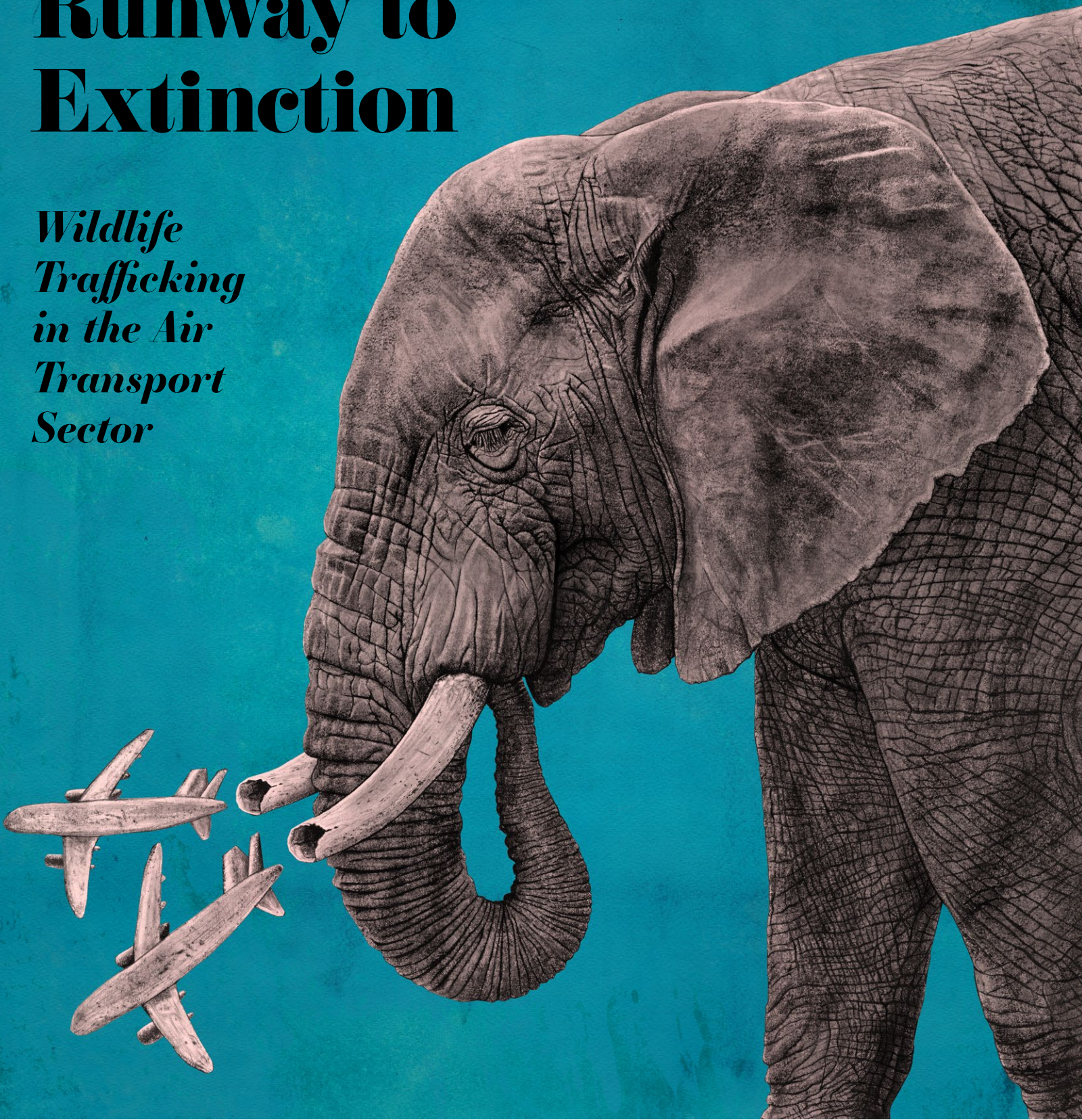


Runway to Extinction

Wildlife Trafficking in the Air Transport Sector



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innovation for peace



TRAFFIC
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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 the Airports Council International (ACI), Center for Advanced Defense Studies (C4ADS), Freeland, the International Air Transport Association (IATA), TRAFFIC and WWF.

For resources referenced in this document or for more information visit:

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Once thought of as largely confined to Africa and Asia, wildlife trafficking has become increasingly prevalent all over the world, now ranking behind only drugs, human, and arms trafficking as the most valuable type of international organized crime by estimated annual value.¹ Wildlife trafficking's rise has been supported by the world's increasingly interconnected systems of finance, communication, and transport, which have brought once isolated source regions in remote areas closer and closer to large demand markets in North America, Europe, and Asia. The proliferation of air transport has exacerbated the issue even further; a trip that once would have taken months by land and by sea may now take 24 hours or less of travel in comparative calm and comfort.

While these changes have been boons for the global economy, they have also put wildlife at risk like never before.² The negative side effects of this economic progress are immediately evident in the substantial population decline of vulnerable species over the past few decades alone. If wildlife poaching and trafficking continues unabated at this scale, regional ecosystems face not just species extinction, but complete collapse. In the face of such catastrophic overexploitation, steps must be taken to reverse the damage caused by the creation of a global marketplace.

