



Beyond Consumption

- Japan's Import of Live Wild Animals -

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Introduction and Objectives

Tens of thousands of wildlife species are used worldwide for food, medicine, timber, ornamental, and exhibition purposes. When used in a sustainable manner, these species could benefit the people who rely on them for their livelihoods, with the estimated annual financial value of legal wildlife trade reaching 220 billion USD (Andersson et al., 2021). However, the direct exploitation of natural resources, including wildlife trade, is the second primary reason that contributes to environmental destruction (Jaureguiberry et al., 2022). Wildlife trade could affect at least 24% of terrestrial vertebrates (Scheffers et al., 2019), and utilized species have a higher rate of population decline than nonutilized ones (McRae et al., 2022) relating to its population decline by 62% where trade occurs (Morton et al., 2021). Furthermore, illegal wildlife trade is a lucrative form of organized crime, with an estimated monetary value reaching 7–23 billion USD per year (UNEP, 2016) affecting around 4000 wildlife species, including thousands of threatened species (UNODC, 2024).

Japan is a major consumer country of wildlife in the world, importing numerous species of wild fauna and flora from across the globe (Ishihara et al., 2010; Kitade & Wakao, 2022; Leupen et al., 2024; Wakao et al., 2018; Wildview Analytics & WWF-Japan, 2025). The trade in live wild animals as “exotic pets” has been of particular concern as it not only directly puts pressure on the conservation of the species but also carries the risk of spreading pathogens of zoonotic diseases (Gippet et al., 2026), brings significant damage to the imported country by introducing an invasive species (WWF-Japan, 2026), and entails concerns over animal welfare of the traded animals (Macdonald et al., 2021) throughout the entire chain of transactions starting from the source country to the final destination. Although studies have analysed the trade characteristics of specific taxa, a comprehensive study on recent Japan’s

legal and illegal import of wild animal species traded as pets remains to be conducted.

To narrow the knowledge gap on Japan’s recent role in international live wild animal trade, the trade data from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES; <https://stag.cites.org/eng>), which regulates the international trade of over 40,000 listed species between 185 parties, were examined with the main focus on four taxa, namely, reptiles, amphibians, mammals, and birds (hereafter referred to as focal taxa), as they are commonly imported and traded in the domestic market as pets and are known to be targeted for illegal trade into Japan (Kitade & Naruse, 2018; Kitade & Wakao, 2022; Leupen et al., 2024; Wakao et al., 2018; Wildview Analytics & WWF-Japan, 2025).

The report first briefly reviews an overview of a decade of Japan’s international trade using CITES trade data recorded from 2015 to 2024. The following section extensively examines the trade characteristics of focal taxa mainly focusing records between 2020 and 2024 by combining multiple datasets, namely, CITES trade data, customs trade data, domestic market survey data, and datasets pertaining to species invasiveness. The last section examines the seizure data of CITES-listed animals recorded by the Japanese Customs, coupled with a quick review of smuggling incidents intercepted abroad where Japan was identified as a possible destination.

As a major consumer country of wild animals traded as pets, legal and illegal trade in Japan must be collected and analysed to assess the sustainability of the market, and aspects that need changes to eliminate the negative impact on conservation and society should be highlighted.

CITES and Legislations that Control Japan’s Wildlife International Trade

CITES lists species in three appendices, namely, Appendix I, Appendix II, and Appendix III, and imposes different levels of trade regulations based on the category of appendices. The species in Appendix I are threatened with extinction, and their international trade for commercial purposes is generally prohibited. The species listed in Appendix II are not necessarily thought of as having an imminent threat of extinction but may become so if trade is not regulated. It requires the submission of export permits granted by the managing authority of the exporter country. The species listed in Appendix III are protected in at least one of the member parties, and cooperation of other countries is necessary to prevent unsustainable or illegal exploitation of the species. The species can be traded if it is accompanied with an export permit or a certificate of origin from the export country.

The parties of the CITES each designate a national management authority that manages the trade of CITES-listed species and a scientific authority that determines whether the trade of the listed species is detrimental to their survival. In Japan, the Ministry of Economy, Trade and Industry (METI) is the management authority, and the Ministry of Environment is the scientific authority for terrestrial animal species. In addition, Japan customs has the actual enforcement power over the import and export of species under the Foreign Exchange and Foreign Trade Act and Customs Act. When importing a CITES-listed species, on top of checking the export permit/certificate of origin from the export country, Japan mandates for Appendix I species or live animals a prior confirmation of import by METI. The species listed in Appendix I are further regulated under the Act on Conservation of Endangered Spe-

cies of Wild Fauna and Flora (ACES), which in principle bans the transaction, display, or sale of the species for commercial purposes within Japan without official registration to the government.

Although not directly managing the CITES-listed species, the Infectious Disease Control Law also regulates the import of terrestrial mammals and bird species, which are known to have the risk of spreading infectious diseases. The commercial import of mammalian species with a high risk of carrying infectious diseases, such as primates, bats, prairie dogs, and raccoon dogs, as well as birds from countries that are known to have confirmed cases of avian flue, is generally prohibited (MHLW, 2025). The law also mandates the submission of health certificates issued by the registered institutions of export countries and notification to the Ministry of Health, Labor and Welfare (MHLW) prior to the importation (MHLW, 2024).

The Act on the Prevention of Adverse Ecological Impacts Caused by Designated Invasive Alien Species also manages the importation and trade of wildlife species (MOE, 2026b). Species listed as designated invasive alien species are generally prohibited from importation, transaction, or keeping for any purpose. Species listed as unevaluated alien species, as well as species that look similar to invasive alien species, are also subject to the submission of documents and acquisition of notification from METI prior to the importation or certificate of species name (MOE, 2026a).

1 Methods

Overall Import Volume and Monetary Value: Comtrade and Trade Statistics of Japan

To depict Japan’s overall monetary value of live animals of focal taxa, the data from the UN Comtrade Database was used. It has records of international transactions aggregated by a harmonized standardized (HS) code, which classifies traded products with a globally standardized six-digit numerical system. The data was retrieved from the Comtrade website (<https://comtradeplus.un.org/>) between June 2025 and May 2026 for the following HS codes: 010611, mammals (live, primates); 010620, reptiles (live); 010631, birds (live, birds of prey); 010632, birds (live, Psittaciformes). The codes 010631 and 010632 were aggregated as they both represent bird species.

Trade Statistics of Japan managed by the Ministry of Finance also makes trade data related to Japan available online (<https://www.customs.go.jp/toukei/info/>). It uses a nine-digit code system, the first six digits corresponding to the HS code and the last three digits using the domestic code. As Trade Statistics of Japan has a designated code for live amphibians and consistent trade volume data, which is not available on Comtrade, the trade monetary value and import volume for the following codes were retrieved in May 2026: 0106.11-000, primates; 0106.20-010, reptiles (turtles and tortoises); 0106.20-020, reptiles (crocodiles and alligators); 0106.20-031, reptiles (lizards); 0106.20-039, reptiles (other); 0106.31-000, birds of prey; 0106.32-000, Psittaciformes; 0106.90-011, amphibians (Anura); 0106.90-012, amphibians (Caudata); 0106.90-019, amphibians (other).

Imports of Regulated Species: CITES

CITES trade data with import or export country recorded as Japan for the period 2015–2024 were downloaded from its website (<https://trade.cites.org/>) in March 2026. The records were filtered with the trade term “live” (liv), purpose of records “commercial” (T), and unit of records either “number of specimens” or blank. Throughout the study, unless specified, the “importer reported quantity” was used to quantify the volume of traded species, as this number likely reflects the actual volume of trade than the “exporter reported quantity,” which is based on the number written on the export permit that might not have been used at all¹.

Species distribution was also fetched using the Species+/CITES Checklist API (<https://api.speciesplus.net/>). Native distribution, as well as countries/territories with records of introduction, were also counted as species presence.

Market Survey

To examine the disparity between CITES trade data and the domestic market of reptile and amphibian species, the data collected from domestic surveys were used.

Online Snapshot Searches

For species identified from the CITES trade database and identified as needing to be closely examined for conservation or invasiveness, a quick snapshot online search was performed on Google Chrome to see if the species were advertised in Japan. If relevant and available, then information regarding the source, exporter/origin, and price were recorded. The search was conducted using the “species name” + “販売/価格 (sale/price),” and advertisements on the first five pages first 50 search results of the result were recorded.

Spot Survey at Reptile/Exotic Pet Expo in Tokyo

A spot survey conducted at a reptile-focused exotic animal exhibition and sales event in Tokyo in October 2025 was referenced. Notably, the species were recorded just as advertised, and no expert identification was made regarding the accuracy of the name of the species.

Level of Threat to Extinction: IUCN Red List

The International Union for Conservation of Nature’s Red List (IUCN’s Red List) categorizes species based on the level of extinction risk (Fig. 1). The category information for species identified in this report was retrieved using their latest API v4 (<https://api.iucnredlist.org/>) in March 2026. The latest assessment category for each species was retrieved if the scope of assessment was global. Information regarding species distribution was also retrieved to compare the information with that of CITES and make a more reliable dataset if available.

Literature Review of Legislations in the Range States of Endemic Species

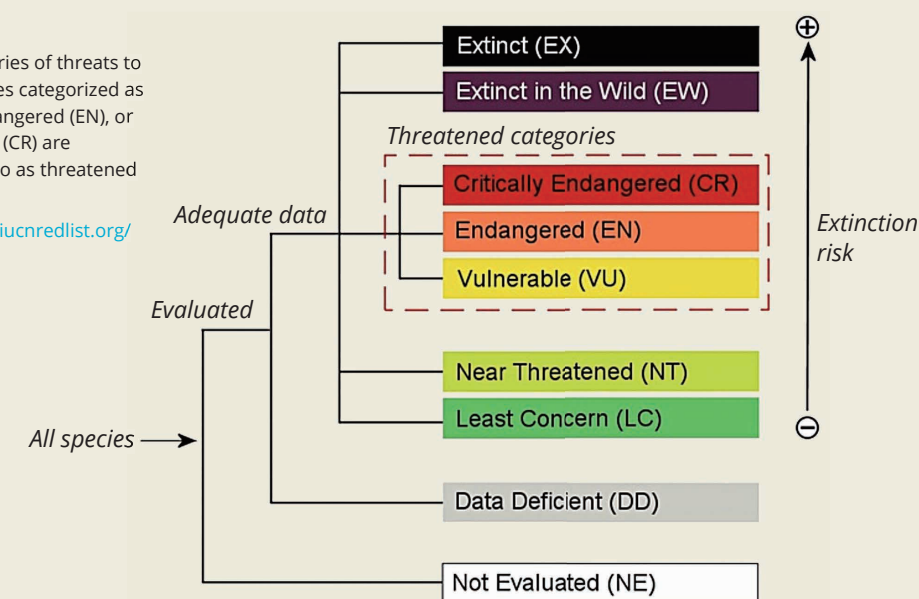
To identify the legislative measures taken in the native range of identified endemic species, relevant literature was collected through a web search. When the accuracy of information was uncertain, corresponding experts in the relevant countries were contacted to verify the accuracy of the information.

