
- iii “Background.” TRAFFIC. TRAFFIC International. [www.traffic.org/trade/](http://www.traffic.org/trade/).
- iv Other species, such as pangolins and abalone, which were not initially included in our analysis due to time constraints, will be incorporated into the seizure databases in future years.
- v UNODC. *World Wildlife Crime Report: Trafficking in Protected Species*. UNODC, May 2016. [www.unodc.org/documents/data-and-analysis/wildlife/World\\_Wildlife\\_Crime\\_Report\\_2016\\_final.pdf](http://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf).
- vi Vira, Varun, Thomas Ewing, and Jackson Miller. *Out of Africa: The Global Trade in Illicit Elephant Ivory*. Born Free USA and C4ADS, August 2014. <http://c4ads.org/s/Out-of-Africa.pdf>.
- vii Ibid.
- viii “Wildlife smugglers eye emerging airports.” *The Times of India*. 29 Sep. 2015. <http://timesofindia.indiatimes.com/city/madurai/Wildlife-smugglers-eye-emerging-airports/articleshow/49150160.cms>.
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- x Import Procedures for a Pet Bird Entering (Non-U.S. Origin) the United States.” USDA APHIS. USDA, 18 Oct. 2016. [www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-and-animal-product-import-information/import-live-animals/sa\\_avian/ct\\_nonus\\_pet\\_bird](http://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-and-animal-product-import-information/import-live-animals/sa_avian/ct_nonus_pet_bird).
- xi Todorova, Vesela. “Dubai ‘Major Hub’ for Wildlife Trafficking: Report.” *The National*. Abu Dhabi Media, 4 Dec. 2013. [www.thenational.ae/uae/environment/dubai-major-hub-for-wildlife-trafficking-report](http://www.thenational.ae/uae/environment/dubai-major-hub-for-wildlife-trafficking-report).



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

For more information on the ROUTES Partnership visit [www.routespartnership.org](http://www.routespartnership.org).

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