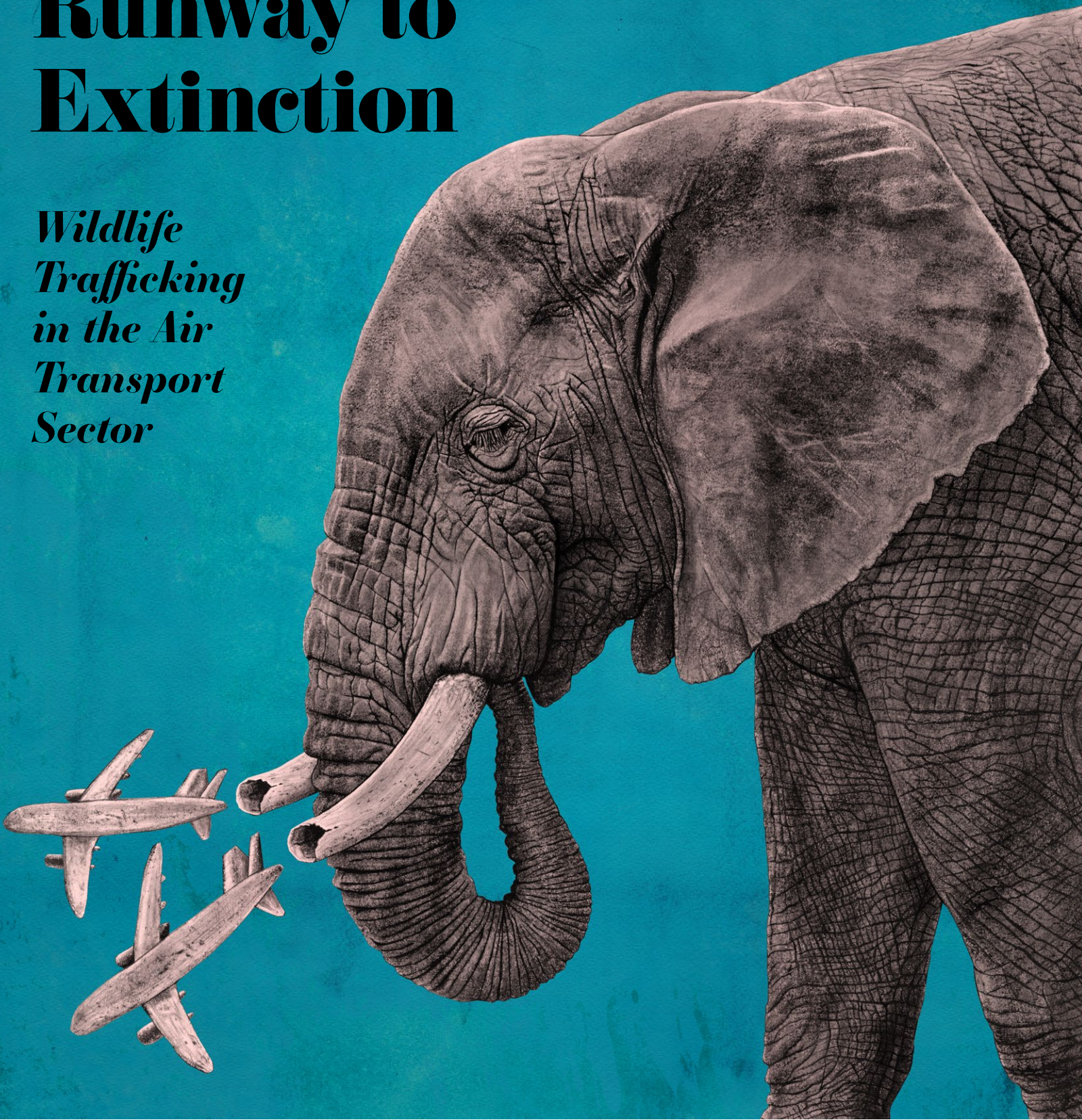


Runway to Extinction

*Wildlife
Trafficking
in the Air
Transport
Sector*



USAID
FROM THE AMERICAN PEOPLE



C4ADS
innovation for peace



TRAFFIC
the wildlife trade monitoring network



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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This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of C4ADS and do not necessarily reflect the views of USAID, the United States Government, or individual ROUTES partners.

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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/default.asp?docid/12612>

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.

MIDDLE EAST

MAIN TAKEAWAYS

The Middle East is a prominent transit region, particularly for wildlife and wildlife products trafficked between Europe, Africa, and Asia.

Middle Eastern countries can be destination countries for exotic live animals (e.g. cheetahs) and for falcons, particularly saker falcons.

Middle Eastern countries seem to make few wildlife seizures or publicly report few wildlife seizures, likely in large part due to the region's role as a transit hub and the difficulty of stopping trafficking instances in transit.

Flight routes for specific African wildlife products seem to rely on one Middle Eastern country more than the others (e.g. pangolins tend to fly through Turkey, rhino horn flies through Qatar, and ivory flies through the UAE). Knowing which types of wildlife products tend to fly through which airports can help enforcement target the transport methods most commonly used by traffickers of each product.

FIGURE 1



Figure 1. Heat map of wildlife and wildlife trafficking instances in the Middle East's air transport sector (2016 – 2018)

The heat map represents the total number of times that a successful or planned trafficking instance was recorded for each country. The map includes instances where the product did not actually enter a country because it was seized earlier in the route. Note that the heat map reflects only those trafficking instances that were stopped in airports.

The Middle East heat map primarily reflects the region's importance as a transit hub for wildlife trafficking by air.

Prominent transit countries

The most significant countries in the heat map (the UAE, Qatar, and Turkey¹) are all major transit countries for wildlife and wildlife products moving between Africa, Europe, and Asia. According to the C4ADS Air Seizure Database, Dubai in the UAE and Doha in Qatar are two of the most prominent transit cities for wildlife trafficking by air in the world, with a significant portion of smuggled African wildlife and wildlife products passing through one or the other on the way to Asian destinations.

