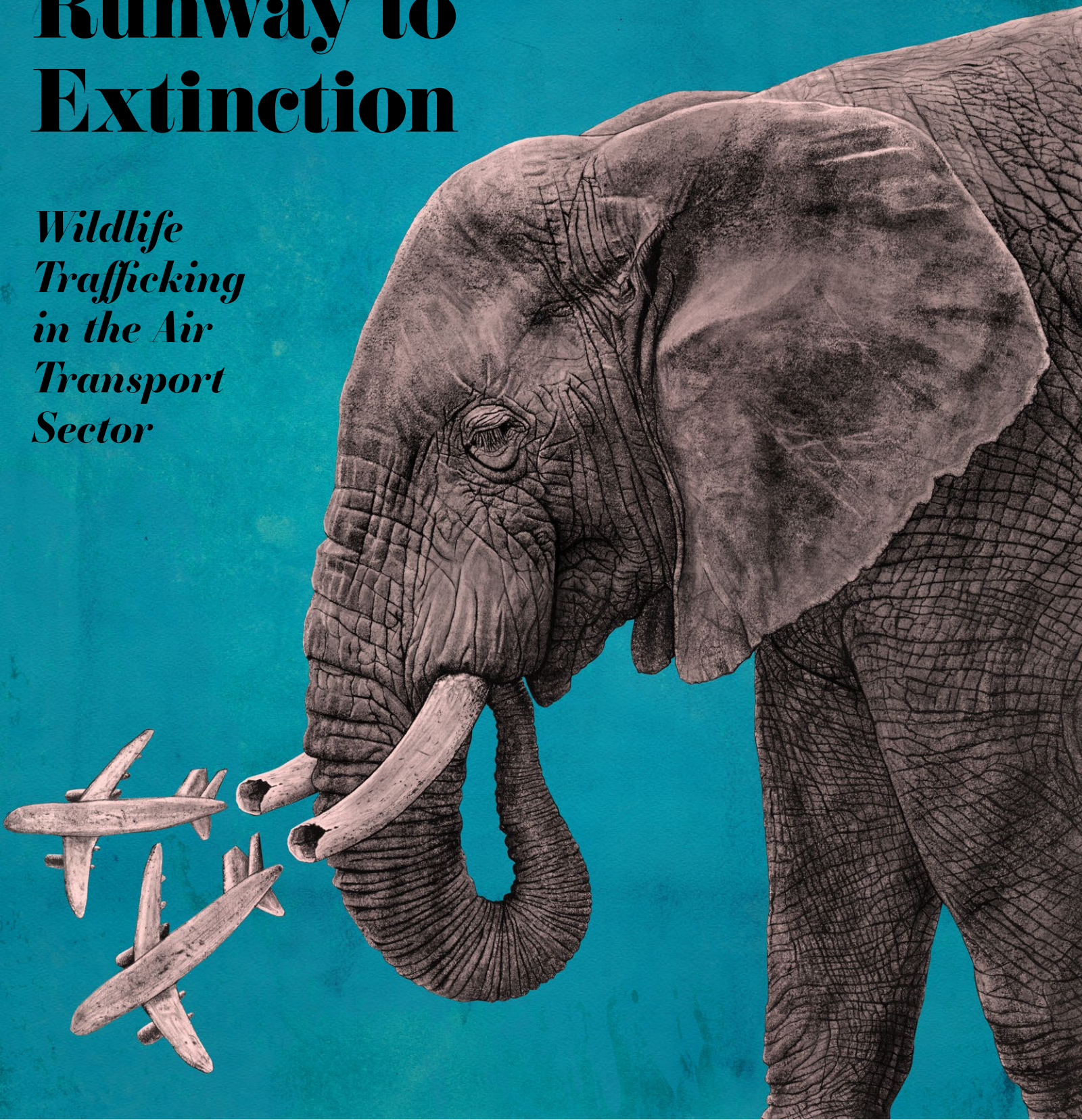


Runway to Extinction

*Wildlife
Trafficking
in the Air
Transport
Sector*



USAID
FROM THE AMERICAN PEOPLE



C4ADS
innovation for peace

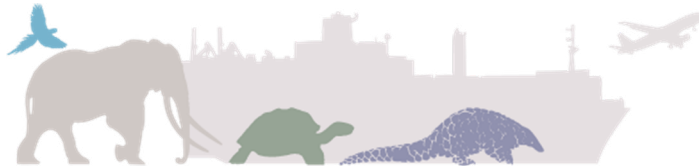


TRAFFIC
the wildlife trade monitoring network



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:

www.routespartnership.org



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The designations of geographical entities in this publication, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of C4ADS, ROUTES, or ROUTES partners concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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.

OCEANIA

MAIN TAKEAWAYS

Publicly reported air seizures are uncommon in Oceania.

Oceania's endemic biodiversity suggests it is or will be used as a source region for wildlife traffickers, particularly for the reptile, bird, mammal, and marine species trades.

Reptile trafficking activity is particularly pronounced in Australia, where traders both export native species and import foreign ones for breeding or sale.