There is a silver lining, however; as wildlife traffickers have increasingly come to rely on income derived from wildlife native to other world regions, they have made themselves dependent on the international systems of transportation that made their illegal trade possible in the first place. As a result, implementing preventative measures against wildlife traffickers using international transport systems could increase the cost associated with trafficking wildlife to such an extent that traffickers may abandon the attempt.

To that end, the USAID Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES) Partnership was formed in 2015 to bring together transport and logistics companies, government agencies, development groups, law enforcement, conservation organizations, academia, and donors to disrupt wildlife trafficking through the air transport sector. C4ADS produces the data and analysis helping to guide the ROUTES Partnership's activities, and has so far published two reports, *Flying Under the Radar* (2017) and *In Plane Sight* (2018), examining trafficking trends, routes, and methods in airports for ivory, rhino horn, reptiles, birds, pangolins, mammals, and marine species since 2009.

While both previous reports focused on identifying trends associated with trafficking of different types of wildlife beginning in 2009, *Runway to Extinction* shifts gears, concentrating instead on recent trafficking trends (2016 – 2018) in six world regions: Africa, the Americas, Asia, Europe, the Middle East, and Oceania.³ Still, each successive report has shown that wildlife trafficking by air varies little from year to year and region to region, and so many of the key findings outlined in *Runway to Extinction* echo conclusions drawn in *Flying Under the Radar* and *In Plane Sight*.

In *Runway to Extinction*, as in *In Plane Sight* and *Flying Under the Radar*, C4ADS analyzes the seizure data in the C4ADS Air Seizure Database to determine wildlife trafficking trends, as well as the routes and trafficking methods utilized by wildlife traffickers. **The findings in this report are not meant to represent the entirety of wildlife trafficking activity through the air transport sector, but are intended to showcase the patterns visible within the C4ADS Air Seizure Database, with the understanding that a different or more complete dataset may reflect different results.** Each section of the report should be read with this in mind.

Note that the use of seizure data, while currently the best method available for investigating trafficking activity of all types, can lead to a variety of mistaken conclusions. For instance, better public seizure reporting may create the appearance of high levels of trafficking activity where only low levels exist. Still, seizure data, taken together with the appropriate caveats, provides a good picture of overall trafficking activity, and can be used to direct future anti-trafficking efforts.

Overall, *Runway to Extinction* finds wildlife trafficking to be global in scope, with trafficking attempts reported more and more frequently. This report's regional focus has emphasized the tendency of wildlife trafficking trends, routes, and methods to be determined more by the type of wildlife being trafficked than by the region it is trafficked in. Relatedly, each region's exposure to wildlife trafficking activity is driven primarily by its proximity to specific source regions and demand markets. Finally, wildlife traffickers tend to exploit the same vulnerabilities within airports that other traffickers do, giving enforcement authorities and the private sector an opportunity to address the weak points identified within this report and strengthen their defenses.

¹ 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.

² Refer to **Appendix I: Security & Health Risks of Wildlife Trafficking** for a discussion of some of the risks posed by wildlife trafficking to the aviation industry.

³ Data and graphics from the entire C4ADS Air Seizure Database (2009 through 2019) can be found on the ROUTES Dashboard at routesdashboard.org.

TRANSPORT METHOD VARIES BY SPECIES

The type of wildlife or wildlife product being smuggled has a large effect on the transport method used to smuggle it. Raw ivory, for instance, is frequently transported in air freight given its size, shape, and smell, but worked ivory is generally transported in checked luggage or carried by passengers. Pangolin scales and certain marine species like dried seahorses and abalone are usually moved in large quantities, and are therefore often hidden in air freight. Reptiles, birds, mammals, totoaba bladders, and European eels are often moved by checked luggage, but can also be found in air freight (reptiles, mammals) and passenger carry-on items (birds, mammals). As a result, the most frequent transport methods used in a certain region or country will generally be determined by the type of wildlife trafficked there.

WILDLIFE TRAFFICKING BY MAIL LIKELY UNDERREPRESENTED

Mail shipments generally undergo less rigorous screening procedures than air freight consignments, which are shipped on commercial flights. Furthermore, it seems that seizures of wildlife or wildlife products discovered in the mail are less likely to be reported by relevant government authorities or by media outlets. As a result, mail seizures are likely underrepresented in the C4ADS Air Seizure Database.

DIFFICULTY OF MAKING SEIZURES IN TRANSIT

Most customs and enforcement officials currently have limited ability to screen passengers and shipments in transit, putting the burden of detection almost entirely on origin and destination locations. They are also hampered by short turnaround times for connecting flights, which do not allow enough time to effectively screen transiting passengers, luggage, air freight, and mail.

But improving screening for transiting passengers and shipments is challenging. For example, when passengers and shipments have extremely short layovers, adding another layer of screening is generally not feasible. In instances where a flight lands to offload some passengers and re-fuel before flying to another destination, many passengers and their luggage will not even exit the plane, and therefore cannot be screened. Note that it is possible that traffickers are aware of this and take advantage of these types of flight schedules when planning their route.¹

Three of the few possible opportunities to improve screening in transit are: increased reliance on sniffer dogs, which can screen a large number of passengers, suitcases, and shipments in a fraction of the time generally needed; e-technology, which allows for risk assessments of incoming passengers and cargo; and increased cooperation between airports along different flight routes, allowing enforcement in origin airports to alert enforcement in transit and destination airports to probable trafficking attempts.