Although not as well-known as either the UAE or Qatar, Turkey also played an important role as a transit country for trafficking attempts flying from Africa or Europe to Asia between 2016 and 2018. Given the country's lower profile, traffickers passing through Turkey may be hoping to evade the extra scrutiny that flights originating in Africa and passing through Dubai or Doha face in certain Asian airports.

IMPORTANCE OF TRANSIT HUBS

“Knowing which types of wildlife products tend to fly through which airports can help enforcement target the transport methods most commonly used by traffickers of each product.”

Appearance of Syria and Iraq

The appearance of Syria and Iraq in the heat map is unexpected, given that neither country has a well-known wildlife market. But further examination of the two trafficking instances destined for each country reveals that the instances were stopped prior to arrival in Syria and Iraq. The Syrian trafficking instance involved a shipment of tiger cubs originating in Ukraine and ultimately destined for Samer al-Husainawi Zoo near Damascus, Syria in March 2017.¹ The seizure only occurred because an NGO, Animals Lebanon, learned that the cubs had been held in Beirut Airport, Lebanon for a week but had not been given additional food or water (see **Tigers and Monkeys in Lebanon**).

The Iraqi instance involved 142 birds of various species leaving Maastricht Aachen Airport in the Netherlands for Iraq.¹¹ The birds did not have the appropriate authorization to travel, and a Belgian national had already unsuccessfully tried to ship them once prior to their seizure in February 2016.

¹ Although Turkey can be considered part of either Europe or the Middle East, it could not be included in both the European and Middle Eastern analyses. Because Turkey displayed many of the same characteristics as other Middle Eastern countries in the C4ADS Air Seizure Database, C4ADS chose to group Turkey within the Middle East for the purposes of this report.

THE MIDDLE EAST AS A TRANSIT REGION PARADIGM

As a prominent transit region, the Middle East experiences far more wildlife trafficking activity than it appears able to intercept. For example, wildlife trafficking instances in Middle Eastern airports over the past three years numbered at least five times more than wildlife seizures in those same airports over the same time period. The majority of these instances were later seized on arrival at their destination airports. As a result, the Middle East's seizure count is not a good indication of the region's true relevance to wildlife trafficking by air.

This phenomenon is clearly visible in the prevalence of ivory, rhino horn, and pangolin trafficking instances transiting through the region (36, 22, and 13 respectively) compared to only two ivory and rhino horn seizures each and no pangolin seizures over the same timeframe.

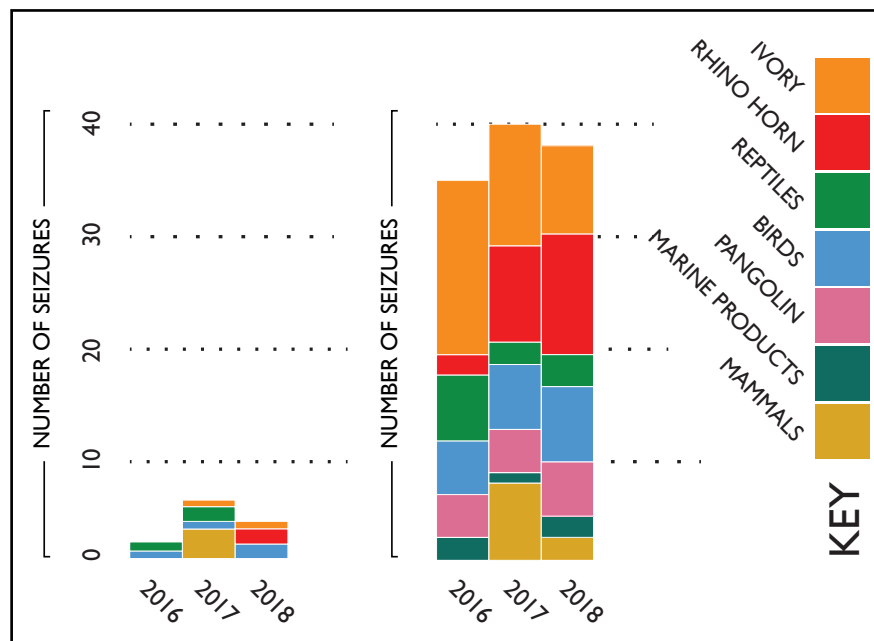


Figure 2. Seizure count and trafficking instance count by wildlife category (2016 – 2018)

FIGURE 3

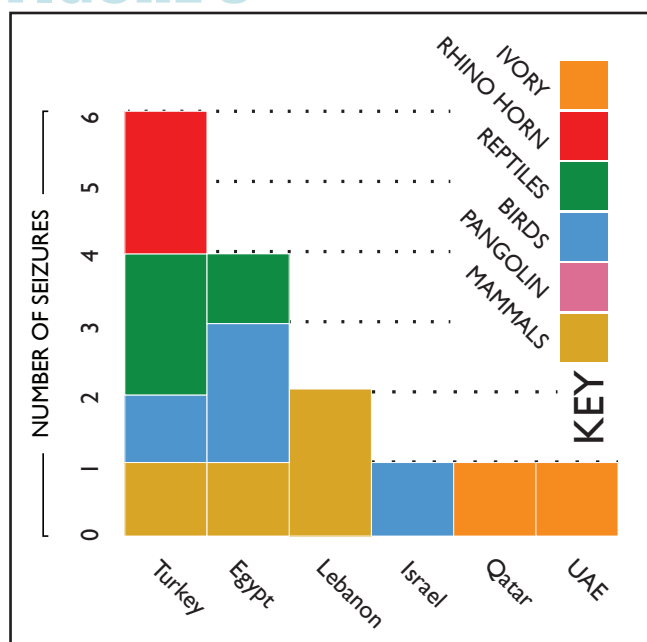


Figure 3. Total seizure count by Middle Eastern country (2016 – 2018)

According to the C4ADS Air Seizure Database, Middle Eastern countries made few seizures in the air transport sector between 2016 and 2018. The countries' low seizure counts are indicative of the Middle East's status as a prominent transit region.