1. It should be noted that as Taiwan does not submit annual report to CITES secretariat, it is not possible to make comparison of importer and exporter reported data.

Figure 1.

IUCN Red List categories of threats to extinction. The species categorized as vulnerable (VU), endangered (EN), or critically endangered (CR) are collectively referred to as threatened species in this study.

Source: <https://www.iucnredlist.org/about/faqs>



Risk of Invasiveness

To examine if the identified imported species were recorded as introduced elsewhere in the world, the Country Compendium of the Global Register of Introduced and Invasive Species (GRIIS), which contains aggregated information of verified checklists of invasive species (Pagad et al., 2022), and the Environmental Impact Classification for Alien Taxa (EICAT), which categorize species into different levels of invasiveness based on their impact on the environment, which were available on the IUCN’s Global Invasive Species Database (<https://www.iucngisd.org/gisd/>) were referenced.

In addition, the CABI Horizon Scanning Tool (CABI-HST: <https://www.cabi.org/HorizonScanningTool>), a decision support tool that identifies potential invasive species that might enter a particular geographic region, was used to get a list of species that could have future risks to Japan. The list of species was downloaded on January 9, 2026, with “area at risk” set to “Japan” and species taxa set to “vertebrates.”

Illegal Trade

Records of incoming seizures of CITES-listed species at the Japanese customs from 2020 to 2024 were downloaded from the Japan customs website (<https://www.customs.go.jp/mizugiwa/washington/washington.htm>) in April 2026. The records with either live or dead wildlife animals of target taxa (reptiles, amphibians, mammals, and birds) were manually extracted and aggregated by the date of the incidents.

Interceptions that happened outside Japan but were destined to Japan were collected from Robin des Bois’s “On the Trail” bulletin (<https://robindesbois.org/en/a-la-trace-bulletin-dinformation-et-danalyses-sur-le-braconnage-et-la->

[contrebande/](#)), which publishes information about animal poaching and smuggling on a quarterly basis. Editions 28–48 were manually checked to select cases relevant to this study. Web search using terms such as “Japan wildlife smuggling” was also conducted in May 2026 to check for additional incidents in which Japan was identified as a possible destination of wildlife smuggling.

Limitations of Data

The CITES trade database does not fully represent a comprehensive volume of international wildlife trade as it only contains information about the listed species and may contain incorrect reporting information. The Comtrade data show the volume and monetary value of the overall international trade, but the product codes have low granularity (i.e., recorded as primates, reptiles, parrots, and no specific code for amphibians) rather than species level. In addition, trades with small monetary value are not included in the database. The snapshot market survey only represents a tiny fraction of the actual scale of domestic wildlife trade in Japan, and the individuals advertised may have had wrong species names. The IUCN assessment might be outdated and may not represent the current state of threat to the species. Data on species invasiveness are likely skewed because of differences in the level of effort put on research of each taxon, and there is a time lag until they get recorded. Furthermore, the seizure data only contains cases of failed smuggling attempts, and the actual scale of smuggling remains unknown.

Despite all the caveats, consolidating different sources of information makes it possible to characterize Japan’s recent wildlife trade and cast light on aspects that need improvement, which could inform stakeholders to take their own responsible actions.

2 Results

2.1 Major Findings

This study mainly examines Japan’s legal and illegal trade (2020–2024), focusing on CITES-listed live reptile, amphibian, mammal, and bird species. It revealed that Japan’s wildlife trade is large, complex, and increasingly significant. Strengthening transparency, regulation, and international collaboration is essential to ensure trade becomes legal, sustainable, and safe for biodiversity and society.



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1. Japan as a Major Consumer Market

- Import volumes significantly exceed exports, confirming Japan’s role as a net wildlife importer.
- High quantity and diversity of imported species:
 - » Reptiles: 407 taxa, 498,478 individuals
 - » Amphibians: 74 species, 43,214 individuals
 - » Mammals: 20 taxa, 28,380 individuals
 - » Birds: 206 taxa, 11,972 individuals
- Imports increased notably after 2020, especially for reptiles and amphibians.

2. Significant Conservation Concerns

- Large proportion of imports include threatened species:
 - » Reptiles: 120 threatened species imported (204,613 individuals)
 - » Amphibians: 30 threatened species imported (4,624 individuals)
 - » Birds: 23 threatened species imported (2,694 individuals)
- High numbers of endemic species imported, many restricted to single countries.
- Some species are protected in their native countries but still appear in international trade exported from non-range states.

3. Reliance on Wild-Sourced Animals

- Although most imports are labelled as captive-bred, some exporter countries rely heavily on individuals sourced from the wild:
 - » Madagascar (reptiles, amphibians)
 - » Guyana (snakes, birds)
 - » Democratic Republic of Congo (species of order Sauria)
- Indicates no stable captive breeding operations for identified taxa, raising concerns over direct harvesting pressure on wild populations, especially for endemic species.

4. Data Gaps and Traceability Issues

- Major discrepancies between CITES trade data and domestic market observations:
 - » Species sold without import records
 - » Inconsistent or missing source/origin information
- Potential laundering of wild-caught animals as captive-bred.
- Limited traceability makes it difficult to verify legality and sustainability of trade.

5. Limitations of CITES Coverage

- CITES regulates only a portion of species traded in Japanese domestic market:
 - » ~30–40% of reptile and amphibian imports covered
- Domestic surveys showed many non-CITES species, including threatened species, are widely traded.

6. Illegal Trade and Enforcement Challenges

- At least 20 seizure cases (2020–2024), involving over 1,200 animals at Japanese border.
- Smuggling often involves:
 - » Large shipments of reptiles and amphibians via cargo
 - » Highly sorted mammals and birds in passenger luggage
- International cases suggest Japan is a target destination for wildlife trafficking networks.

7. Emerging Risks

- Risk of Invasive species from pet releases (e.g., turtles, iguanas, snakes).
- Public health risk from zoonotic diseases linked to illegal wildlife trade.

Summary of Recommendations

For Governments (Japan & International)

- Strengthen verification of legal origin and supply chains
- Improve international cooperation and data sharing
- Expand monitoring systems beyond CITES-listed species
- Consider establishing mandatory traceability mechanisms

For Industry

- Display origin, source, and trade history of animals
- Avoid sourcing species with unclear or high-risk origins

For Consumers

- Verify legality and sustainability before purchase

2.2 Background

Overview of Japan’s Import of Live Animals (2015-2024)

Import Quantity Grouped by Taxonomic Class

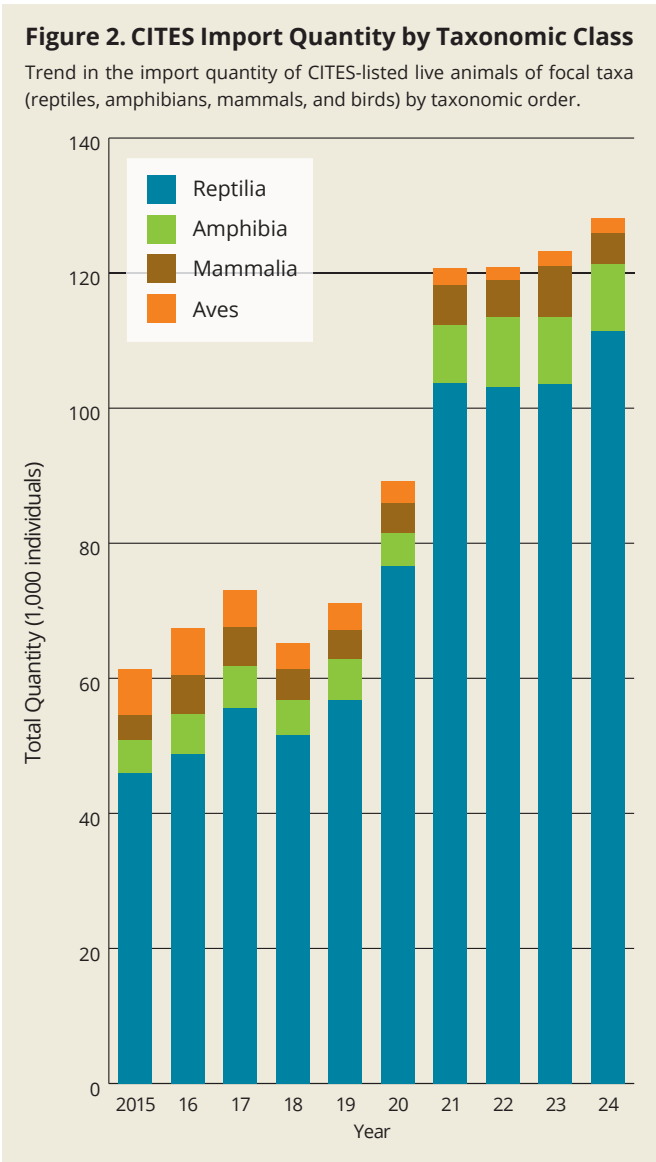
The total quantity of CITES trade data of imported live animals into Japan reported between 2015 and 2024 grouped by taxonomic class is shown in Table 1. Reptile species were the top taxonomic class with the highest import quantity, followed by Actinopteri, which covers almost all ray-finned fish, amphibians, mammals, and bird species. Most of the top imported Actinopteri taxa included species that are traded for food consumption in Japan (e.g., European Eel *Anguilla anguilla* and Sterlet *Acipenser ruthenus*), and the taxonomic class Actinopteri did not fit the purpose of this study; therefore, other classes in the top five classes, namely, reptiles, amphibians, mammals, and birds, were selected for further examination.