FIGURE 1

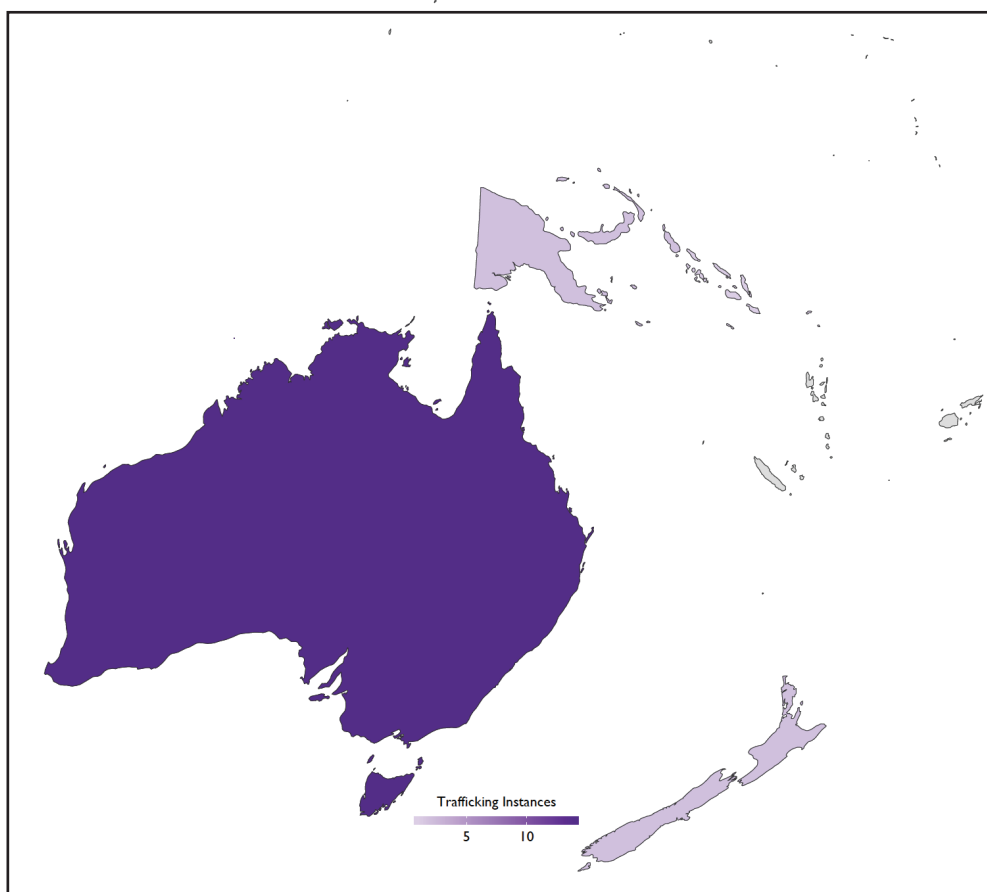


Figure 1. Heat map of wildlife and wildlife product trafficking instances in Oceania's air transport sector (2016 – 2018)

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 Oceanian heat map indicates that wildlife trafficking by air in the region is largely concentrated in four countries: Australia, New Zealand, Papua New Guinea, and the Solomon Islands. Many Oceanic countries, however, are too small to appear clearly in the heat map, and so any existing trafficking instances in those countries are not visible. Note that other countries in the region, such as Indonesia (Asia) and New Caledonia (France, Europe), do not appear in the Oceanian heat map because they are categorized in different regions for the purposes of this report.

Australia dominates

Between 2016 and 2018, Australia counted seven times more wildlife trafficking instances in its airports than any other Oceanian country. This is not surprising, given that Australia consistently reports seizures publicly and seems to have effective enforcement protocols. Australia also has a remarkable number of endemic species, making the country a target for wildlife traffickers, particularly traffickers involved in the illegal reptile trade.ⁱ

FIGURE 2

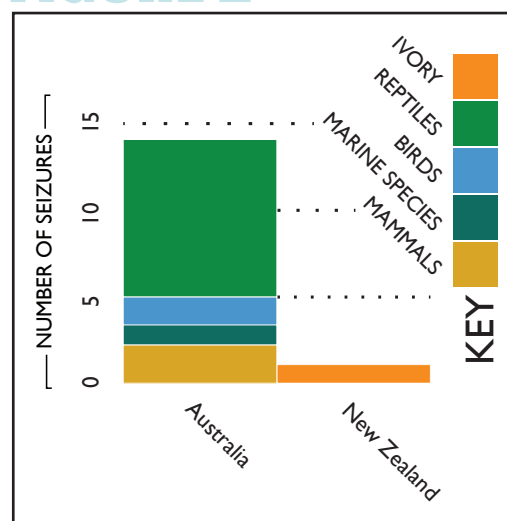


Figure 2. Total seizure count by Oceanian country (2016 – 2018)

FIGURE 3

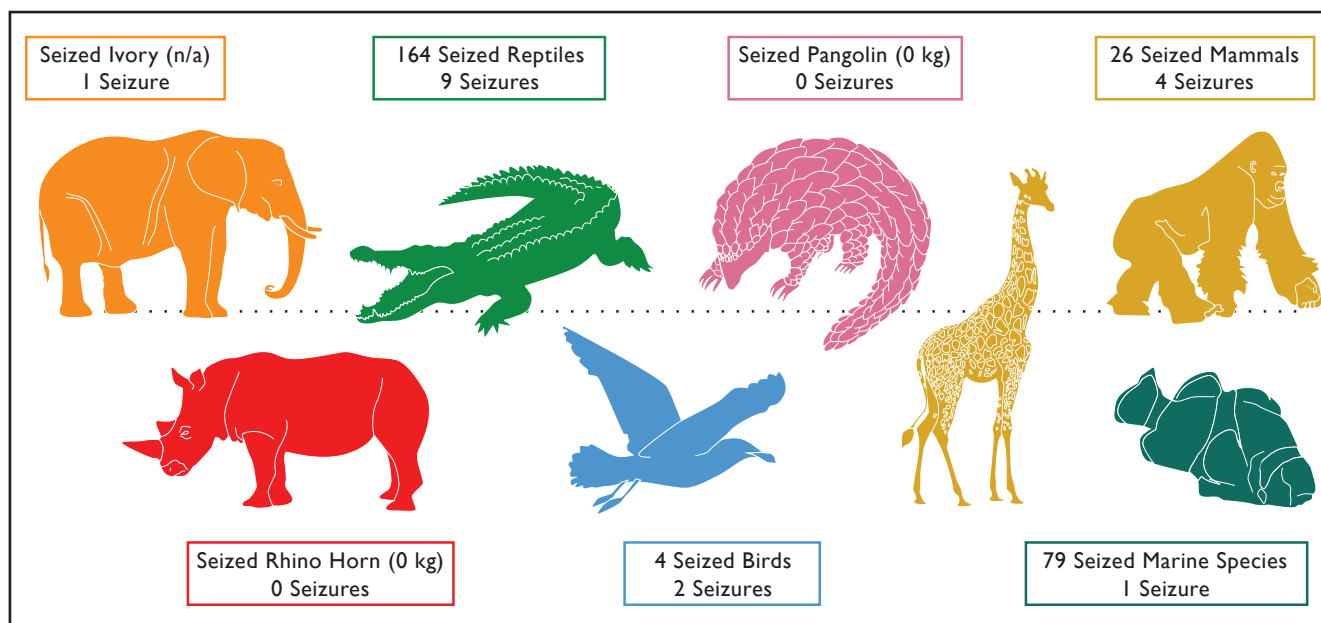


Figure 3. Number of seizures in Oceania of each type of wildlife or wildlife product

According to the C4ADS Air Seizure Database, Oceanian countries counted few known seizures between 2016 and 2018, with Australia making the most by far with only 14 seizures total over the three-year period.