Difficulty making seizures in transit

Turkey ranked first by seizure count between 2016 and 2018, with more reported seizures than the UAE and Qatar combined. Turkey's comparatively high seizure count is not driven by its status as a significant transit country for trafficked wildlife and wildlife products, however; the majority of known wildlife seizures made in Turkey between 2016 and 2018 were destined for the country. Turkey's seizures were therefore likely discovered as they passed through customs screening on arrival.

The only seizure Turkish officials made in transit that was captured in the C4ADS Air Seizure Database involved 34 kg of rhino horn on a Turkish Airlines flight from Mozambique to Vietnam.ⁱⁱⁱ The seizure occurred after previous flights taken by the Vietnamese trafficker smuggling the horns raised red flags in Ataturk Airport's Intelligence Information System. The success of this seizure emphasizes the importance of relying on red flag indicators and emerging technologies to reduce time and manpower constraints inhibiting effective screening of passengers and cargo in transit.

DIFFICULTY OF MAKING SEIZURES IN TRANSIT

SECURITY SCREENING AT ORIGIN VERSUS CUSTOMS SCREENING AT DESTINATION

FIGURE 4

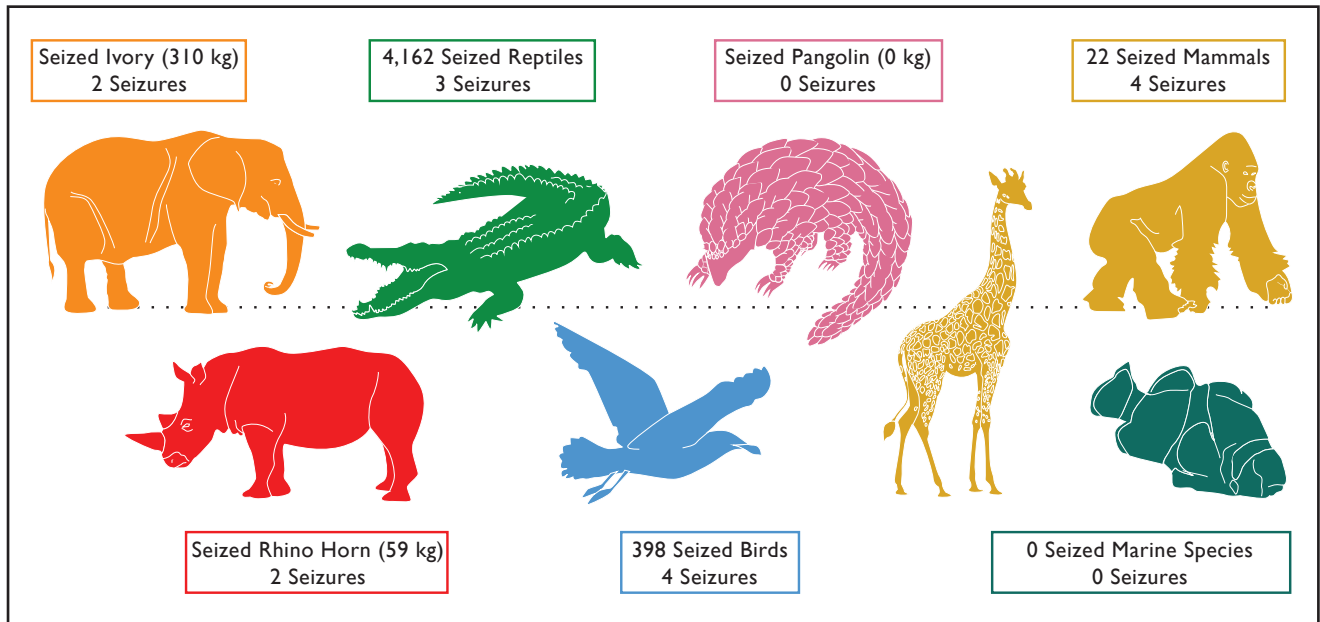


Figure 4. Number of Middle Eastern seizures displayed by type of wildlife or wildlife product seized (2016 – 2018)

Appearance of Egypt

Between 2016 and 2018, Egyptian authorities in Cairo Airport made four known wildlife seizures, ranking second in Figure 3 amongst Middle Eastern countries by seizure count. At least three of the seizures suggested that Egypt may function as an origin point or a “gateway” to live animal markets in other Middle Eastern countries.

Both Egyptian bird seizures in Figure 3 involved falcons leaving Cairo for sale in Bahrain. In one seizure, traffickers sewed shut the eyes of the peregrine falcons they were transporting (see **Falcon Smuggling & Corruption**).² The Egyptian mammal seizure occurred after a “Gulf national” was caught smuggling two lion cubs in boxes to “a Gulf country.”^{iv} He claimed they were domestic kittens and provided authorities with falsified paperwork claiming he had purchased them in a pet shop, but later admitted he had purchased them from a circus in Marsa Matruh.

IMAGE 1



Image 1. Two lion cubs purchased from a lion trainer at a circus in Egypt and found in the possession of a Gulf national attempting to export them from Cairo. Source: Al-Ahram Arabic

²Similarly, the Egyptian reptile seizure in Figure 35 involved 60 venomous Egyptian cobras found in ice-packed boxes, also with their mouths sewed shut. Source: Kous, Dima Abo. “Smuggled Cobras Rescued at Cairo Airport Thanks to Our Trainings.” International Fund for Animal Welfare. 9 May 2016. www.ifaw.org/united-states/news/smuggled-cobras-rescued-cairo-airport-thanks-ourtrainings.