Table 1. Total quantity of CITES-listed live animals imported into Japan for commercial purposes from 2015 to 2024 in descending order.

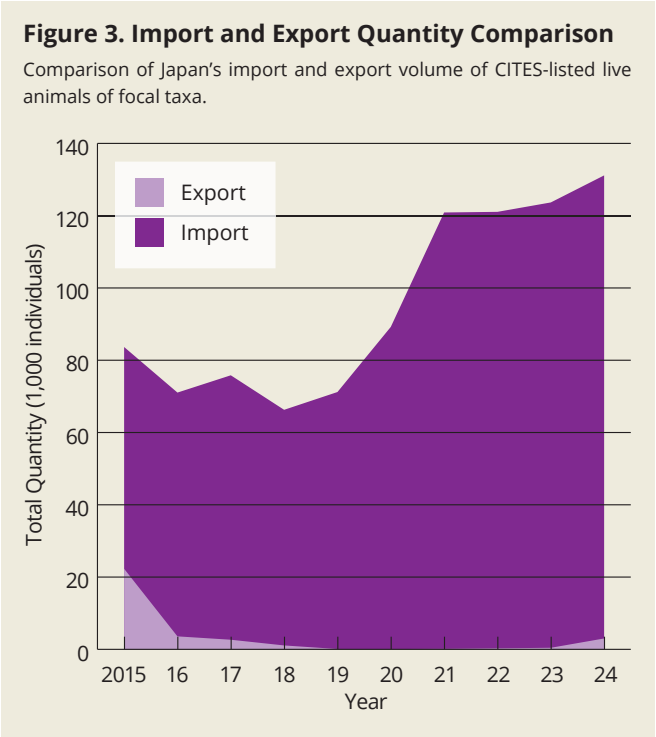
Taxonomic class	Imported quantity (number of individuals)
Reptilia	757,213
Actinopteri	116,729
Amphibia	70,852
Mammalia	52,969
Aves	39,220
Hirudinoidea	24,475
Arachnida	9,045
Elasmobranchii	8,581
Anthozoa	1,520
Dipneuste	1,470
Bivalvia	1,324
Insecta	206
Cephalopoda	10

Overview of the Focal Taxa

Throughout the period of 2015–2024, the proportion of reptile imports remained the highest, with the volume showing an increasing trend especially after 2020 (Fig. 2). Amphibians increased the import quantity after 2021, whereas bird imports dropped gradually since around 2019. The imports of mammals remained constant.



Based on the comparison between the import and export volume of live animals of focal taxa (Fig. 3), Japan’s import volume is a lot higher than that of export volume, reiterating its significant role as a consumer country.

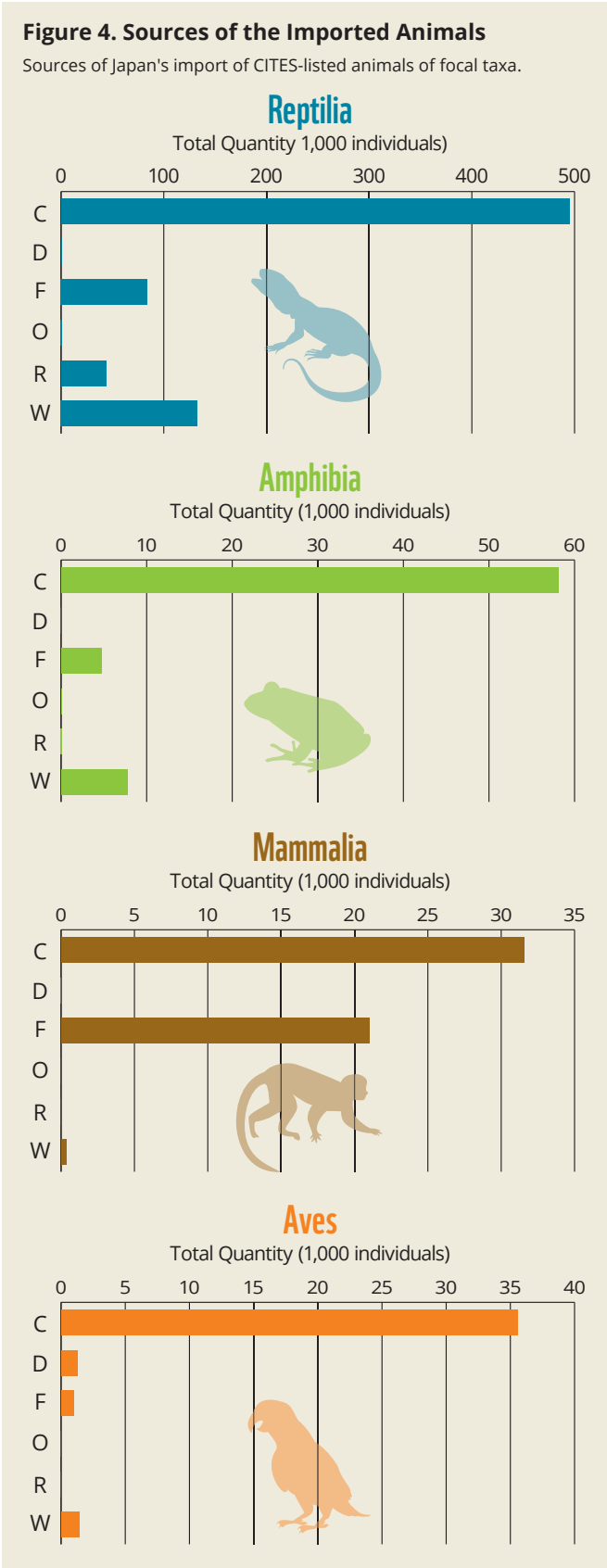


CITES data include the “source” column, which describes where the traded specimens came from, allowing for analysis of the characteristics among species, exporter, importer, origin country, and the change in the trend of sources for specific species. The source code identified in this study is shown in Table 2.

Table 2. CITES source code used in this report and definition

Source Code	Description	Definition
C	Bred in captivity	Animals bred in captivity in accordance with resolution Conf. 10.16 (Rev.)
D	Bred in captivity	Appendix-I animals bred in captivity for commercial purposes
F	Born in captivity	Animals born in captivity (F1 or subsequent generations), which do not fulfil the definition of “bred in captivity”
O	Preconvention	Specimen acquired before the provisions of the convention applied to it
R	Ranched	Specimens of animals reared in a controlled environment, taken as juveniles from the wild
W	Wild	Species taken from the wild

Captive-bred individuals (C) accounted for the highest proportion for all focal taxa (Fig. 4). However, mammals contained a high volume of individuals born in captivity (F), and the second highest source of reptiles and amphibians was individuals sourced from the wild (W).



2.3 Closer Examination of Japan's Import of Reptiles, Amphibians, Mammals, and Birds

Reptiles

Overview

The monetary value of import of all live reptiles (including non-CITES-listed species) between the period from 2015 to 2024 retrieved from the Comtrade database is shown in Fig. 5. As highlighted, Japan's import value remained the second highest following the US after 2020, peaking in 2021 with USD14,422,599.

A comparison of the overall import quantity retrieved from Trade Statistics of Japan and import quantity of CITES-listed species of reptiles is shown in Fig. 6. The overall quantity and CITES import show an increasing trend, although the overall volume decreased in 2023 before increasing again in 2024. The number of identified CITES-listed species/taxa from Japan's imports shows an increasing trend, which is not surprising given that the number of listed species generally increases overtime. However, as the overall import quantity also increases, the increase in CITES import quantity is likely not solely driven by the fact that there are more species listed in the later years.

The figure also shows how CITES does not extensively cover the import of reptile species, where the quantity of CITES-listed individuals never reached over 40% of the overall quantity throughout the period of 2015–2024 (Trade Statistics of Japan recorded import of 293,157 individuals for the year 2024, while CITES import reached 111,501 individuals, accounting for the maximum coverage of 38%).

Figure 5. Import Value Top 10 countries of Reptiles

Comtrade import monetary value of the top 10 importing countries of live reptiles for each year.

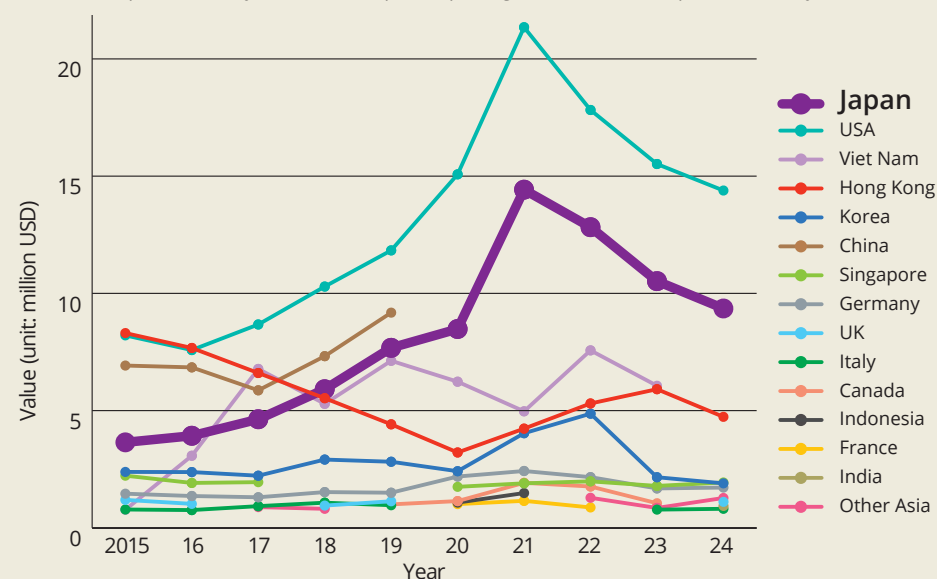
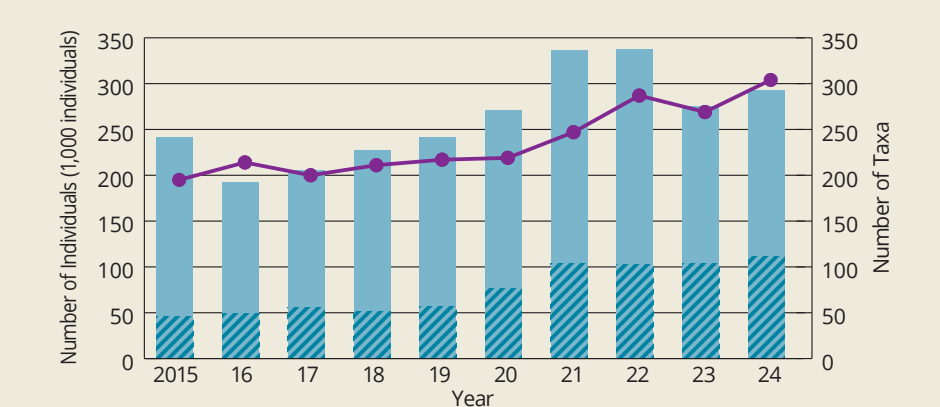


Figure 6. Overall Import Quantity, CITES Import Quantity and Species count by Year

Comparison between Japan's overall import quantity of live reptiles and the import quantity of CITES-listed live reptiles presented with the number of identified CITES-listed reptile species/taxa that Japan imported for the corresponding years.