¹ "South Africa seizes two Vietnamese with record 41 kg of rhino horns." *Toi Tre News*. 2 Nov. 2014. <http://tuoitrenews.vn/society/23744/south-africa-seizes-two-vietnamese-with-record-41-kg-of-rhino-horns>.

SECURITY SCREENING AT ORIGIN VERSUS CUSTOMS SCREENING AT DESTINATION

Screening procedures and priorities for departing flights differ significantly from arriving flights. Screening on departure and in transit is primarily done for aviation security purposes, and is not focused on identifying trafficking attempts. Screening on arrival is designed to uncover trafficking, but is conducted by customs agencies, who are mainly focused on revenue and agricultural disease protection. This set-up helps traffickers of wildlife and other contraband evade detection by skirting through screening checkpoints undetected.

Still, seizures made on departure are not infrequent; of the seizures in the C4ADS Air Seizure Database between 2016 and 2018, a third were made on departure, while 50% were made on arrival, and 17% were made in transit. This suggests that security screening may unintentionally reveal wildlife trafficking attempts, since the red flags for security risks and trafficking attempts can be similar (i.e. nervous behavior, bulky clothing, suspicious items in carry-on or checked bags, short turn-around time in-country after arriving on a long international flight, etc.), and both exploit some of the same security and screening vulnerabilities in airports.

SOURCE REGIONS IN THE SOUTHERN HEMISPHERE, DEMAND REGIONS IN THE NORTH

The most common routes for illegal wildlife and wildlife products often follow the most frequent air passenger routes from hub airports near supply markets in the Southern Hemisphere to hub airports near demand markets in the Northern Hemisphere. This could be a result of large middle classes in North America, Europe, and certain Asian countries creating significant demand for live animals and wildlife products sourced from remaining pockets of biodiversity in South America, Africa, and Oceania.

SUPPLY CHAINS NARROW AS THEY REACH THEIR DESTINATION

Origin points for different wildlife products are often varied, with trafficking instances involving certain species (e.g. seahorses) emanating from a wide variety of countries. Destination points, however, are often much fewer in number, creating a funnel effect as demand markets attract and consolidate product from source regions all over the world. Trafficking instance counts are therefore often higher in common destination countries.

Though this is often true for wildlife products, it is not always true for live animals valued as exotic pets, since demand for certain exotic pets is fairly widespread throughout several world regions (e.g. North America, Europe, the Middle East, and Asia). In other instances, in-demand species live only in a very specific area (e.g. totoaba in the Upper Gulf of California, or ploughshare tortoises in Madagascar), meaning the source regions for those species are just as few or fewer than the demand regions for the same species.

IMPORTANCE OF TRANSIT HUBS

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. Certain types of trafficked wildlife also have very defined supply chains, and so travel through the same large, international transit hubs repeatedly. As a result, international airlines based at major hub airports are disproportionately exposed to trafficking. Targeting these chokepoints will therefore have a large impact on traffickers' operations.

Note though that increasing enforcement effectiveness in hub airports will likely push traffickers to rely on smaller international or regional airports. Authorities in these airports should be adequately prepared for any potential shifts in trafficking flight routes in their area (e.g. a significant increase in enforcement capabilities at John F. Kennedy Airport in New York should be accompanied by increases in enforcement preparedness at neighboring airports La Guardia and Newark).

IMPORTANCE OF SEIZURE REPORTING & ITS EFFECT ON APPARENT ENFORCEMENT SUCCESS

Analyses based on public seizure data are heavily dependent on frequent and thorough reporting by government agencies and media outlets. But seizure reporting often differs from region to region due to differences in government reporting protocols and varying media and public interest. For instance, seizures of wildlife and wildlife products from charismatic species (like elephants) and species facing well-documented and intriguing challenges (like the totoaba) are more likely to receive media attention, and are therefore more likely to be captured in the C4ADS Air Seizure Database. As a result, trafficking activity associated with those species can overshadow higher levels of trafficking affecting other, lesser known species.

Similarly, particularly good reporting can create the appearance of unusually effective enforcement where it is only mediocre, and can suggest disproportionately high levels of trafficking activity where there is little. This effect is especially pronounced when compared to countries with limited to no public reporting protocols but high levels of trafficking activity. Those countries generally either appear in the data as having ineffective enforcement (regardless of the true state of their enforcement capabilities), or no trafficking activity at all, obscuring significant risks to wildlife and allowing trafficking activity to continue unabated.

RELIANCE ON SNIFFER DOGS & EMERGING TECHNOLOGIES TO IMPROVE SCREENING

Steadily increasing passenger and cargo volume has put pressure on existing screening and enforcement procedures that are straining to deal with the increase. There are, however, a number of potential options available to improve customs screening and reduce aviation industry vulnerability to wildlife trafficking without overburdening officials or industry employees.