FALCON SMUGGLING & CORRUPTION

Falcon trafficking is common in the Middle East, where wealthy members of the Middle Eastern elite, often royalty or government officials, collect falcons to hunt (usually illegally) and compete in various contests. Though captive-bred falcons can often be sold legally, falcon trafficking remains prominent in the Middle East due to a persistent belief that wild birds are more successful hunters than captive-raised birds.^v As a result, birds are often caught along the coasts of the Mediterranean, Red, and Arabian Seas^{vi} and passed into the illegal wildlife trade before being illegally sold to falconers in and around the Arabian Peninsula. Falcons are so prized by their owners in the Middle East that Bentley recently released the Bentayga Falconry, a car with a perch positioned between the two front seats and a “Master Flight Station” designed to hold a “GPS bird tracking unit, binoculars, and hand-crafted leather bird hoods and gauntlets.”^{vii}

Because so much of the illegal falcon trade involves Middle Eastern elites, there is likely a fair amount of corruption involved in many falcon trafficking attempts, from airport employees who turn a blind eye to a smuggling attempt involving an elite, to the traffickers themselves, to the individuals receiving the birds and flying them back and forth to falconry camps and competitions.

For example, in October 2016, Egyptian officials in Cairo Airport X-rayed bags belonging to an Egyptian passenger and discovered 41 peregrine falcons, prized for their speed and hunting ability, bundled up and drugged with their eyes sewn shut.^{viii} Officials arrested the passenger, who was allegedly flying to Bahrain to sell the birds “to princes in the Gulf region,” along with a police officer in the Cairo Security Directorate and three lower-ranking police officers in Cairo Airport that he had bribed.^{ix}

In another seizure a year later, Pakistan officials in Allama Iqbal Airport in Lahore searched the airport in response to a tip-off about a bird smuggling attempt.^x The officials discovered nine falcons hidden in a carry-on bag owned by a Qatari citizen, Ali Muhammad Al-Sada. He was attempting to board a private flight back to Qatar at the time of the seizure.



Image 2. A hooded falcon standing on the perch of a Bentley Bentayga Falconry. Source: Gentleman's Journal



Image 3. One of 41 peregrine falcons destined for sale in Bahrain. The birds had been drugged and had their eyelids sewn shut. Source: IFAW

FIGURE 5

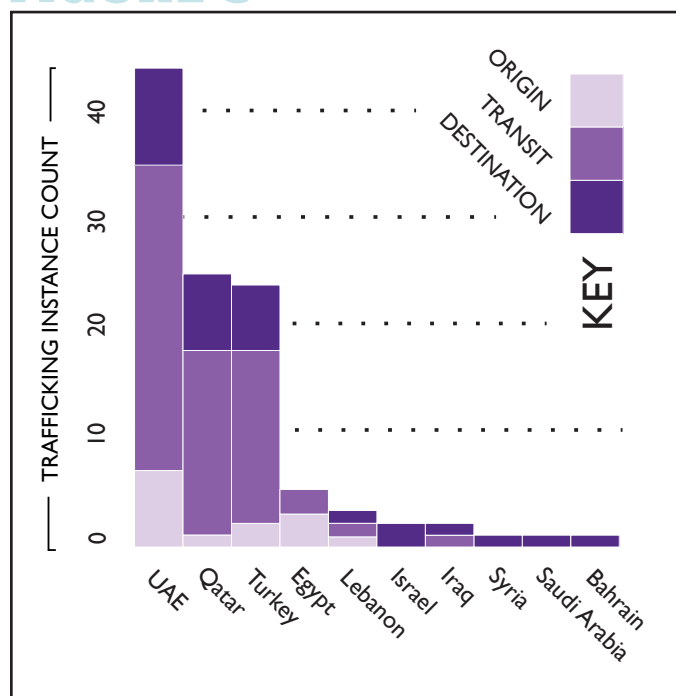


Figure 5. Country-level flight route information for Middle Eastern countries with one or more trafficking instances (2016 – 2018)

Only trafficking instances for which flight route information exists were included. The data is split by country, rather than airport, to account for transit information reported at the country level.

The role of the Middle East as the world's most prominent transit region for wildlife trafficking by air is clearly on display in Figures 5 and 6, with the UAE, Qatar, and Turkey experiencing primarily transit instances. In fact, transit instances accounted for 63%, 69%, and 67% of the trafficking instances involving the UAE, Qatar, and Turkey respectively. Airports in Egypt, Lebanon, and Iraq were also used as transit points by wildlife traffickers between 2016 and 2018, albeit to a lesser extent.

Transit hubs as origin points

Each of the primary transit countries in Figure 5 – the UAE, Qatar, and Turkey – all count at least one origin instance. While it is possible that these represent the attempted trafficking of native species or of non-native animals living in the Middle East, it is also possible that these origin instances involved live animals or wildlife products that were being smuggled through each country in two separate trafficking attempts.