Australian reptile trade

Of the 14 known seizures made by Australian authorities between 2016 and 2018, 64% involved reptiles. Most of these seizures originated in Australia and involved native Australian lizards (most frequently bobtail lizards) destined for Asia, generally Hong Kong.

Two other seizures, however, originated in other world regions and were intercepted as they arrived in Australia. These seizures involved various snake, lizard, and turtle species, including ball pythons and venomous temple pit vipers, as well as Colombian giant tarantulas,

Mexican red-knee tarantulas, Brazilian salmon pink bird-eater tarantulas, and Asian forest scorpions.

Low seizure count

The limited number of wildlife and wildlife product seizures made by Oceanian authorities between 2016 and 2018 is somewhat surprising given the many endemic species present throughout the region. Seizure trends in other world regions instruct that wildlife traffickers tend to target areas with unusual species for sale within the exotic pet trade. As a result, it seems likely that Oceanian mammals, birds, reptiles, and marine species would be targeted by wildlife traffickers. The comparatively high number of reptile seizures in the region between 2016 and 2018 makes sense in this context, but the low numbers of bird, mammal, and marine species seizures in the C4ADS Air Seizure Database do not.

FIGURE 4

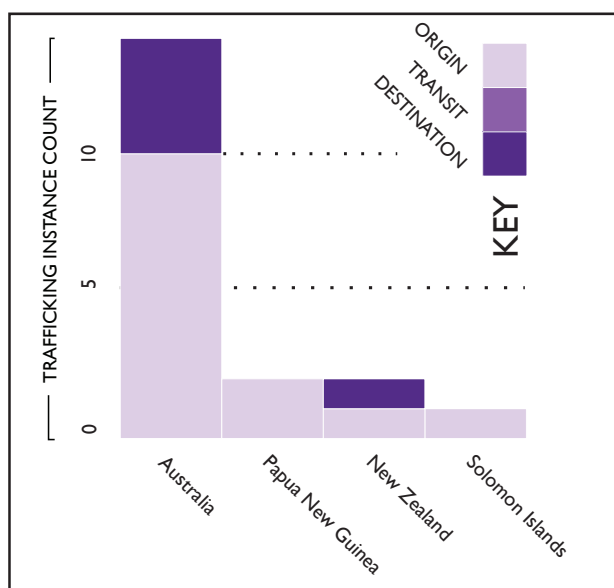


Figure 4. Country-level flight route information for Oceanian countries with one or more trafficking instances (2016 – 2018)

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.

FIGURE 5

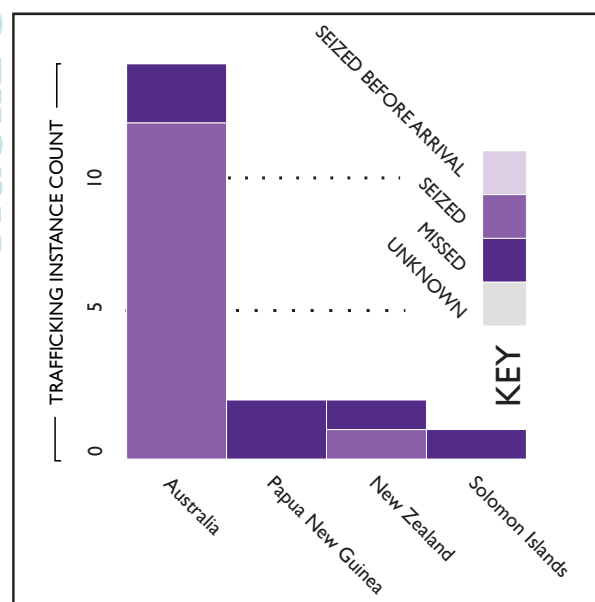


Figure 5. Point of seizure within the supply chain by Oceanian country (2016 – 2018)

LIZARDS FROM AUSTRALIA

Just as Oceania's seizure count was extremely low, Oceania's trafficking instance count fell well below the level of wildlife trafficking activity documented in the C4ADS Air Seizure Database in every other world region. Only four Oceanian countries – Australia, New Zealand, the Solomon Islands, and Papua New Guinea – were linked to any known wildlife trafficking attempts through their airports at all between 2016 and 2018, and only Australia counted more than two known attempts.

Seizures in Australia

With 14 total instances, Australia numbered more trafficking instances in its airports than all other Oceanian countries combined, according to the C4ADS Air Seizure Database. Though the majority of Australia's trafficking instances originated in the country, Australian authorities were able to stop most of the trafficking attempts (88%) passing through their airports.

Oceania as an origin region

Of the 21 known trafficking instances associated with Oceania between 2016 and 2018, 76% originated in the region, with each country visible in Figure 4 counting at least one origin trafficking instance.

SECURITY SCREENING AT ORIGIN VERSUS CUSTOMS SCREENING AT DESTINATION

IMPORTANCE OF SEIZURE REPORTING & ITS EFFECT ON APPARENT ENFORCEMENT SUCCESS

The region's role as an origin point for trafficked wildlife may partially explain why seizure numbers in Oceania are so low, given that screening for departing flights does not prioritize identifying trafficking attempts. Other contributing factors may include limited public seizure reporting and low enforcement awareness or prioritization of wildlife trafficking.