One way to do this would be to invest more heavily in sniffer dogs, which are able to screen large numbers of people, luggage, and shipments extremely quickly; for example, a 2016 Smithsonian documentary about Frankfurt Airport showed a sniffer dog checking 40 suitcases for drugs in 100 seconds.¹ Sniffer dogs can be trained to detect a wide array of contraband, and have been employed to great effect in Kenya's Jomo Kenyatta Airport in Nairobi.

Another solution would be to replace paper-based documentation with e-documentation systems, which can incorporate risk management systems designed to identify suspect activity, thereby improving interdiction success rates. E-documentation risk management systems can also alert customs and enforcement to inbound passengers or shipments that display multiple red flags for trafficking activity based on pre-established risk factors. In addition, the speed with which documentation moves through an e-documentation system could both improve official response times and, through integrated messaging, increase communication between different national customs and enforcement agencies.

¹ "X-Ray Mega Airport: Crossroads of the World." Smithsonian Channel, 5 Aug. 2016. www.smithsonianchannel.com/videos/how-drug-sniffing-dogs-search-your-checked-luggage/50078.

WILDLIFE PRODUCT PROCESSING INCREASINGLY OCCURS IN SOURCE REGIONS

Over the past few years, seizures and other enforcement actions in Africa, the Americas, and Asia have indicated that wildlife product processing is increasingly occurring in source or origin countries, rather than near demand markets. This phenomenon is likely driven in part by the challenges inherent in trafficking raw materials over long distances; raw ivory and raw rhino horn, for instance, are much larger and more unwieldy than worked ivory and rhino horn products. Trafficking networks have likely realized that processing wildlife products in source regions and flying final or near-final products to demand markets helps them evade detection, since worked wildlife products are easier to carry, difficult to attribute to specific protected species, and occasionally even difficult to identify as wildlife derivatives. Traffickers carrying small quantities of wildlife products on their persons or in their luggage can also claim to be tourists, unaware of wildlife trafficking regulations and innocent of intentional criminal activity. Note that this phenomenon is far more prominent in seizures made in air transport than in seizures of maritime shipments.

OVERVIEW

FIGURE 1

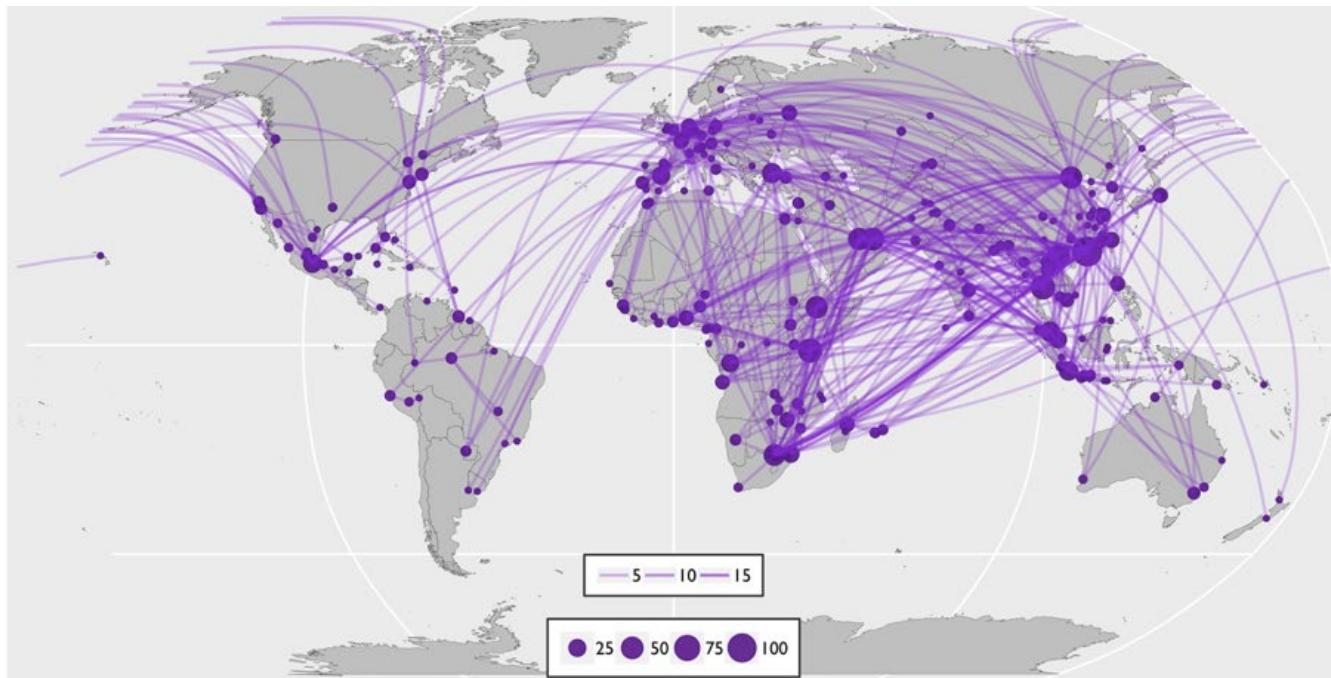


Figure 1. All air trafficking routes recorded in the C4ADS Air Seizure Database (2016 – 2018)

The trafficking routes map represents the flights used to traffic wildlife products through the air transport sector. This includes instances where the product did not actually enter a country because it was seized earlier in the route. The transparency of the line for each route represents the number of times it was used. The bubbles represent the total number of flights to and from each city.