Some traffickers are careful to obfuscate the true origin of their shipments by storing them in a transit location – such as in a warehouse or with an exotic animal trader – for days to months at a time. Dividing flight routes in this way may help to reduce authorities' perceived risk of a shipment arriving at its destination, thereby reducing the chances it will be stopped and closely scrutinized. For example, Chinese authorities are well aware that flights arriving from South Africa and Mozambique may carry rhino horns, and so often perform enhanced screening on passengers and shipments disembarking from those flights. Flights arriving from Qatar, however, are not necessarily considered high-risk for rhino horn trafficking attempts, and so may undergo less rigorous screening for wildlife products

IMPORTANCE OF TRANSIT HUBS

FIGURE 6

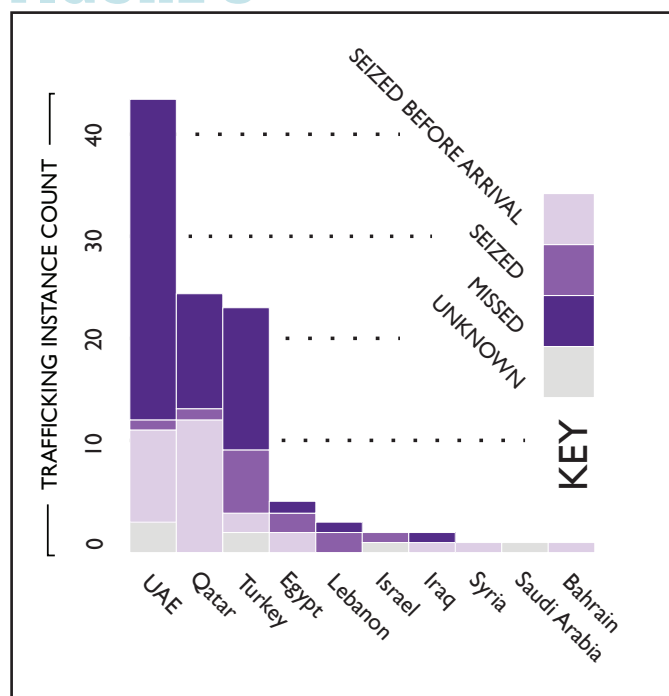


Figure 6. Point of seizure within the supply chain by Middle Eastern country (2016 – 2018)

Further inspection of the Emirati, Qatari, and Turkish origin instances in Figure 5 reveal that they are likely a mix of both genuine origin instances and delayed trafficking instances. Many involved falcons native to the Middle East on their way from the UAE or Qatar to Pakistan. Others involved non-native species, such as red-eared slider turtles and gray parrots, and wildlife products derived from non-native animals.

Appearance of Saudi Arabia, Bahrain, and Israel

Saudi Arabia, Bahrain, and Israel all appear in Figure 5 as destination countries due to domestic demand for live animals, particularly reptiles and birds. For example, Saudi Arabia was listed as the intended destination of a trafficker carrying 10 live juvenile pythons in socks and plastic bags on a Garuda Indonesia flight.^{xii} Bahrain was the intended destination of 41 drugged and bound peregrine falcons found in the luggage of an Egyptian trafficker (see **Falcon Smuggling & Corruption**).^{xiii} Israel's trafficking instances in Figure 5 involved both birds and reptiles. In the first seizure, Israeli officials intercepted two Israeli traffickers in Ovda Airport on arrival from Milan, Italy in November 2018 after receiving a tip off.^{xiiii} The officials found eight Gouldian finches in bird cages hidden in the traffickers' suitcases. One month later, German customs officers stopped a male passenger with a strange bulge in his pants on his way to Israel.^{xv} Further inspection revealed that he had placed a boa in a cloth bag and hidden the bag in his pants.

Low seizure rates

Of the Middle Eastern countries featured in Figure 6, only Lebanon and Egypt seized more trafficking instances than they missed. The UAE and Qatar, the two most significant Middle Eastern countries by trafficking

DIFFICULTY OF MAKING SEIZURES IN TRANSIT

IMAGE 4



Image 4. Eight Gouldian finches discovered in the suitcase of a trafficker flying from Italy to Israel. Source: Israel Nature and Parks Authority

IMAGE 5



Image 5. A boa stuffed in a cloth bag and hidden in a passenger's pants. Source: German Main Customs Office Shonefeld

instance count and the most common transit countries in the region, had particularly low seizure rates (2% and 4% respectively), reflecting the difficulty of making seizures in transit.

Note that Dubai Airport tends to report three or four months of seizures in one press release, without describing individual seizures and only referencing combined totals. This format prevents the incorporation of those seizures into the C4ADS Air Seizure Database, and may lead to an artificially low seizure count for the UAE.

Comparatively high seizure rate in Lebanon

Lebanon was the only Middle Eastern country in the C4ADS Air Seizure Database to stop the majority of the known trafficking instances linked to its airports (see **Tigers and Monkeys in Lebanon**). Lebanon only counted three trafficking instances total in its airports between 2016 and 2018, however, so this seizure rate could reflect chance more than a heightened ability to intercept trafficked wildlife.

Seizures before arrival in Qatar

Of the trafficking instances linked to Qatar between 2016 and 2018, 54% were seized prior to arrival in Qatar. This suggests that Qatari trafficking instances may be passing through airports with particularly effective enforcement before arriving in Qatar, perhaps along a few commonly used routes. But no clear pattern emerged in the data; the 14 trafficking instances seized prior to arrival in Qatar originated in nine different countries, and involved everything from rhino horn to pangolin scales and falcons. The instances did, however, involve more falcons and rhino horn than any other species or wildlife product, and were seized in either an African country (Mozambique, Nigeria, Morocco, South Africa, or Uganda) or an Asian country (Kazakhstan, Azerbaijan, Pakistan, or Indonesia). These nine countries do act as common origin points for certain trafficked species, and so perhaps have higher awareness of their exposure to wildlife trafficking, giving enforcement a heightened ability to identify smuggled wildlife on departure.

IMAGE 6



Image 6. Three tiger cubs held at Beirut Airport, Lebanon for a week. Source: AFP

Between 2016 and 2018, Lebanon officials made only two known wildlife seizures in the country's airports. Both seizures involved live animals shipped in poor conditions.