Few Oceanian seizures elsewhere

Oceania's extremely low seizure count undoubtedly understates the level of wildlife trafficking activity in the region. However, between 2016 and 2018, only four countries outside of Oceania seized wildlife flying out of the region, according to the C4ADS Air Seizure Database: Sri Lanka, China, Indonesia, and France. The fact that so few trafficking instances (only six, or 29% of the total) originated in Oceania and were seized elsewhere suggests that wildlife trafficking activity in the region is either comparatively infrequent, remains largely within Oceania, or generally moves through the maritime industry.

SECURITY SCREENING AT ORIGIN VERSUS CUSTOMS SCREENING AT DESTINATION

A series of reptile seizures that took place between 2016 and 2018 seemed to suggest that organized reptile trafficking networks might be operating out of Perth, collecting native Australian reptile species and smuggling them to Asian destinations.



Image 1. Reptiles hidden in cloth bags inside computer towers. Source: Ada Derana

In the more recent, larger seizure in June 2018, Sri Lankan customs officials in Colombo Airport discovered 32 likely endangered geckos and lizards in a DHL shipment of computer towers.ⁱⁱ The animals had been placed in four cloth bags before being hidden within the computers. The shipment had arrived in Colombo on Singapore Airlines flight SQ 468 after leaving from Australia and transiting through Singapore. The shipment's listed destination was a false address.



Image 2. Australian lizards and skins discovered inside a computer tower. Source: Ada Derana

PAPUA NEW GUINEA & WILDLIFE TRAFFICKING

Occasional seizures of Oceanian wildlife suggest that wildlife trafficking in the region may be more common than it appears. Papua New Guinea in particular is home to a wide variety of species that could be vulnerable to trafficking for the illegal exotic pet trade.

In March 2017, Indonesian officials at Soekarno-Hatta Airport in Jakarta, Indonesia discovered four lizards from Papua New Guinea hidden within plastic cylinders in an air mail parcel.ⁱⁱⁱ The lizards, described as two yellow monitor lizards and two blue monitor lizards, were allegedly destined for Hong Kong, but had flown from Papua New Guinea to Indonesia without the appropriate documentation.



Image 3. Soekarno-Hatta Agricultural Quarantine Office officials show monitor lizards sent from Papua New Guinea without the appropriate paperwork to the press. Source: Antara News

FIGURE 6

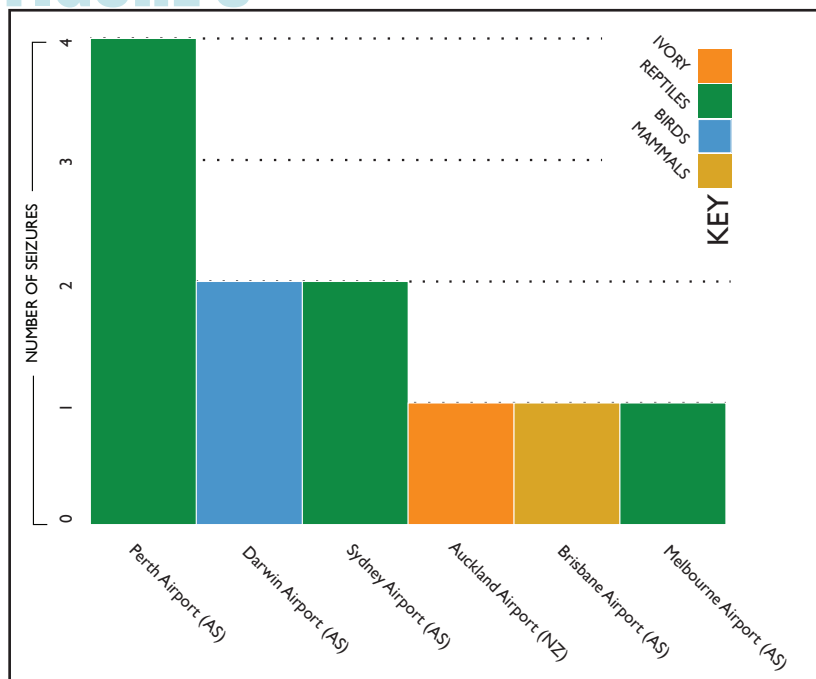


Figure 6. Airport seizure count for Oceanian airports with one or more seizures (2016 – 2018)

The majority of the airports in Figure 6 are Australian – only one, Auckland Airport in New Zealand, is not. The other five Australian airports count ten seizures between them, including seven reptile seizures, two seizures involving both birds and mammals, and one mammal seizure. Note that one Australian seizure was not reported with seizure airport information, and so could not be included in Figure 6.

Significance of Perth Airport

According to the C4ADS Air Seizure Database, Perth Airport counted more seizures than any other airport in Oceania with four reptile seizures. The seizures displayed certain similarities; for instance, each involved bobtail lizards intended to fly from Perth to either Hong Kong or Japan. One instance was supposed to fly from Perth to Hong Kong before continuing on to Japan. Each trafficking attempt was hidden in either mail or checked luggage, and each involved either a Chinese or a Japanese trafficker. These similarities suggest that organized trafficking networks operate out of Perth Airport, and may specialize in poaching bobtail lizards for sale as exotic pets in Asia. See **Reptile Trafficking in Perth Airport** for more information.

Appearance of Darwin Airport

Darwin Airport counts two mammal and bird seizures in Figure 6, both of which were linked to the same Australian wildlife product dealer (see **Wildlife Product Trafficking in Australia**).

Appearance of Auckland Airport

Although wildlife seizures are generally an outward sign of underlying illegal activity, some do capture tourists and other travelers who are simply unaware of existing regulations. For instance, in July 2018, New Zealand officials in Auckland Airport intercepted an antique piano after it arrived at the airport from the United Kingdom because its keys were made of ivory.^{iv} Though the piano was old enough to be exempt from the CITES ivory ban, the owners of the piano were unaware of CITES regulations for ivory exports and so did not apply for the exemption, meaning the piano had been exported illegally.