The global routes map indicates that in just three years, wildlife trafficking by air passed through every world region repeatedly, reflecting the illegal wildlife trade’s truly global scope. Still, wildlife trafficking activity did seem to cluster slightly in certain countries and areas, such as Mexico, Europe, the UAE and Qatar, Southern and Eastern Africa, and virtually all of East and Southeast Asia. China in particular seems to count hundreds of trafficking instances flying in to and out of the country. In fact, Table 1 reveals China experienced over 200% more known trafficking instances than Vietnam, the second-ranking country by trafficking instance count, between 2016 and 2018.

Similarly, of the ten countries linked to the most instances of wildlife trafficking in their airports between 2016 and 2018 according to the C4ADS Air Seizure Database, five were Asian, three were African, one was American, and one was Middle Eastern. The dominance of Asian countries in Table 1 is likely driven by a variety of factors, including high demand for wildlife and wildlife products; significant levels of intra-regional trafficking activity; and generally frequent seizure reporting with sufficient detail to allow for inclusion in the C4ADS Air Seizure Database. The other countries appearing in Table 1 tended to have either high biodiversity, high awareness of wildlife trafficking, or good public reporting protocols.

TABLE 1

COUNTRY	TRAFFICKING INSTANCES
China	240
Vietnam	76
Thailand	57
Indonesia	56
South Africa	56
Mexico	51
UAE	44
Malaysia	40
Kenya	33
DRC	32

Table 1. Top ten countries by number of trafficking instances (2016 – 2018)

FIGURE 2

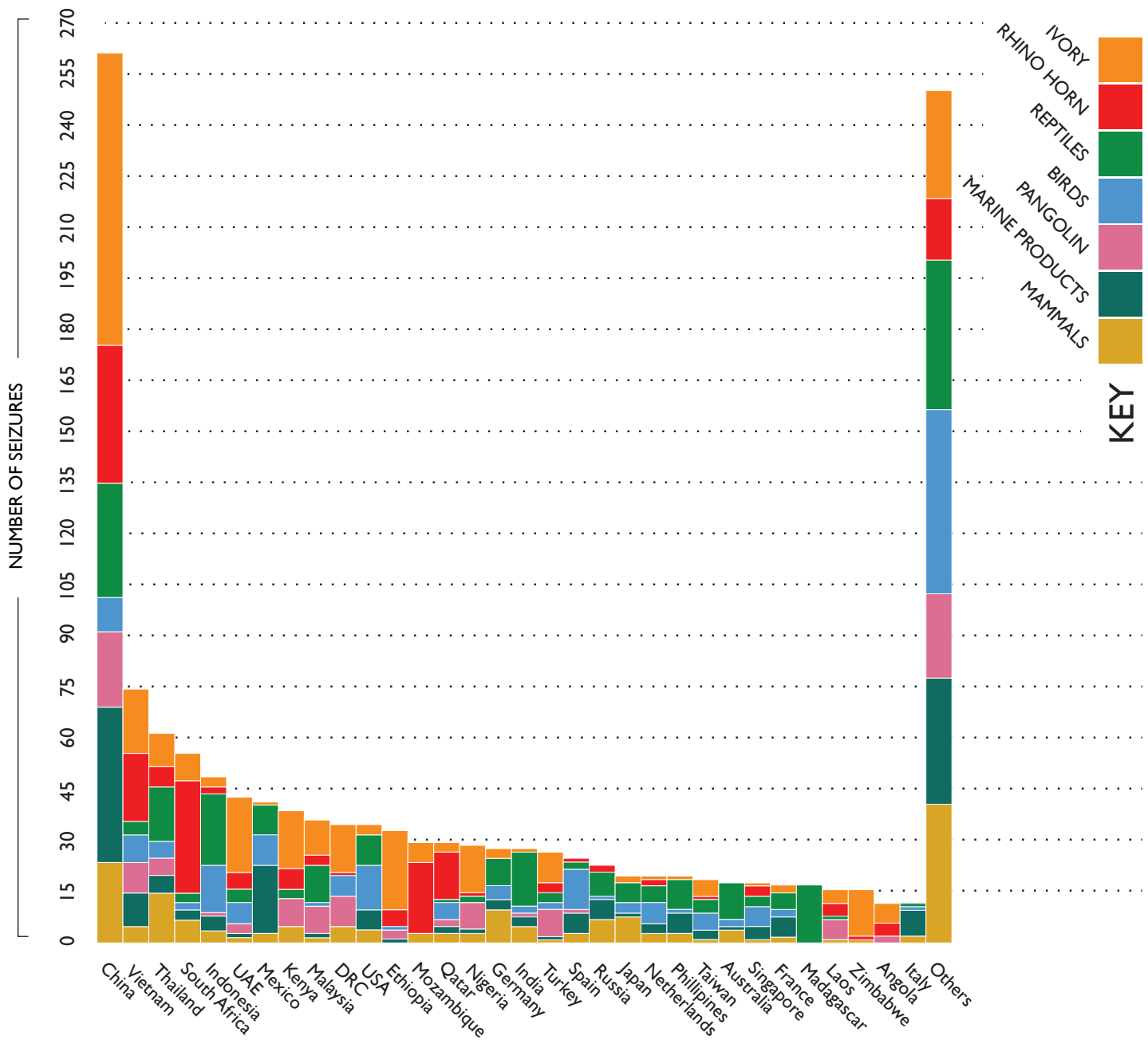


Figure 2. Number of seizures by country (2016 – 2018)