In the first seizure in March of 2017, a Lebanese NGO, Animals Lebanon, alerted the Lebanese Ministry of Agriculture and Customs to a shipment of three tiger cubs arriving in Beirut Airport from Ukraine.^{xv} The owner of the shipment presented paperwork and permits for the cubs, stating that they were due to fly out again the day after their arrival on a ShamWings flight to Syria (ShamWings, however, allegedly told Animals Lebanon that they did not have the appropriate planes for live animal transport).^{xvi}

The cubs did not fly out the next day as promised, and instead spent seven days sitting in the small crate they had arrived in in Beirut Airport. The crate did not comply with IATA's Live Animals Regulations (LAR) – it was too small, did not have absorbent bedding, and did not include appropriate food and water containers.^{xvii xviii} The bottom of the crate also became increasingly covered in maggots as the cubs remained confined within it. Note that CITES permits require that IATA's LAR be met, or else the permit becomes invalid.^{xix}

After seven days, a judge ordered the release of the cubs to Animals Lebanon “because of significant concerns for their health and welfare.”^{xx}

Five months later, Lebanese officials discovered two rare white-throated guenon monkeys (CITES Appendix II) in a cat crate.^{xxi} The monkeys had flown from Accra, Ghana through another transit location or two before arriving at Beirut Airport, allegedly multiple days after they had left Ghana. They were not given food or water for the trip. Animals Lebanon took the monkeys in after their arrival and said they were in “terrible shape.”^{xxii} The monkeys are believed to be the only whitethroated guenons outside of the species' normal habitat in Nigeria and Benin.

TIGERS & MONKEYS IN LEBANON

FIGURE 7

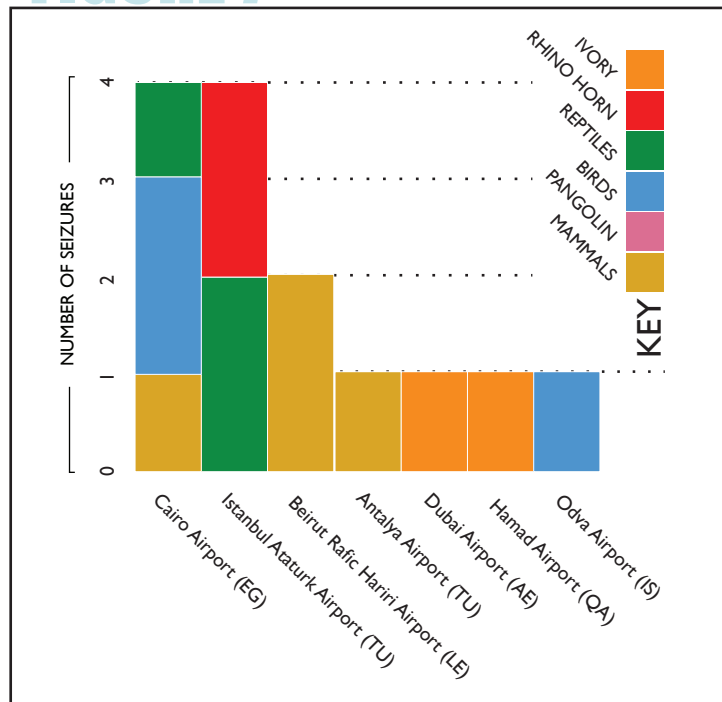


Figure 7. Airport seizure count for Middle Eastern airports (2016 – 2018)

Few Middle Eastern airports made wildlife seizures between 2016 and 2018, with seizures concentrated in primarily two countries, Turkey (five seizures)³ and Egypt (four).

Lack of identifiable patterns likely reflects Middle East's status as a transit region

No clear trends are visible in Figure 6, with each airport making too few seizures to portray any real pattern.

A slight emphasis on mammal seizures is visible, however, with three Middle Eastern airports counting at least one mammal seizure between 2016 and 2018. All four involved animals likely destined for the Middle Eastern pet trade. Three involved exotic wild animals (lion cubs, tiger cubs, and white-throated guenons), while the fourth involved 15 Scottish fold and Scottish straight house cats smuggled in the carry-on bags of tourists entering Turkey.^{xxiii} Seven of the cats died en route due to a lack of oxygen.

DIFFICULTY OF MAKING SEIZURES IN TRANSIT

Seizures may not be publicly reported

The exotic pet trade and the falconry trade are both wellknown in the Middle East, and yet Figure 6 only counts four mammal seizures and two bird seizures reported publicly in the region in three years. The absence of seizures suggests seizures are either not occurring or that reporting is relatively limited.

Most exotic pets and falcons that are smuggled into Middle Eastern countries are purchased by wealthy members of the Middle Eastern upper class, including royalty. This could put pressure on customs and enforcement authorities within airports to turn a blind eye to suspect shipments (see **Falcon Smuggling & Corruption**). It is also possible that existing regulations allowing for the movement of falcons with the correct documentation provide a gray area that prevents authorities from easily differentiating between legal falcon movements and illicit falcon trafficking.

IMAGE 7



Image 7. Three of the kittens discovered on arrival in Antalya, Turkey. Seven of the kittens had died en route. Source: AA Photo

³Reports of the sixth seizure made in Turkey between 2016 and 2018 (African grey parrots flying between the DRC, Turkey, and Iraq) did not include airport information.