REPTILE TRAFFICKING IN PERTH AIRPORT

A series of reptile seizures that took place between 2016 and 2018 seemed to suggest that organized reptile trafficking networks might be operating out of Perth, collecting native Australian reptile species and smuggling them to Asian destinations.

In the first seizure on December 13, 2016, Australia Post workers at Perth Airport X-rayed a mail package destined for Hong Kong and discovered 10 bobtail lizards and one blue-tongued lizard wrapped in socks inside.^v



Image 4. Lizards found in a mail package after the package was x-rayed. Source: Australian Border Force



Image 5. A number of the lizards discovered on December 13th hidden in socks. Source: Australian Border Force

A subsequent investigation into the shipment by Australia Border Force (ABF) and Parks and Wildlife officials identified a Chinese male as a “person of interest.” Officials found him as he was boarding a flight to Hong Kong, and noted that his baggage contained the same type of socks that the lizards had been found in earlier that day. Further investigation led officials to a second mail shipment of lizards, this time containing 11 bobtail lizards and one blue-tongued lizard, on their way to Hong Kong on December 14. The Chinese trafficker associated with both shipments was later charged with attempting to export a regulated native specimen.

Roughly six months later, in May of 2017, ABF officials X-rayed a checked bag destined for Japan and found 13 bobtail lizards in cotton bags hidden inside.^{vi} The suitcase’s owner, a Japanese national, was arrested for attempting to export a regulated native specimen.

Finally, on November 8, 2018, ABF officials received information from the Parks and Wildlife Service that a Japanese man was attempting to smuggle six bobtail lizards out of Australia.^{vii} Officials found the suspect and X-rayed his suitcase, revealing lizards wrapped in paper towels inside a cloth bag. Further investigation discovered that “three of the lizards were taken from Rottnest Island, one from the Midwest region and two from the Perth metropolitan area, and that some had been kept in hessian bags for up to eight days with no food and little water.”^{viii}

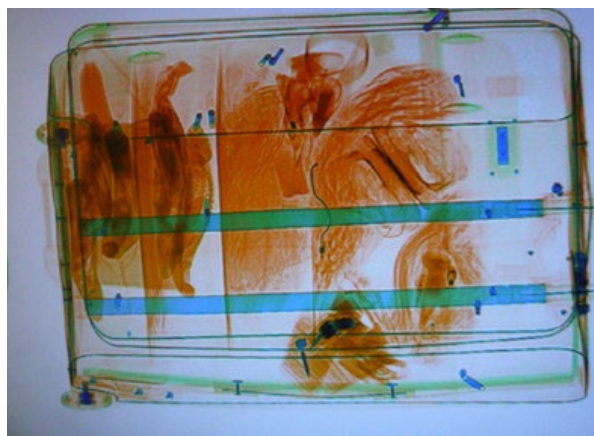


Image 6. 13 bobtail lizards, seven adults and six juveniles, inside a checked bag headed to Japan. Source: Australian Border Force

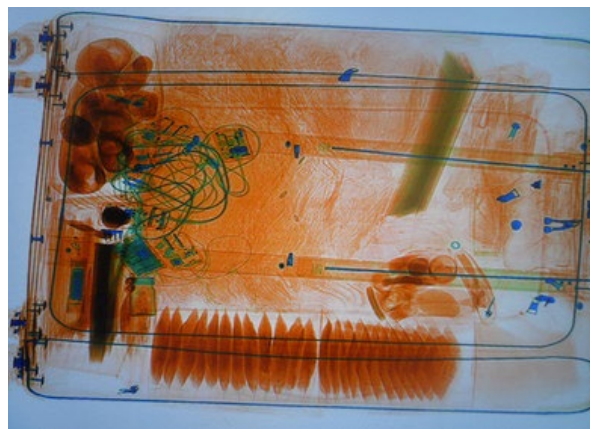


Image 7. Six bobtail lizards hidden in a bag likely on the way to Japan via Hong Kong. Source: Australian Border Force



Image 8. Three of the bobtail lizards seized on November 8, 2018. Source: Australian Border Force

The similarities between both sets of seizures suggest that at the very least, two reptile trafficking networks have operated out of Perth in the past. The first network seemed to rely on mail shipments to move both bobtail lizards and blue-tongued lizards to China, while the second preferred to hide bobtail lizards in checked bags likely destined for Japan.

At the time of the November 2018 seizure, an Australian official with the Parks and Wildlife Service noted that Western Australian reptiles, including bobtail and blue-tongued lizards, are “highly sought after on the black market because they [are] easy to care for, attractive, and exotic.”^{ix}