CITES Import into Japan Between 2020 and 2024

Overview

Between 2020 and 2024, Japan imported a total of 407 unique reptile taxa (392 species, 1 subspecies, and 14 genus²), totalling 498,478 individuals, which ranks as the third country with the largest import quantity of CITES-listed live reptiles (Table 3). The number of unique taxa and origin countries (61) was the highest among the top five importing countries. Therefore, Japan plays a significant role as an importer of diverse reptile species from numerous countries across the world.

2. Of the 498,478 individuals (0.093%), 466 were identified at the genus level.

Table 3. Top 5 import countries of CITES-listed live reptiles (2020–2024)

Ranking	Country	Number of Individuals	Number of Taxa	Number of Exporters	Number of Origin Countries
1	Hong Kong	1,762,007	184	51	37
2	the US.	1,299,781	299	59	46
3	Japan	498,478	407	57	61
4	Germany	345,668	115	31	11
5	Indonesia	303,427	113	48	31

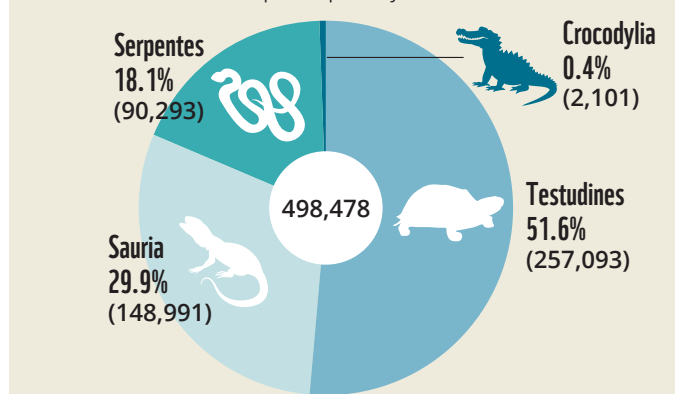
Taxonomic Composition

Of the 498,478 reptile individuals Japan imported between 2020 and 2024, over half of them belonged to the order Testudines (51.6%, including all tortoises, freshwater turtles, and sea turtles), followed by Sauria (29.9%, including iguanas, geckos, monitor lizards, chameleons, and skinks), Serpentes (18.1%, snakes), and Crocodylia (0.4%, crocodiles; Fig. 7).

The species with the highest volume of import was Reeves' Turtle *Mauremys reevesii* (97,412 individuals), followed by Ball Python *Python regius* (61,723 individuals), Hermann's Tortoise *Testudo hermanni* (26,885 individuals), Common Tortoise *Testudo graeca* (23,709 individuals), and Veiled Chameleon *Chamaeleo calypttratus* (19,449 individuals).

Figure 7. Taxonomic Composition of Reptiles

Breakdown of CITES live reptile imports by taxonomic order.



Hermann's tortoise *Testudo hermanni*
One of the species with high import quantity
Japan imported between 2020 and 2024.

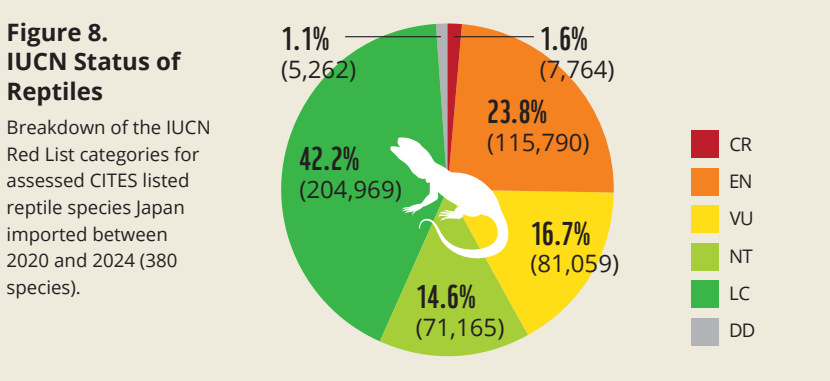
Appendix

Of the 407 identified reptile taxa, six were listed in Appendix I, 364 were listed in Appendix II, and 38 were listed in Appendix III³.

All orders except for Testudines were predominated by Appendix II species. A large proportion of Testudines were listed in Appendix III (101,541 out of 257,093 Testudines individuals, 39.5%) because Reeves’ Turtle, the species with the highest import quantity, is listed in Appendix III⁴.

IUCN Red List Status

Of the 393 reptiles identified at species or subspecies level, 380 had IUCN status assessed, of which 120 were assessed as threatened, meaning critically endangered (CR), endangered (EN), or vulnerable (VU). The total number of assessed individuals was 486,009, of which 204,613 (42.1%) were categorized as threatened (i.e., CR: 7,764 individuals, EN: 115,790 individuals, and VU: 81,059 individuals; Fig. 8).



Exporter and Origin Countries

The major exporter countries differed for each taxonomic order. As for Testudines, the countries/regions in East and Central Asia and the Middle East made up the majority, whereas for Sauria, African countries were more common, and for Serpentes, US and European countries were more present (Table 4, Figs. 9 – 11⁵).

Crocodiles were mostly exported from Taiwan (2,028 individuals), although this record should be interpreted with caution as no similar trade pattern has been observed in the past decade. As Japan does not allow the keeping of crocodiles for personal use under the law “Act on Welfare and Management of Animals,” whether the imported individuals resulted from reporting errors remains unknown (e.g., leather products mistakenly labelled as live).

Table 4. Top 10 exporters of reptiles to Japan by taxonomic order

Ranking	Testudines 		Sauria 		Serpentes 		Crocodylia 	
	Exporter	Quantity	Exporter	Quantity	Exporter	Quantity	Exporter	Quantity
1	China	88,300	Togo	26,207	the US	19,814	Taiwan	2,028
2	Hong Kong	37,261	Czech Republic	22,731	Germany	16,254	Vietnam	20
3	the US	21,388	Indonesia	18,718	Netherlands	11,686	Guyana	12
4	Slovenia	18,809	Madagascar	16,796	Indonesia	11,229	Singapore	10
5	Uzbekistan	15,200	Thailand	10,265	Togo	10,777	the US	10
6	Zambia	10,402	El Salvador	8,878	Czech Republic	6,628	Germany	7
7	Jordan	9,010	Kenya	7,623	Canada	5,130	Thailand	7
8	Togo	8,686	DR Congo	7,256	Guyana	1,407	Peru	6
9	Indonesia	8,433	Nicaragua	4,897	United Kingdom	1,348	Hong Kong	1
10	Lebanon	6,655	Germany	3,943	Benin	946		

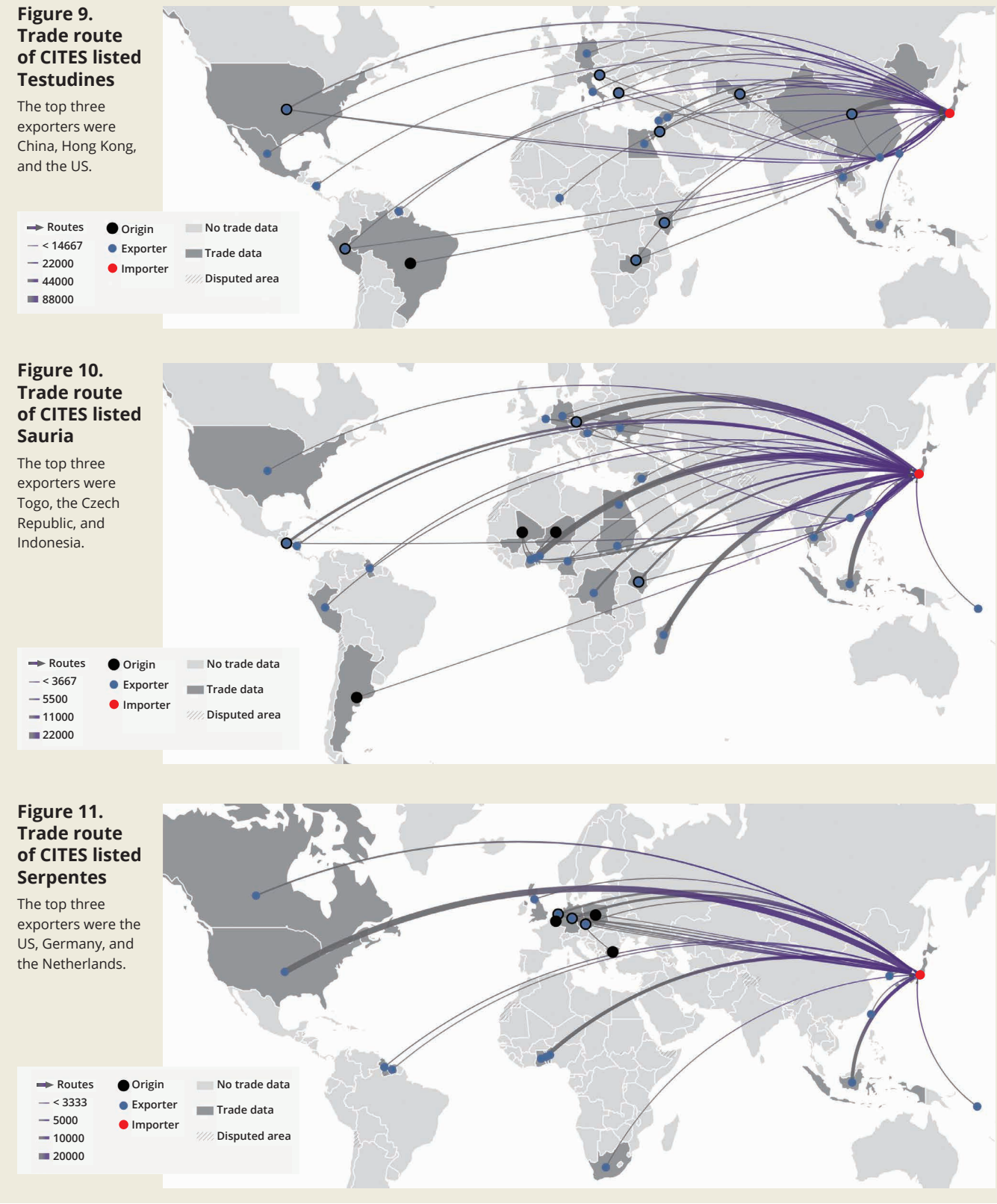
Asia Americas Africa Europe

Following the categorization of the United Nations Geographic Scheme (<https://unstats.un.org/unsd/methodology/m49/>).