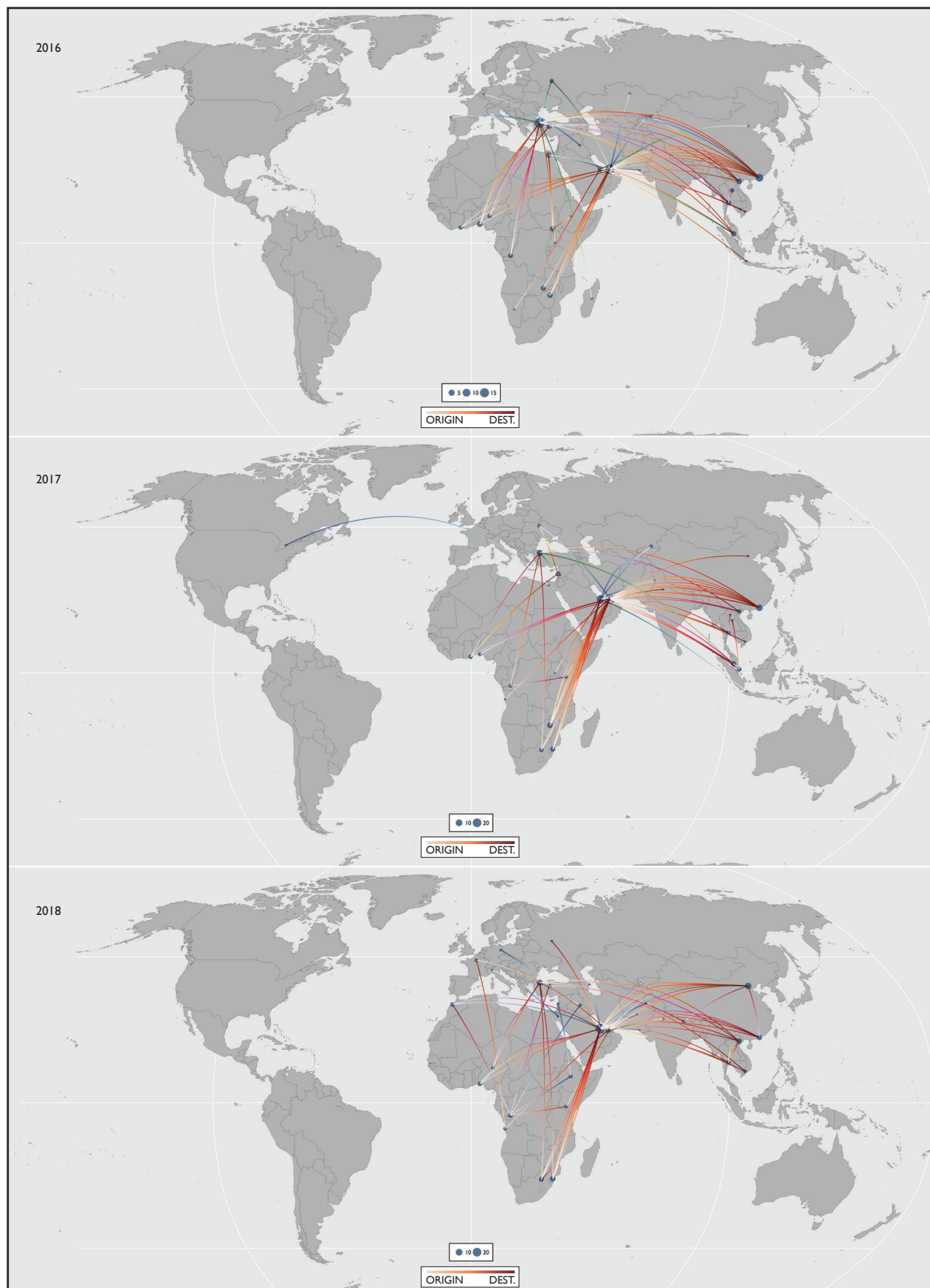


Figure 7. Middle Eastern air trafficking routes recorded in the C4ADS Air Seizure Database (2016 – 2018)

Circle size indicates the number of flights carrying illicit wildlife that departed from or arrived in a particular city. Capital cities are used when specific airports are unavailable.

The Middle Eastern routes maps look like simplified versions of the African routes maps, missing only Africa’s direct flights between East and Southern Africa and Asia. This similarity reflects the use of the Middle East as a stepping stone to Asian destinations by wildlife traffickers operating in Africa.

Importance as a hub connecting Africa and Asia

Most of the flights flying into the Middle East from Africa continued on to Asian destinations. This was particularly true for flights used to smuggle ivory, rhino horn, and pangolin from West, Central, and Southern Africa. Rather than flying into a wide array of Middle Eastern airports to avoid detection, however, these trafficking instances almost always flew into one of three Middle Eastern cities: Dubai in the UAE, Doha in Qatar, and Istanbul in Turkey. This near constant reliance on the same three cities was most likely driven by necessity – Dubai Airport, Hamad Airport, and Istanbul Ataturk Airport (now Istanbul Airport) are the three busiest airports in the Middle East, and so probably offer the most flights and flight routes between the Middle East and other world regions.

Certain wildlife products seem to favor certain transit countries

The Middle Eastern routes maps suggest that certain African wildlife products flew through one transit country more frequently than any others between 2016 and 2018. Seizure data contained within the

C4ADS Air Seizure Database reveal a similar trend, with ivory, rhino horn, and pangolin trafficking instances all tending to favor one Middle Eastern country over the rest. For example, pangolin trafficking instances flew through Turkey more often than any other country in the region, accounting for 62% of pangolin instances transiting through the Middle East.⁴ In contrast, rhino horn flying through the Middle East passed through Qatar 68% of the time, and ivory flew through the UAE 61% of the time.

The differences in the flight routes used by ivory, rhino horn, and pangolin traffickers between 2016 and 2018 were likely a result of slight differences in the origin and destination points for each. According to the C4ADS Air Seizure Database, ivory usually flew out of East, Central, West, or Southern Africa for Hong Kong, China or Kuala Lumpur, Malaysia, while rhino horn almost exclusively flew out of Southern Africa for Hong Kong or Vietnam. Pangolin often flew out of West or Central Africa for China, Vietnam, or Lao PDR.