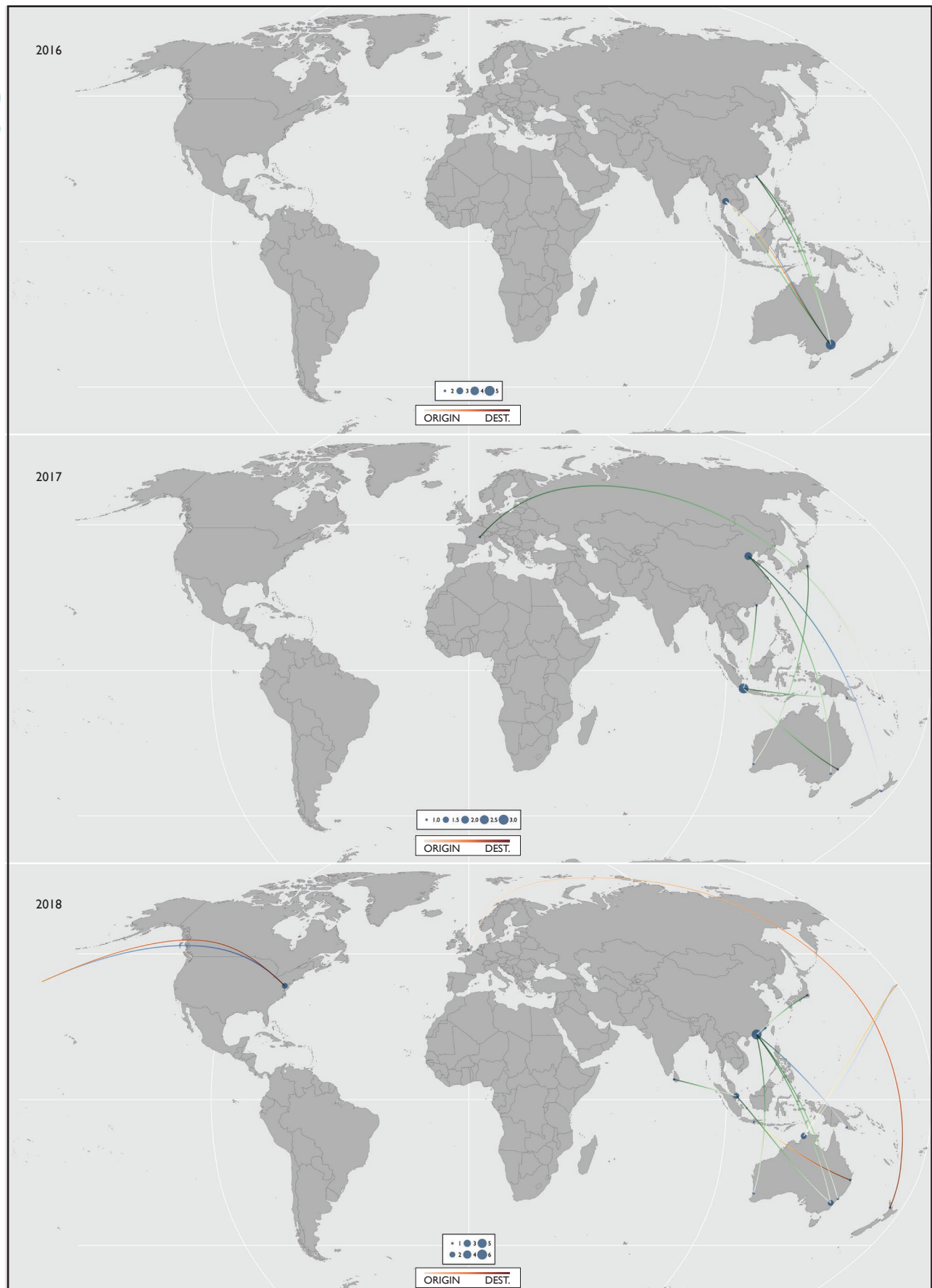


Figure 7. Oceanian air trafficking routes recorded in the C4ADS Air Seizure Database (2016 – 2018)

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 Oceanian routes maps emphasize how little seizure data is available for the region, despite the fact that Oceanian countries' biodiversity likely exposes the area to exploitation by wildlife trafficking networks.

Flight routes destined for Oceania

Most of the flight routes visible in the Oceanian heat maps originated in the region, particularly in Australia. But several visible flight routes were destined for Oceania instead, including a mammal instance destined for Australia in 2018 (see **Australia and Euthanasia**), and a number of reptile instances destined for Australia in 2017 (see **Wildlife Trafficking & Rugby**).

IMAGE 9



Image 9. A giant clam shell flown into China via Hong Kong by a Chinese passenger returning from Papua New Guinea. Source: Xiamen Customs

Marine species trafficking

Three marine species trafficking instances left Oceania between 2016 and 2018. Two were eventually seized in China and reported by Chinese customs authorities. The first involved a mail shipment of fish, dried sea cucumber, deer antler velvet (used in traditional medicine), and deer tongue arriving in Tianjin Binhai Airport from New Zealand in June 2017.^x The second took place a year later in August 2018, and involved an “unprocessed” clam shell discovered in a Chinese male passenger’s checked bag.^{xi} He had flown in to Xiamen Gaoqi Airport from Port Moresby, Papua New Guinea via Hong Kong on Cathay Dragon flight KA 606.

As a region made up of island nations, it is surprising that Oceania does not count more seizures of marine species. These two seizures, however, indicate that marine species trafficking does occur in the region, although it may not be caught or reported.

Destined for China

Most of the trafficking instances visible in the Oceanian routes maps were destined for Asian airports, accounting for 73% of the known instances originating in Oceania, according to the C4ADS Air Seizure Database. More specifically, of the 14 trafficking instances that originated in Oceania between 2016 and 2018, eight (57%) were attempting to fly to Chinese airports. This Oceania – China supply chain was almost entirely driven by Chinese demand

for certain reptile species for the pet trade (see **Reptile Trafficking in Perth Airport**), although traditional medicine also appeared to play a role in at least one marine species trafficking instance. This suggests that there may be fairly significant demand for Oceanian wildlife and wildlife products in China.

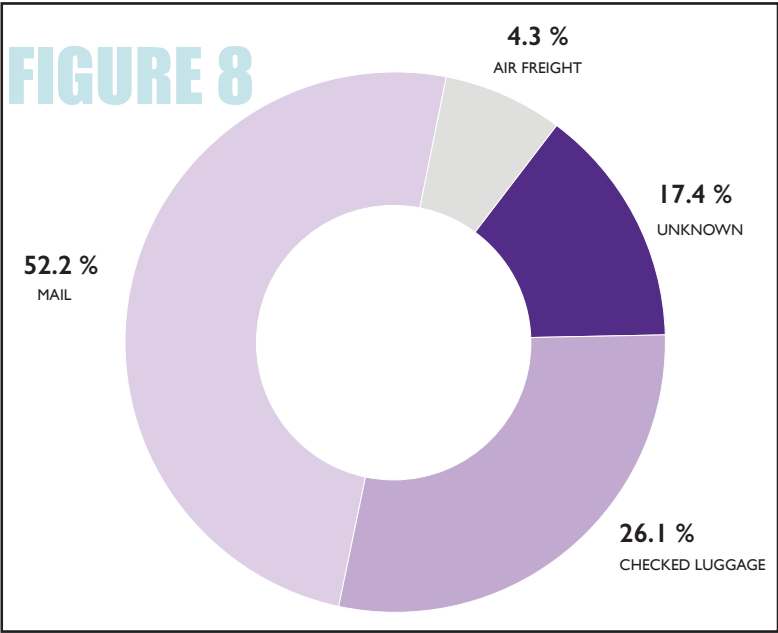


Figure 8. Transport methods for Oceanian trafficking instances in the air transport sector (2016 – 2018)

The Oceanian transport method graph is strikingly different than the transport method graph for every other world region. Whereas wildlife seizures discovered in mail shipments are generally assumed to be under-represented in the C4ADS Air Seizure Database due to a combination of less stringent screening requirements for mail and less frequent public seizure reporting, Oceanian trafficking instances were discovered hidden in mail 52% of the time. Oceanian trafficking instances were only discovered in checked luggage, the most common transport method in every other world region, 26% of the time.