3. The total number of taxa was 408 because one species (Indian python *Python molurus*) was uplisted during the period of 2020–2024 following taxonomic changes.
4. *Mauremys reevesii* was listed in Appendix III by China in 2005.

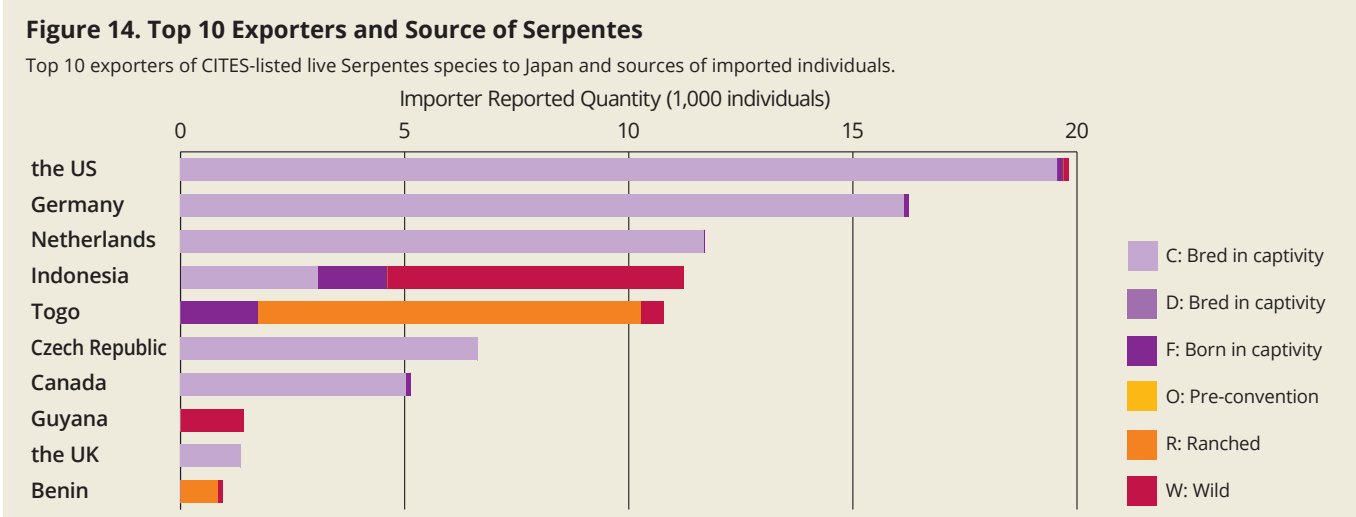
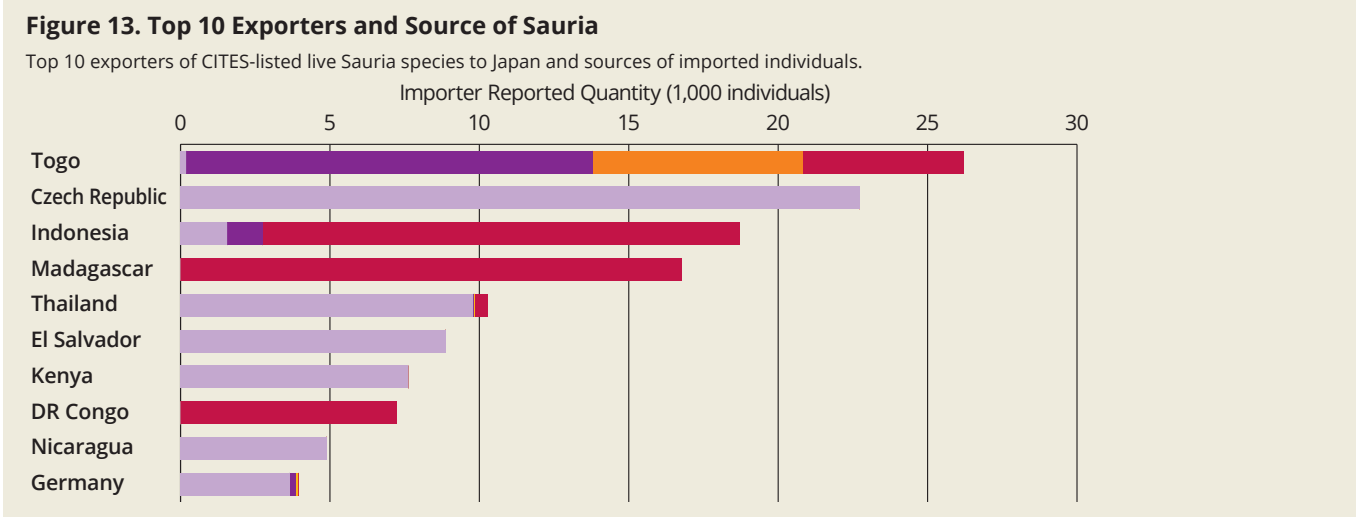
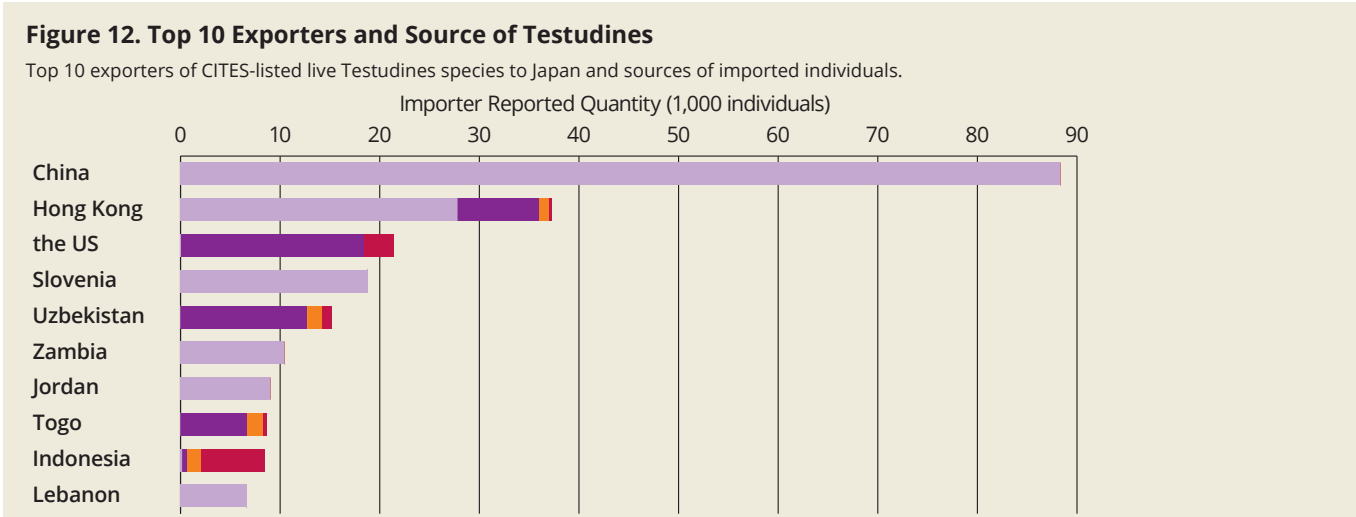
Re-export/Origin

Around 13.6% (67,896 individuals) of the total quantity of imported reptiles were re-exported, with Hong Kong playing a major role as the transit country with the highest re-export quantity (35,483 individuals, 52.3%), most of which belonged to the order Testudines, originating from China (12,913 individuals) and North Macedonia (4,987 individuals). Germany also re-exported a high amount (10,554 individuals) of Sauria and Serpentes species, most of which originated from other European countries, such as the Netherlands (6,168 individuals) and the Czech Republic (2,012 individuals).



Major Exporters and Sources

All Sauria individuals from Madagascar and the Democratic Republic of Congo and all Serpentes individuals from Guyana were sourced from the wild. Indonesia also had a higher proportion of wild-sourced individuals than captive-bred individuals, whereas for Togo, farmed or ranched individuals accounted for the most of its exports for all the three taxa (Figs. 12–14).



Madagascar Day Gecko
Phelsuma madagascariensis
One of the Madagascar’s endemic species popular among hobbyist for its vibrant colours.

Significant Features

China’s Massive Export of Captive-bred Threatened Testudines Species to Japan

China exported 16 unique reptile species, 15 of which belonged to the order Testudines and all threatened species, totalling 88,300 individuals, all captive-bred individuals. Of the 15 species, 10 were native to China, whereas the remaining five species were native to East Asian countries or north America (Supplementary Document Table 1).

Reeves’ Turtle *Mauremys reevesii* (81,415 individuals; EN) and Yellow Pond Turtle *Mauremys mutica* (4,539 individuals; CR) make up most of China’s exports, composing 97.3% when combined. In addition, Hong Kong re-exported 12,147 individuals of Reeves’ Turtle originating from China; therefore, a total of 93,562 individuals of Reeves’ Turtle were exported from China to Japan either directly or through a transit country between 2020 and 2024.