Figure 2 displays the 18 countries with the highest number of seizures in the C4ADS Air Seizure Database between 2016 and 2018. As in the global routes map, Figure 2 shows wildlife trafficking by air to be widespread throughout the world's regions, with at least one country from every region other than the Middle East appearing as one of the top 18 countries by seizure count. Each country also made a wide array of wildlife seizures, although some countries did seem to prefer certain types of wildlife (e.g. ivory in China, marine species in Mexico, rhino horn in South Africa and Mozambique, and reptiles in India). Note that countries appearing in Figure 2, which is measured by seizure count, and not in Table 1, which is ranked by trafficking instance count, may be better able to report successful seizures or stop wildlife trafficking attempts.

IMPORTANCE OF SEIZURE REPORTING

FIGURE 3

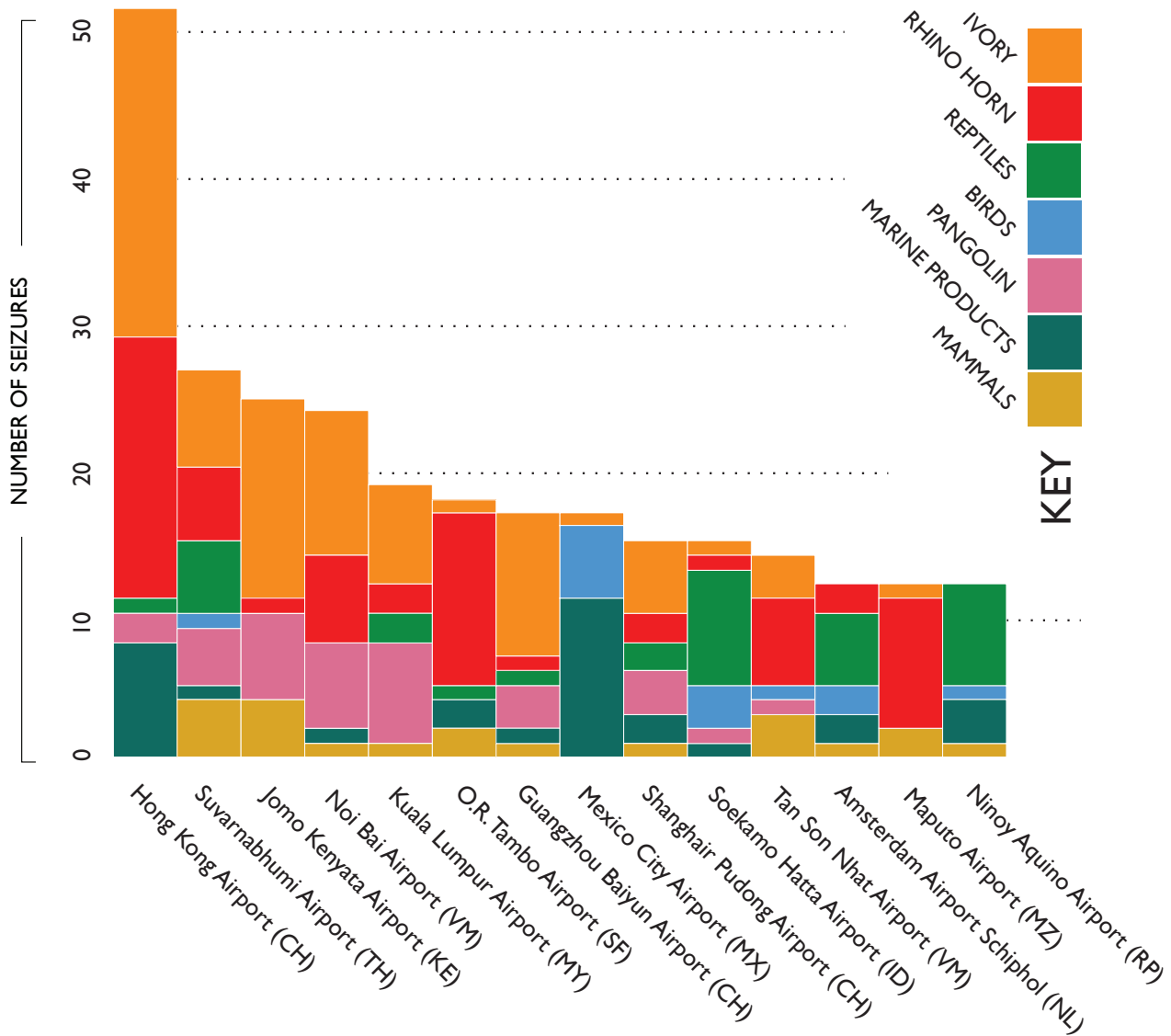


Figure 3. Airport seizure count for airports with 12 or more seizures (2016 – 2018)

China’s dominance is once again clearly visible in Figure 3, which presents seizure counts for airports with 12 or more seizures between 2016 and 2018. Hong Kong Airport alone numbers roughly twice as many seizures as any other airport, and two other Chinese airports, Guangzhou Baiyun and Shanghai Pudong, also appear. China’s prominence seems to have grown over the past few years; although Hong Kong and other Chinese airports also ranked highly in terms of seizure count in *Flying Under the Radar* (2017) and *In Plane Sight* (2018), other airports consistently ranked higher. China’s growing seizure count could be a result of good seizure reporting, higher levels of wildlife trafficking awareness, improving enforcement protocols, or increasing levels of trafficking activity.