Prevalence of mail

All of the mail trafficking instances visible in Figure 8 were stopped in Australia, China, or Indonesia. Australian authorities seem particularly adept at identifying contraband, wildlife or otherwise, in mail shipments, so much so that the majority of the seizures Australian authorities made between 2016 and 2018 were hidden in mail. The ABF is also careful to publish press releases for the wildlife seizures they make, although they sometimes report seizures in bulk, which prevents analysis of individual seizure trends (see **Aggregated Seizures in Australia**). Similarly, China is particularly good at identifying smallscale wildlife seizures and reporting them with a fair amount of detail.

Appearance of checked luggage and air freight

According to the C4ADS Air Seizure Database, trafficking attempts in Oceania were far less likely to be found in checked luggage or air freight than in any other world region. Trafficking via air freight was particularly unlikely, with only one known Oceanian trafficking instance discovered in air freight.

Known Oceanian trafficking attempts moved by checked luggage and air freight between 2016 and 2018 were evenly split between live animal instances involving bobtail lizards, monitor lizards, or squirrels and wildlife product instances involving reptile products or giant clams.

AUSTRALIA AND EUTHANASIA

As residents on a large island nation, many Australian species have spent millennia evolving into animals different from any species living in Africa, Asia, Europe, the Middle East, or the Americas. As a result, Australian species are unique, drawing the attention of tourists and traffickers alike.

But the prolonged isolation of Australia has led to at least one clear downside: Australian species are not equipped to handle diseases that other animals evolved to deal with thousands of years ago, and Australian ecosystems are not prepared to combat the influx of certain foreign species, such as cane toads and red foxes.

As a result of the threats posed to Australian wildlife and agriculture by foreign animals, Australian officials generally must euthanize any foreign species they catch being illegally imported into the country.

For example, on March 14, 2017, ABF officials in Melbourne X-rayed a mail shipment that had just arrived from Northern Europe and discovered a variety of live reptiles and tarantulas inside (some of the spiders were already dead).^{xii xiii} Officials opened the shipment and found:

- Three ball pythons,
- Two hognose snakes,
- Six venomous Wagler's temple vipers,
- Two Colombian giant tarantulas,
- Five Mexican red-knee tarantulas,
- Two Brazilian salmon pink tarantulas (the third largest tarantula species in the world), and
- Four Asian forest scorpions.

The press release published by the ABF about the seizure noted, "These [species] pose a high biosecurity risk to Australia because they can carry pests and diseases that aren't present here."^{xiv} As a result, all of the snakes and the surviving spiders had to be euthanized.

A few months later, in June 2017, ABF at Sydney Airport X-rayed a mail shipment declared as "toys" and discovered 50 turtles and lizards inside, hidden amongst building blocks. The shipment had come from Indonesia. Citing the biosecurity risk posed by allowing the animals to live, officials had to euthanize all 50 animals.



Image 10. Snakes euthanized after arrival in Melbourne. Source: Australian Border Force



Image 11. An x-ray of a mail shipment of turtles and lizards seized in Sydney. Source: Australian Border Force



Image 12. Turtles and lizards declared as "toys" and shipped from Indonesia. Source: Australian Border Force

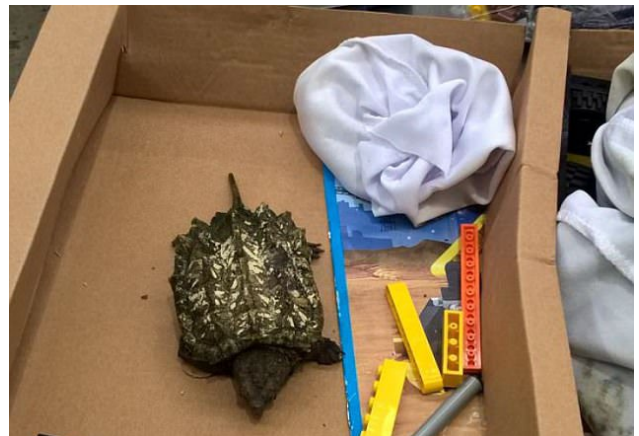


Image 13. One of the turtles seized and euthanized in Sydney in June 2017. Source: Australian Border Force

Finally, in December 2018, ABF officials received information from Border Watch about a traveler returning home to Brisbane Airport from Bali, Indonesia.^{xv} After receiving the tip, ABF officers approached the passenger and identified two live squirrels in his luggage. Again referencing the biosecurity risk posed by the animals, as well as squirrels' ability to carry rabies, officials euthanized both animals.

Unlike other countries that are able to re-home or release seized wildlife, Australian officials cannot afford to risk introducing new species and any diseases they may carry into their country. As a result, any traffickers attempting to smuggle wildlife into Australia are both jeopardizing the health of native Australian species and likely wasting the lives of animals they are probably trying to sell as pets.

WILDLIFE TRAFFICKING & RUGBY

Although there were comparatively few reptile seizures in Oceanian airports between 2016 and 2018 according to the C4ADS Air Seizure Database, several seizures suggested that there is a prominent illegal reptile trade in Australia, with a number of reptile traders dedicated to exporting native Australian species and importing a wide variety of non-native species from contacts in other countries.