Birds destined for and leaving from the Middle East

One clear difference between the African and Middle Eastern routes maps is the appearance of multiple bird trafficking instances flying between the Middle East, Central Asia, and Eastern Europe. Many of these bird trafficking instances involved falcons smuggled between the UAE, Turkey, Qatar, Bahrain and several Central Asian countries such as Pakistan and Kazakhstan.^{xxiv xxv}

FIGURE 8

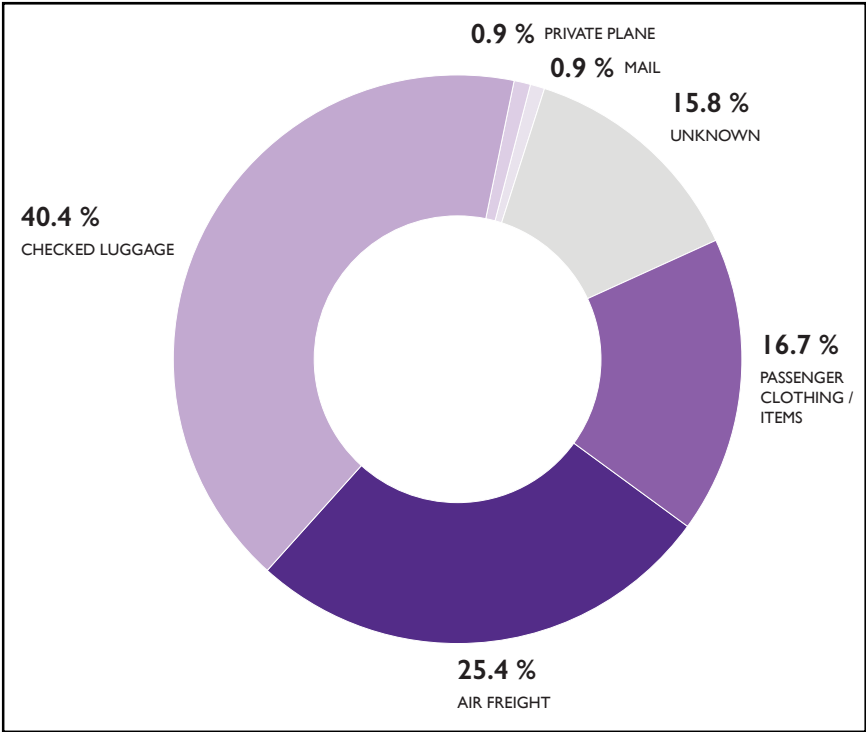


Figure 8. Transport methods for Middle Eastern trafficking instances in the air transport sector (2016 – 2018)

Although checked luggage was the most commonly used transport method in the Middle East between 2016 and 2018, it was slightly less significant there (40% of instances moved in checked luggage) than in most other world regions (42% on average), with the exception of Oceania (26%). At the same time, air freight and passenger clothing/items were comparatively more important in the Middle East, with more Middle Eastern trafficking instances concealed in air freight or passenger clothing/items than in any other world region.

Prevalence of air freight

The significance of different transport methods in the Middle East was largely dependent on the types of wildlife trafficked there, according to the C4ADS Air Seizure Database. For example, of the air freight instances that passed through the Middle East between 2016 and 2018, 69% were either ivory or pangolin scale trafficking attempts on the way from Africa to Asia. Air freight was less commonly used in regions where neither ivory nor pangolin scale trafficking attempts were common (i.e. the Americas, Europe, and Oceania) .

⁴Note that the regional focus of this section may be affecting the analysis – it is possible that these wildlife products more frequently transit through African or European airports than the airports mentioned here.

WILDLIFE TRAFFICKING BY MAIL LIKELY UNDERREPRESENTED

Prevalence of passenger clothing/items

According to the C4ADS Air Seizure Database, ivory trafficking instances made up 53% of the trafficking attempts hidden in passenger clothing or items in the Middle East between 2016 and 2018. The vast majority of these ivory seizures occurred in or were destined for China.

In Africa and Asia, trafficking instances moved by passenger clothing/items seemed to be associated with an increase in small-scale (less than one kg) ivory trafficking attempts. In the Middle East, however, ivory trafficking instances carried by passengers or placed in their carry-on bags generally weighed around 20 kg. Further investigation revealed that the vast majority of these instances were linked to a particular ivory trafficking network, dubbed “The Handmade Vest Network” for the purposes of the ROUTES reports, operating between Harare, Zimbabwe; Dubai, UAE; and Hong Kong, China since at least 2015 (see **Handmade Vests case studies** in *Flying Under the Radar* and *In Plane Sight*).

Rhino horns in checked luggage

Of the Middle Eastern trafficking instances moved in checked luggage between 2016 and 2018, 28% involved rhino horns flying from Southern Africa to Asia, usually onboard Turkish Airlines or Qatar Airways. While some rhino horns were placed directly inside a suitcase, others were cut into pieces, wrapped in tin foil, and hidden within industrial machinery or cans of food.

WILDLIFE PRODUCT PROCESSING INCREASINGLY OCCURS IN SOURCE REGIONS

IMAGE 8

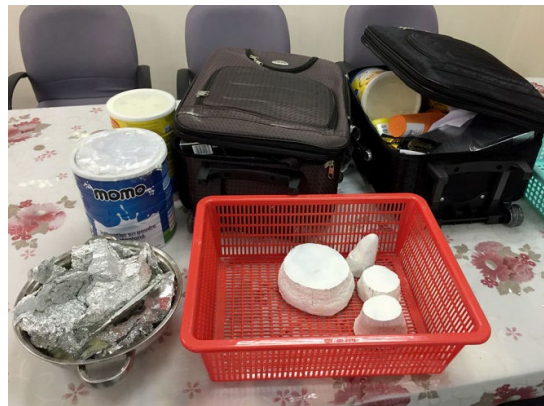


Image 8. Rhino horn pieces painted white, wrapped in tin foil and hidden inside powdered milk formula cans in two suitcases. Source: Vietnamese Customs

IMAGE 9



Image 9. Rhino horn pieces painted black and hidden inside food packaging. Source: Hong Kong Customs and Excise Department

Endnotes

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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

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16. Store collected seizure information in one centralized database.



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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.