Figure 3 also reveals how seizures of certain wildlife and wildlife products tend to cluster along their supply chains. For instance, ivory, rhino horn, and pangolin products tend to follow similar Africa to Asia trafficking routes, occasionally passing through Europe or the Middle East on the way. Most airports in Figure 3 that made seizures of ivory, rhino horn, or pangolin counted seizures of all three, and were located in Africa or Asia.

Understanding how wildlife trafficking moves through the aviation industry is absolutely essential to counteracting it. Seizure data reveals that wildlife trafficking networks often rely on the same transport methods over time, and that even across networks, traffickers of certain species and wildlife products tend to use the same transport methods repeatedly. Knowing what generally moves through a specific area can therefore help customs and enforcement target the most relevant transport methods used for wildlife trafficking in their airport.

Between 2016 and 2018, checked luggage was by far the most common transport method used by wildlife traffickers, accounting for over twice as many trafficking instances as any other transport method according to the C4ADS Air Seizure Database. The prominence of checked luggage is driven by its relevance to almost every wildlife category covered in this report. Rhino horn in particular is generally trafficked in checked luggage, but ivory, totoaba bladders, turtles, birds in cages, and sedated live animals also frequently move in checked luggage.

While ivory is frequently smuggled in checked luggage, more ivory by weight is moved in air freight. But recent shifts in wildlife product processing towards source regions, likely intended to make trafficking attempts more difficult to identify, suggest that seizures of raw ivory in air freight shipments may decrease, and seizures of worked wildlife products in luggage and in passenger carry-on items may increase. Already small seizures of worked ivory in China have become more frequent, with 78% of ivory seizures in the C4ADS Air Seizure Database including worked ivory in 2018, compared to 28% in 2016.

Finally, although mail seizures are almost certainly understated in Figure 4, they are growing in prominence, perhaps reflecting a change in enforcement awareness, an improvement in mail screening protocols, or a heightened emphasis on reporting. Australia in particular has shown a skill for identifying trafficking attempts in mail shipments.

Note that less effective trafficking methods are more likely to be intercepted, and therefore included in the analysis, whilst the most effective tactics may never be identified. It is also possible that the transport method results reflect the relative success of customs screening for each respective transport method. For example, checked luggage seizures could be high as a result of comparatively effective customs screening methods for luggage, and air freight seizures could be low due to comparatively ineffective customs screening procedures for air freight consignments.

FIGURE 4

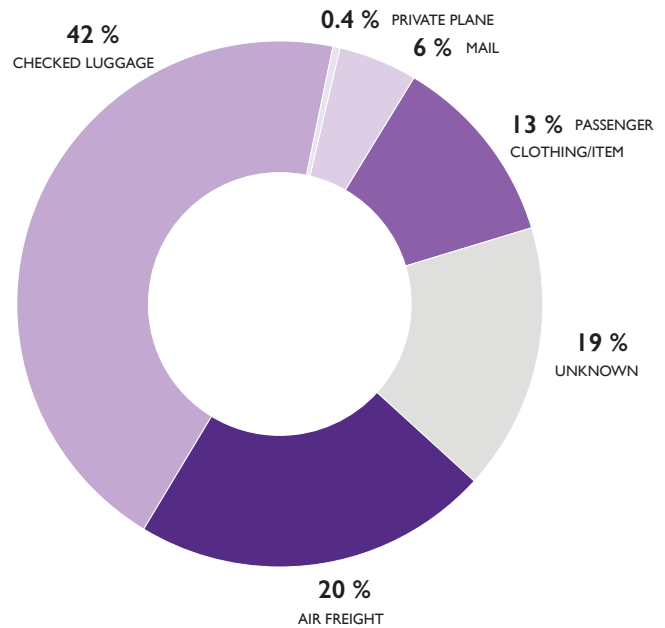


Figure 4. Transport methods for all seizures in the C4ADS Air Seizure Database (2016 – 2018)

CONCLUSION & RECOMMENDATIONS

In *Runway to Extinction*, C4ADS finds the illegal wildlife trade to be truly global in scope, encompassing more and more locations as each year goes by. Traffickers operating in each of the world regions covered by this report – Africa, the Americas, Asia, Europe, the Middle East, and Oceania – relied repeatedly on the same or similar trafficking methods and flight routes, often exploiting the same vulnerabilities within the air transport sector as traffickers of other illicit goods. The greatest variation in wildlife trafficking occurred not necessarily between regions, but between the species or wildlife product trafficked; the specific methods used and routes taken by wildlife traffickers were heavily dependent on wildlife type (e.g. Guyanese finches are always smuggled in hair curlers from Guyana to New York; pig-nosed turtles are generally smuggled in huge quantities, declared as a marine species, and flown from a regional Indonesian airport to Jakarta before flying to China).