For example, between July and October 2016, ABF officials intercepted 22 separate packages containing wildlife in three seizure events.^{xvi} In the last seizure on October 19, 2018, officers from the Department of Agriculture discovered the following animals in 16 packages from Bangkok:

- 23 Chinese softshell turtles,
- 15 alligator snapping turtles,
- 15 veiled chameleons,
- 11 neotropical stingrays,
- Ten live snakehead fish (58 dead snakehead fish), and
- Two live sugar gliders (18 dead sugar gliders).

Officials also discovered at least one attempted export of shingleback lizards to Sweden in around the same timeframe.

An in-depth investigation conducted after the seizures led back to Martin Kennedy, a former rugby player who was suspended from Australia's National Rugby League after he ordered "a number of prohibited substances during the 2012 off-season."^{xvii} Officials later found two pythons in his home and AU\$43,550 in his freezer.^{xviii}

Although Australian customs and enforcement agencies generally publish detailed seizure press releases that are well-suited to inclusion in seizure analyses, they also occasionally publish aggregated seizure data that cannot be used to determine trafficking trends.

For example, in October of 2018, ABF issued a press release stating that, "In the last three months alone, [ABF] officers have stopped a total of 20 separate consignments containing more than 110 reptiles from being illegally exported overseas."^{xxiii} The press release then explains the number of seizures made each month, detailing some of the concealment methods used by traffickers to hide the animals, and mentions general intended routes of the shipments, explaining that each was found in the mail.



Image 15. Two of the lizards discovered in the fall of 2018 in a mail shipment. Source: Australian Border Force

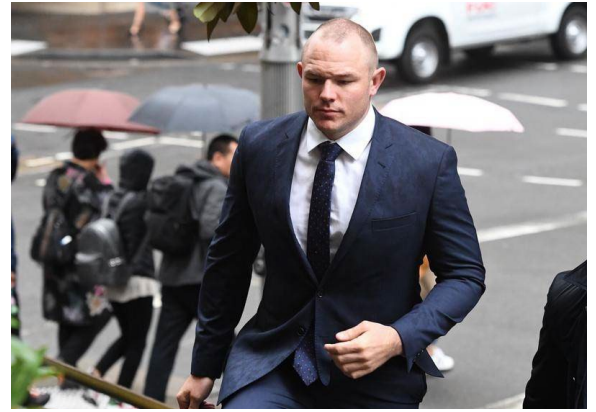


Image 14. Ex-rugby player Martin Kennedy. Source: Australian Associated Press

In March 2018, Kennedy pled guilty to six charges relating to the import and export of native and regulated animals, as well as a charge for possessing non-native endangered animals.^{xix} During his sentencing trial, Kennedy claimed that he had borrowed AU \$25,000 from his friend, Neil Simpson, to pay legal bills relating to his anti-doping hearing. Kennedy explained that to repay Simpson, who is fairly well-known in his own right for "a lengthy criminal history relating to animal smuggling and bank fraud," he decided to join Simpson's animal trafficking operation.^{xx} Simpson, however, disagreed, saying that he actually gave Kennedy AU\$27,000 and AU\$85,000 to pay for two albino snakes Kennedy was planning to breed. According to Simpson, "[Kennedy] had a very good reputation...for breeding reptiles."^{xxi}

Martin Kennedy was sentenced in June 2019 to "three years imprisonment, to be served in the community by way of an intensive correction order."^{xxii} He is required to complete 700 hours of community service.



Image 16. An X-ray of lizards hidden in a mail parcel. Source: Australian Border Force

Image 16. An X-ray of lizards hidden in a mail parcel. Source: Australian Border Force

While certainly an indication of effective enforcement and helpful to indicate the true scale of trafficking activity in Australia, compiled seizure information is difficult to incorporate in seizure databases such as the C4ADS Air Seizure Database. Aggregated information also usually cannot be analyzed to understand how trafficking trends are changing (e.g. What other countries and species are involved? What transport methods do they rely on consistently? Are there any clear patterns in the trafficking method used?) (see **Appendix IV: Seizure Reporting Template**). As a result, the majority of the seizures mentioned here could not be incorporated in the C4ADS Air Seizure Database. Still, Australian agencies are far better at public seizure reporting than most of their counterparts in other countries.

AGGREGATED SEIZURES IN AUSTRALIA

WILDLIFE PRODUCT TRAFFICKING IN AUSTRALIA

Two mammal and bird product seizures in Australia's Darwin Airport in 2018 revealed what seemed to be an international operation trafficking in exotic wildlife products.

On July 31, 2018, Australian Parks and Wildlife officers discovered a red-tailed black cockatoo skull and a king colobus monkey skull during routine screening of a mail package destined for the United States.^{xxiv} A subsequent seizure uncovered a straw-necked ibis skull and an olive-backed baboon skull in another mail shipment.

Following the two seizures, officials from the Australian Border Force (ABF), Parks and Wildlife, and police executed a search warrant at a property in Driver and discovered a vast array of reptile, bird, and mammal derivatives from Australian and other non-native species. Most of the products consisted of "skulls, skeletons, and other parts allegedly belonging to ... animals including ocelots, kangaroos, chipmunks, crocodiles, wombats, hornbills, bearded dragons, ... dogs, fish, wedge-tail eagles and a number of domestic species including goats, ducks and chickens."^{xxv} Photos from the search appeared to show skulls and bones from various species in various states of decomposition arranged on shelves, plates, and sometimes piled on the ground. A 34-year-old Australian man was arrested in association with the discovery.



Image 17. Skulls and bones from various mammal, bird, reptile, and fish species arranged on a shelf at the Driver property. Source: Australian Border Force

The scale of the operation identified as a result of these two mail seizures would likely require an international network of traffickers working to poach native and non-native species in various countries and then prepare their skeletons and body parts for display. This supports the theory that, although wildlife seizure numbers in Oceania appear to be low, the unique, exotic species living there must draw in traffickers involved in both the live animal and wildlife product trades.

“...although wildlife seizure numbers in Oceania appear to be low, the unique, exotic species living.”

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

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.