From checking the CITES import data between 2015 and 2019, Japan imported 26,986 individuals of Reeves’ Turtle either from China or Hong Kong as the exporter/origin country, indicating that the import quantity of the species has more than tripled for the period 2020–2024 compared with the previous five years. As for the Yellow Pond Turtle, only 66 individuals were imported into Japan from China or Hong Kong as the exporter/origin country during the period 2015–2019.

Japan is not known to consume these species for food, they are instead presumably imported to meet Japan’s pet market demand, as the advertisements for these species can be easily found online, where some individuals of Reeves’ Turtle were sold for as cheap as a few thousand Japanese yen (USD 6–25) and *Mauremys mutica* (the subspecies *Mauremys mutica* and *Mauremys mutica kami*) for around several thousands to around JPY20,000 (USD 25–125).



Keeled Box Turtle *Cuora mouhotii*
Assessed as EN in the IUCN Red List. Japan imported a total of 440 individuals from China between 2020 and 2024.

Ball Pythons from “Consumer Countries” and Togo

Of the 90,293 snake individuals Japan imported during 2020–2024, around 70% were Ball Pythons (61,723 individuals). The US export mostly comprises this species, accounting for 97% with 19,224 individuals, which were all captive-bred individuals. The Netherlands and Germany also exported a large amount, accounting for 11,532 and 10,596 individuals, respectively, which mostly comprised captive-bred individuals. Togo, the species’ native range, exported 10,111 individuals, whose sources were ranched, born in captivity, or wild (8,290, 1,701, and 120 individuals, respectively).

Notably, the largest importer of Togo’s ball python was the US between 2020 and 2024 (232,868 individuals), and the largest importer of ball python exported from the US was Japan. This finding indicates that Japan’s demand partially fuels other consumer countries’ incentive to import the species from range states.

Endemic Species Imported into Japan

Of the 393 identified reptile species/subspecies, 172 (43.8%) were native to only one country (hereafter referred to as endemic species⁶). Madagascar had the highest number of such species with 50 species, followed by Australia (46 species), Indonesia (16 species), the US (11 species), and Mexico (nine species), to name several major native range countries.

Madagascar’s Wild-sourced Endemic Chameleons and Geckos

Madagascar exported 43 unique Sauria species, 37 of which were endemic to Madagascar, and 9 of them were assessed as threatened. Of the 37 endemic species, 28 totalling 7,128 individuals were exported only from Madagascar, and all were sourced from the wild.

From a rapid snapshot online survey, 23 of the 28 species were found from online advertisements in Japan with prices ranging between JPY 8,800 and 128,000 (USD 56.03–814.95), with an average of JPY 43,549 (USD 277.27⁷) per individual (Supplementary Document Table 2). The sources of the individuals were often not provided in the advertisements, but for the records where sources were available, all individuals except one individual of *Brookesia stumpffi* were advertised as wild sourced. Therefore, the absence of successful captive breeding of these species likely putting wild populations under harvest pressure to meet market demand.



Brown Leaf Chameleon *Brookesia superciliaris*
Endemic chameleon species of Madagascar. All the individuals Japan imported between 2020 and 2024 were sourced from wild.

6. In this report, the term “endemic species” was used to describe species that are native to only one country, although they may not meet the criteria of calling them “endemic” in a strict sense as their range and habitat may not be restricted to a small area with a specific environment.

7. 1 USD = JPY 157.06, based on monthly average rate through February to March 2026.



Yellow Tree Monitor *Varanus reisingeri*
It is not assessed as threatened species in IUCN Red List due to the lack of sufficient data, but it is said to be potentially under threat from the international pet market. It was advertised with an average of JPY 208,560 (USD 1328) in Japan.

Indonesia’s Endemic Sauria Species

Indonesia exported 10 endemic Sauria species, eight of which were exported only from Indonesia. Unlike Madagascar, all eight species (719 individuals in total) were either captive bred (C) or born in captivity (F). However, all species were either threatened species or assessed as data deficient (DD) in the IUCN Red List, including three EN species (Banggai Island Monitor *Varanus melinus* (223 individuals), Auffenberg’s Monitor *Varanus auffenbergi* (94 individuals), and Sago Monitor *Varanus obor* (three individuals); Supplementary Document Table 3).

From a rapid snapshot online survey, advertisements for all eight species were found, with prices for each individual ranging from JPY 49,800 to 680,000, with an average price of JPY 144,995 (approximately USD 904).

There was an advertisement of Biak Emerald Monitor *Varanus Kordensis*, which was likely to be wild sourced from Indonesia with arrival month June 2020. However, the last CITES record of wild-sourced individuals for this species was in 1997. The arrival month likely indicated the time when the individual arrived at the shop and not the month of import. However, considering that the last wild-sourced individuals were imported more than two decades prior to the arrival time and that the maximum life span of Biak Emerald Monitor is thought to be around 14 years (Myhrvold et al., 2015), the individuals imported recently may have a false source code.

Protected in Native Range but Traded Internationally

Among the identified endemic species, some were protected under the domestic law of their native range, with notable examples presented below.

Australia All the 46 identified endemic species of Australia (3,859 individuals) were exported by countries other than Australia. The Czech Republic and Germany are the primary exporters of these species, accounting for 77.7% of the individuals of these species (1,705 and 1,294 individuals, respectively). Source code preconvention “O” was identified in 12 of the 46 species (total of 76 individuals).

Australia has a law that strictly regulates the harvesting and exporting of its native species, where only entities of approved official programs are allowed to commercially trade species (DCCEEW, 2025). Of the 46 species, 18 had a history of being exported or originating from Australia under any purpose in the past (any time between 1975 and 2024), but the remaining 28 species had no records of export from Australia in the past (Supplementary Document Table 4).



Rough Knob-tail *Nephrolepis asper*
Endemic species of Australia but there was no record that showed Australia exported this species to other countries in CITES database.

Viet Nam Viet Nam also had a similar pattern where all three endemic species belonging to the genus *Goniurosaurus* (*G. huiliensis* (CR), *G. lichtenfelderi* (VU), and *G. catbaensis* (CR)), which are protected under Viet Nam’s law that bans commercial trade of the species (N. Ngo et al., 2022), were exported from the Czech Republic (33 individuals, all bred in captivity). Based on the CITES database, none of the three species were exported from Viet Nam in the past.

China Six endemic species of China were identified, all of which were exported by countries other than China. The six endemic species were composed of three species belonging to the genus *Cuora* (*C. aurocapitata*, *C. mccordi*, and *C. pani* (all CR)) and three species belonging to the genus *Goniurosaurus* (*G. bawanglingensis* (EN), *G. hainanensis*, and *G. yingdeensis* (CR)), which are all protected under China’s domestic law that strictly regulates the harvesting and transaction of listed species for commercial purposes within the country (Chen et al., 2023).

Most individuals were exported from Thailand, accounting for 93.4% (3,630 out of 3,886 individuals, all Chinese Cave Gecko *Goniurosaurus hainanensis* individuals). Germany exported four species (21 individuals), and the Czech Republic exported three species (211 individuals). Four out of six species had no records of export from China or origin country identified as China in the CITES database in the past (Chinese Cave Gecko, Bawangling Leopard Gecko *Goniurosaurus bawanglingensis*, Yingde Leopard Gecko *Goniurosaurus yingdeensis*, and Yellow-headed Box Turtle *Cuora aurocapitata*).

Mexico Eight out of nine endemic species of Mexico were also exported from countries other than Mexico (145 individuals), where Taiwan was identified as exporting the highest quantity (76 individuals of Baja California Spiny-tailed Iguana *Ctenosaura hemilopha* and 10 individuals of Mexican Mud Turtle *Kinosternon integrum*). The Czech Republic and Germany exported three species each (23 and 12 individuals, respectively).

Five out of eight species (Deppe’s Arboreal Alligator Lizard *Abronia deppii* (EN), Banded Arboreal Alligator Lizard *Abronia taeniata* (VU), Baja California Spiny-tailed Iguana, Herrera’s Mud Turtle *Kinosternon herrerai*, and Mexican Mud Turtle) are currently regulated under NOM-059-SEMARNAT-2010 in Mexico, and are subject to protection and management measures, with any use or commercial trade requiring compliance with Mexican wildlife legislation and the corresponding authorizations, including proof of legal origin where applicable (SEMARNAT, 2010).

Four out of eight species (San Esteban Spiny-tailed Iguana *Ctenosaura conspicuosa* (VU), Herrera’s Mud Turtle, Mexican Mud Turtle, and Campeche Thorntail Iguana *Cachryx alfredschmidtii*) had no records of export from Mexico or an origin country identified as Mexico in the CITES database in the past.

Disparity Between Market Survey and CITES

From a spot survey conducted in Tokyo on October 18, 2025, 6,087 individuals of 648 unique reptile taxa were identified (505 species, 111 subspecies, 21 genus, 7 family/subfamily, and 4 order/suborder).

CITES-listed Species Without Import Records

The spot market survey records contained 303 CITES-listed species, totalling 3,277 individuals. However, Japan had no historical import record for 17 CITES-listed reptile species sold at the fair. A total of 11 out of 17 species were listed in the CITES appendix after 2022, indicating that the species advertised might have been imported preconvention or imported after 2024; therefore, official records were not yet available on the CITES database.

The remaining six species included the Borneo Earless Monitor *Lanthanotus borneensis* (five individuals), Maasai Girdled Lizard *Cordylus beraduccii* (three individuals), Balsas Spiny-tailed Iguana *Ctenosaura clarki* (five individuals), Oaxaca Spiny-tailed Iguana *Ctenosaura oaxacana* (two individuals), Fierenana Leaf-tailed Gecko *Uroplatus fiera* (two individuals), and Zhou’s Leopard Gecko *Goniurosaurus zhoui* (one individual).