Although wildlife trafficking bleeds into countries on every continent other than Antarctica, China's role in the illegal wildlife trade (likely driven by high demand for wildlife, but also by fairly effective enforcement, good reporting standards, and sheer population size) completely eclipsed the involvement of any other country, and seemed to be increasing. Relatedly, wildlife product processing seems to be moving closer and closer to source regions to reduce the chances of discovery in transit, suggesting that seizures of smaller quantities of processed ivory, rhino horn, and marine species will increase in the future. Finally, wildlife trafficking can be roughly divided into two groups: wildlife product trafficking (ivory, rhino horn, pangolins and pangolin products), which generally flows from Africa to Asia in a broad supply chain that narrows substantially as it approaches its end; and live animal trafficking (reptiles, birds, marine species, and mammals), which is widely dispersed throughout the world, without a clearly definable supply chain.

As in *Flying Under the Radar* and *In Plane Sight*, *Runway to Extinction* provides broadly applicable recommendations¹ that, if implemented correctly, could help to reduce wildlife trafficking throughout the air transport system as a whole. Most of last year's recommendations are still applicable this year, and primarily involve awareness, training, enforcement procedures, seizure reporting, and prevention efforts. The recommendations are grouped below by topic, and are meant to be applicable to enforcement, industry, intergovernmental organizations, and nongovernmental organizations. For more specific recommendations regarding a certain species or region, please contact C4ADS or the broader ROUTES Partnership.

¹ More specific recommendations would require knowledge of each country's current seizure reporting protocols and awareness raising activities, and so were outside the scope of this analysis.

For agencies and organizations interested in taking a more proactive approach to combatting wildlife trafficking, we have included examples, possible paths forward, and organizations to contact wherever possible in Appendix III. The implementation of many of the recommendations can also be supported by the resources developed under the ROUTES Partnership and work being undertaken by other groups on wildlife trafficking (e.g. United for Wildlife and the US Wildlife Trafficking Alliance).

Each recommendation is marked with the following symbols to illustrate its intended audience:



Regardless of each recommendation's intended audience, note that communication and collaboration are needed, at a minimum, between enforcement and industry to ensure that wildlife trafficking through the air transport sector is addressed comprehensively and strategically. In addition, many of the trafficking methods identified in both *Flying Under the Radar* and *In Plane Sight* are utilized by traffickers of all types. As a result, implementation of the following recommendations will likely improve enforcement success not just for the illegal wildlife trade, but for other crime types as well.

C4ADS recommends the following steps be taken to improve enforcement success rates and reduce wildlife trafficking by air.

RECOMMENDATIONS

AWARENESS

1. Increase awareness among air passengers, aviation staff, freight forwarders, shippers, and enforcement officials.
2. Adopt or create a pamphlet or tool tailored to each country to help customs and enforcement officials, as well as relevant industry personnel, identify restricted species and wildlife products commonly trafficked through their territory.
3. Ensure public reporting mechanisms are in place and well-known so passengers can report suspected wildlife trafficking instances.



TRAINING

4. Provide training on red flag indicators associated with wildlife traffickers and shipments. Ensure that follow-up trainings are provided as necessary to support uptake.
5. Incorporate training for airline staff on how to safely handle trafficked live or dead animals after discovery into existing training programs. Create and provide “forensic protection protocols” training to preserve evidence for trial.



ENFORCEMENT

6. Develop clear escalation procedures upon discovery of potential illegal activity.
7. Engage with the private sector to ensure that aviation personnel are aware of the types of information needed to follow up on reports of wildlife trafficking. Provide feedback to industry and the public on the outcomes of submitted tips.
8. Develop post-seizure procedures to safely and securely store wildlife products or ensure the proper care of trafficked live animals. Develop procedures to track seized live animals and wildlife products.
9. Dedicate additional resources to combatting the illegal wildlife trade in common hub airports exploited by wildlife traffickers.
10. Develop or enhance customs screening procedures for transit flights.
11. Customs and enforcement should be aware of flight routes opening through high-risk areas.
12. Develop and maintain a comprehensive internal database of entities previously involved in wildlife seizures.
13. Develop a system to test counter-wildlife trafficking protocols.
14. Improve wildlife customs screening requirements for postal mail shipments. Ensure mail seizures are reported to the same degree as passenger, checked luggage, or air freight seizures.
15. Increase cooperation with other customs and enforcement agencies along high-risk supply chains. Inform foreign agencies of seizures on flights that have left or are destined for their countries.



RECOMMENDATIONS

SEIZURE REPORTING

16. Store collected seizure information in one centralized database.



17. Develop a procedure to publicly report seizure information. Update seizure press releases with prosecution results.



POLICY

18. National laws should, at a minimum, enforce CITES regulations and regulate the domestic trade in non-native species. Penalties for wildlife trafficking should be raised until they are sufficiently deterrent.



DETECTION

19. Pursue shift towards electronic paperwork for air freight and updated technology for customs screening. Expand advanced cargo and passenger information systems to include red flags for the illegal wildlife trade. Incorporate CITES e-permits in e-documentation systems.