Possible illegality of the source of Borneo earless monitors has been raised many times in the past (Nijman, 2021; Nijman & Stoner, 2014), as the species is highly protected in their native range Indonesia, making it theoretically impossible that the species are sold in Japan without any official import records of the species. As for Balsas Spiny-tailed Iguana and Oaxaca Spiny-tailed Iguana, they were both listed in Appendix II in 2019, indicating that the individuals sold at the fair might have been imported preconvention. They are also protected in their native range in Mexico under NOM-059-SEMARNAT-2010. Although the individuals sold at the fair were labelled as captive bred in Japan (2 individuals of Oaxaca Spiny-tailed Iguana however, had no source information available), concerns remain over the legality of how the species entered Japan in the first place. The same is true for Zhou’s Leopard Gecko, an endemic species of China listed in 2019, but the species is protected in their range state China.

Maasai Girdled Lizard was officially described in 2002, and this species might have been imported under a different name such as Cape Girdled Lizard *Cordylus cordylus* or other species of *Cordylus* spp. Fierenana Leaf-tailed Gecko is an endemic species of Madagascar, which was listed in 2005. This species might have been imported under a different name as well (e.g., Spearpoint Leaf-tail Gecko *Uroplatus ebenaui*).

Species Not Listed in CITES

A total of 335 species (including 46 subspecies), totalling 2,810 individuals (46.1% of the total 6,087 individuals) observed in the spot survey, were not listed in CITES appendices.

The species not listed in CITES included 20 threatened species in the IUCN Red List, 14 of which are geckos (suborder Gekkota), including three CR species, namely, Viet Nam’s endemic species Black-eyed Bent-toed Gecko *Cyrtodactylus nigriocularis* (three individuals), Thailand’s endemic species Sam Roi Yot Leaf-toed Gecko *Dixonius kaweesaki* (one individual), and New Caledonia’s endemic species Tough-snouted Giant Gecko *Rhacodactylus trachycephalus* (one individual).

Species encountered in high volume include Crested Gecko *Correlophus ciliatus* (269 individuals), Fat-tailed Gecko *Hemitheconyx caudicinctus* (188 individuals), Knob-headed Giant Gecko *Rhacodactylus auriculatus* (127 individuals), and Western Hognose Snake *Heterodon nasicus* (123 individuals).

Risk of Invasiveness

Of the 393 CITES-listed reptile species/subspecies imported by Japan between 2020 and 2024, 28 were recorded as introduced elsewhere in the world in the GRIIS dataset, and 15 were identified as having a possible risk of posing future invasive risks specifically in Japan on the CABI-HST.

The species found in the GRIIS dataset contains Reeves’ Turtle, the species with the highest import volume, which is in fact already confirmed as established across Japan by the National Institute for Environmental Studies (NIES) in Japan. The dataset also includes Veiled Chameleon, Savannah Monitor *Varanus exanthematicus*, and Common Green Iguana *Iguana iguana*, which also has recorded wild populations in Japan (Falcón et al, 2013), all of which had a total import quantity exceeding 10,000 individuals between 2020 and 2024.

The species identified as having a potential risk of becoming invasive in Japan in the future in CABI-HST include Ball Python and Horsfield’s tortoise *Testudo horsfieldii*, which Japan imported 61,723 and 16,997 individuals in total, respectively (Supplementary Document Table 5).

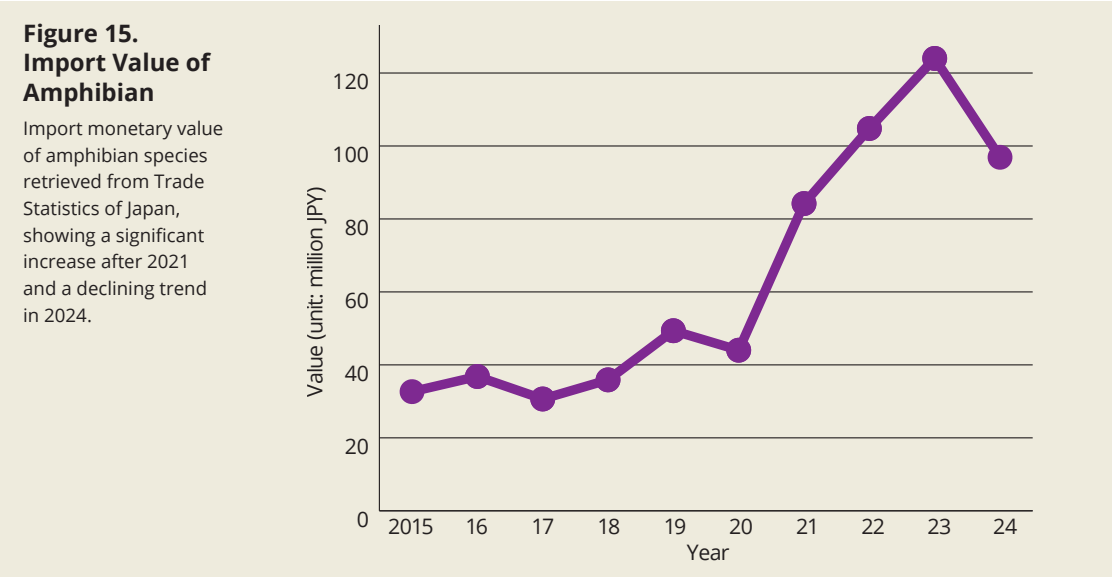


Common Green Iguana *Iguana iguana*
It is one of the most common iguana species kept as pets and it has been spotted in the wild in Japan.

 Amphibians

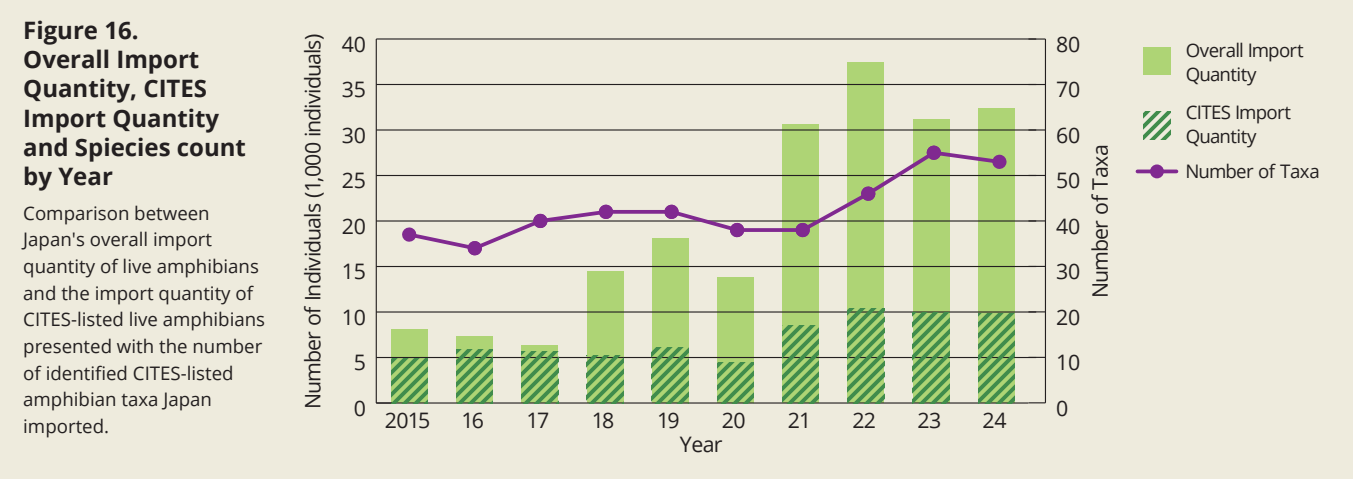
Overview

The monetary value of import of all live amphibians (including non-CITES-listed species) between 2015 and 2024 retrieved from Trade Statistics of Japan is shown in Fig. 15. Japan’s import value significantly increased after 2021, peaking in 2023 with over 124 million JPY.



A comparison of the overall import quantity retrieved from Trade Statistics of Japan and import quantity of CITES-listed species of amphibians is shown in Fig. 16. The overall quantity and CITES import quantity show increases after 2021, although the rate of increase likely plateaued after 2023. As the overall import quantity increased, the increase in CITES import quantity may not be solely driven by the fact that there are more species listed in the later years.

Between 2015 and 2017 when the overall import quantity was low, the quantity of CITES imports covered the majority of the overall imports. However, after 2018, CITES imports only accounted around 30% of the overall imports each year. For example, in 2024, 9,804 individuals of CITES-listed live amphibians were imported, whereas the overall import reached 32,321 individuals (CITES coverage 30.3%), showcasing how a large proportion of amphibians imported into Japan was not regulated under CITES.



CITES Import into Japan Between 2020 and 2024

Overview

From 2020 to 2024, Japan imported a total of 43,214 individuals of 74 unique species of CITES-listed amphibians from 14 exporters and 10 origin countries. Japan ranks second with regard to the total number of amphibians imported during the period of 2020–2024 following the US. The number of unique amphibian taxa and origin countries identified was the highest among the other top five importer countries (Table 5).

Table 5. Top 5 import countries of CITES-listed live amphibians (2020–2024)

Ranking	Country	Number of Individuals	Number of Taxa	Number of Exporters	Number of Origin Countries
1	the US	201,019	66	16	7
2	Japan	43,214	74	14	10
3	South Korea	14,399	52	9	7
4	the UK	6087	28	7	1
5	Indonesia	3770	31	10	2

Taxonomic and Appendix Composition

Most of the species imported by Japan belonged to the order Anura (41,969 individuals, 97.1%), which included all frog species, and the rest belonged to the order Caudata (1245 individuals, 2.9%), which included all salamander species (Fig. 17). Most species were listed in Appendix II (43,105 individuals, 99.7%, 72 species); two species were listed in Appendix III (109 individuals), and no Appendix I species was imported during the period.

The top five species imported included Red-eyed Treefrog *Agalychnis callidryas* (9,470 individuals, 21.9%), Dyeing Poison Frog *Dendrobates tinctorius* (5,237 individuals, 12.1%), Green And Black Poison Frog *Dendrobates auratus* (4,783 individuals, 11.1%), Strawberry Poison Frog *Oophaga pumilio* (4,285 individuals, 9.9%), and Fleischmann’s Glass Frog *Hyalinobatrachium fleischmanni* (3,021 individuals, 7%).

IUCN Red List Status

All 74 species were assessed on the IUCN Red List, 30 of which were threatened species (4,624 individuals, 10.7%; Fig. 18). Critically Endangered (CR) species included Harlequin Poison Frog *Oophaga histrionica* (84 individuals), Lake Patzcuaro Salamander *Ambystoma dumerilii* (50 individuals), and Lehmann’s Poison Frog *Oophaga lehmanni* (27 individuals).

Figure 17. Taxonomic Order Breakdown Amphibians

Breakdown of the taxonomic order of amphibians.

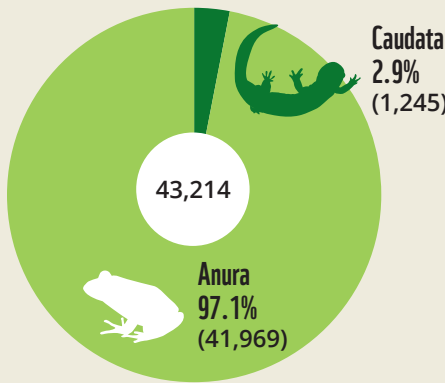
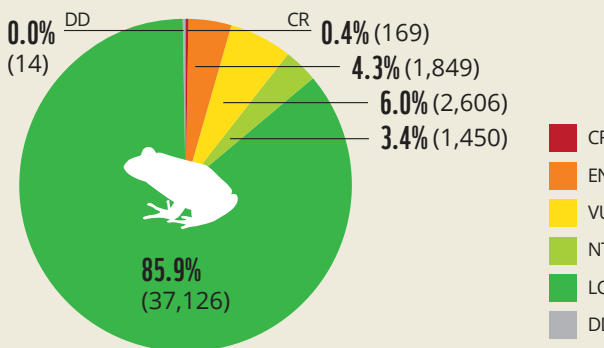


Figure 18. IUCN Status of Amphibians

Breakdown of IUCN Red List status for assessed CITES listed amphibian species Japan imported between 2020 and 2024.



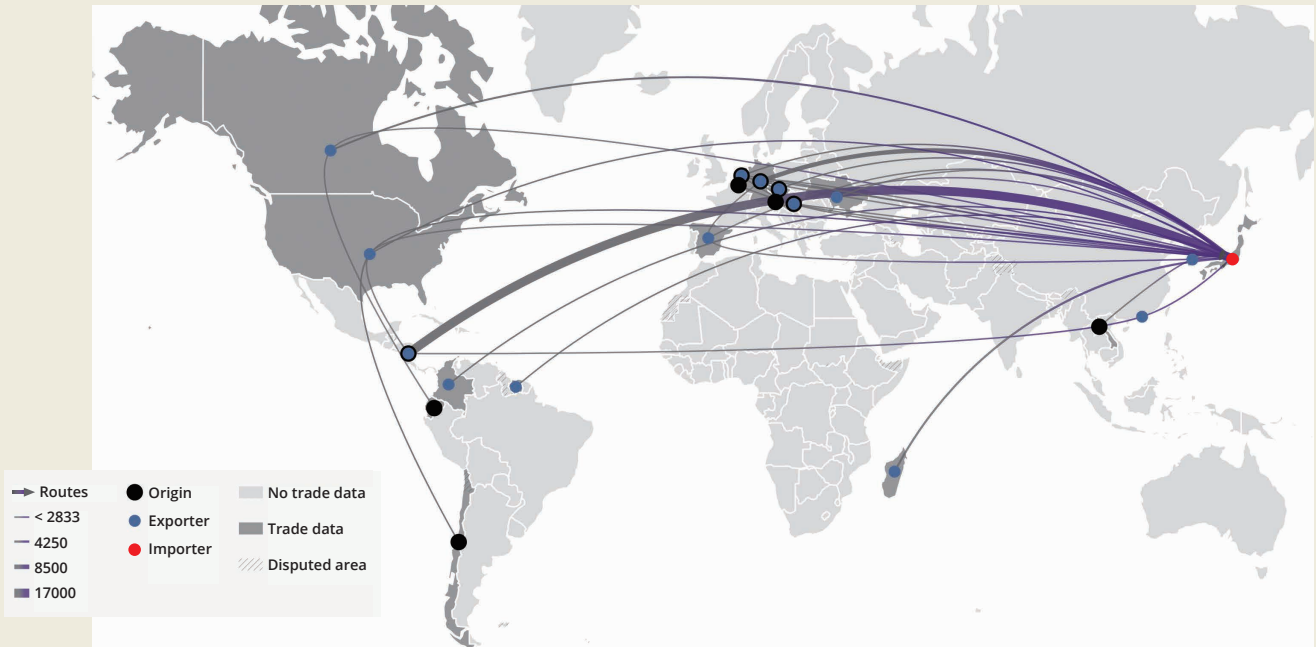
Red-eyed Treefrog *Agalychnis callidryas*
The amphibian species Japan imported with the highest quantity between 2020–2024.

Exporter and Origin

Almost 40% of the total imported individuals were exported from Nicaragua (16,718 out of 43,214 individuals; Fig. 19). 95.6% of exports from the US also originated from Nicaragua (2,201 out of 2,300 individuals exported from the US), highlighting its significant role as a major exporter of amphibians. Japan imported 9,533 individuals of amphibians from Nicaragua between 2015 and 2019, indicating an increase of over 175% between 2015 and 2019 and between 2020 and 2024. This increase is partly due to the fact that three out of six species exported from Nicaragua, namely, the Fleischmann’s Glass Frog (2,670 individuals), Chiriqui Glass Frog *Teratohyla pulverate* (845 individuals), and Grainy Cochran Frog *Cochranella granulosa* (831 individuals), were listed in CITES in 2023.

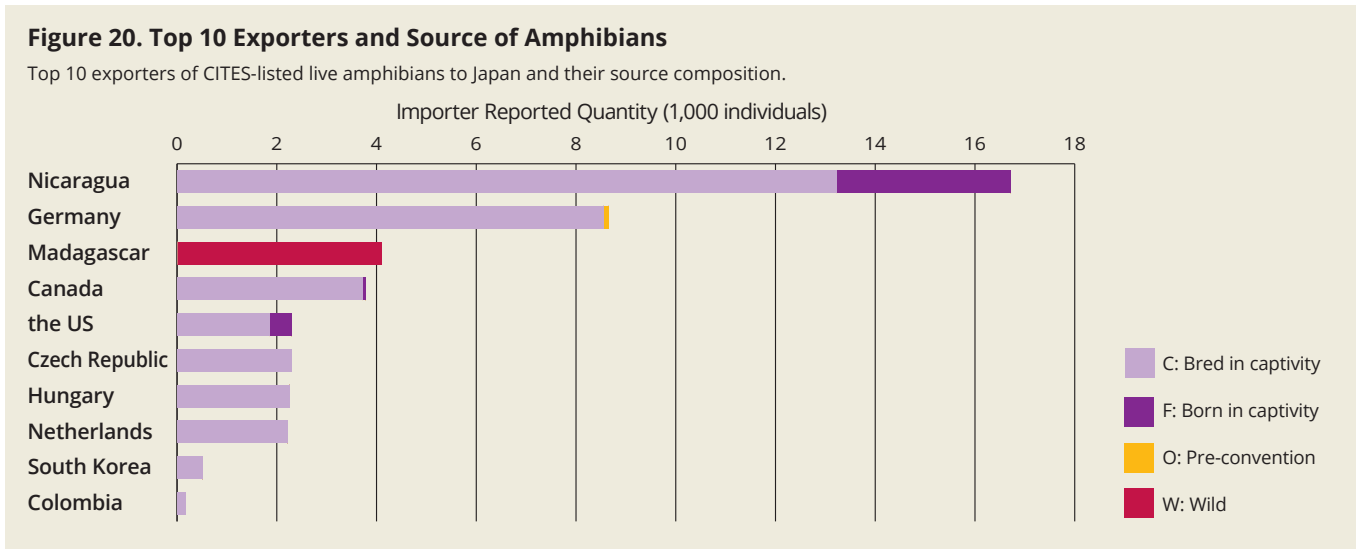
Figure 19. Trade route of Amphibians

Nicaragua was the export country with the highest quantity.



Major Exporters and Sources

Individuals exported from Madagascar were all sourced from wild (W, 4,101 individuals), whereas those exported from other countries were predominantly bred in captivity (Fig. 20).



Significant Features

Endemic Species

Japan imported various endemic amphibian species, with 40 out of 74 species (54%) being identified as endemic to nine different countries. Similar to reptile species, Madagascar had the highest number of endemic species (14). The native range of other endemic species was mostly found in Latin America (Peru 10, Colombia 8, Mexico 2, Brazil 2, Ecuador 1, and Chile 1).

Madagascar’s Wild-sourced Endemic Species

Madagascar exported 10 unique species of amphibians totalling 4,101 individuals to Japan, all of which were endemic species of Madagascar and wild-sourced. Moreover, eight of the 10 endemic species (3,120 individuals) were exported only from Madagascar (Supplementary Document Table 6), including two VU species, namely, Marbled Rain Frog *Scaphiophryne marmorata* and Madagascan Mantella *Mantella madagascariensis*, both known to be found in the international pet market. For Madagascan Mantella, the harvest of individuals from the wild is known to be putting pressure on its local population (IUCN Red List).

Golden Mantella
Mantella aurantiaca
Madagascar’s endemic species assessed as EN in IUCN Red List. Individuals exported form Madagascar to Japan between 2020 and 2024 were all sourced from wild.



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Protected in Native Range but Traded Internationally

Similar to reptiles, some of the identified endemic species were protected under the domestic law of their native range.

Peru’s Protected Endemic Species

The 10 endemic amphibian species of Peru were all exported from other countries (549 individuals from Canada, 515 individuals from Germany, 91 individuals from the Netherlands, and 30 individuals from Hungary), which were all captive-bred individuals. Peru enforced a strict law that strictly regulates the harvest, transport, and exportation of wildlife species for commercial purposes starting in 2000, making it only possible to trade specimens authorized at a registered government institution (MINAGRI, 1999).

Of the 10 endemic species, three had no record of export from Peru as an exporter or origin country in the past based on the CITES database (Marañón Poison Frog *Excidobates mysterosus* (EN), Blessed Poison Frog *Ranitomeya benedicta* (VU), and Pepper's Poison Frog *Ameerega pepperi* (VU)).

Disparity Between Market Survey and CITES

From a spot survey conducted in Tokyo on October 18, 2025, 439 individuals of 87 unique amphibian taxa were identified (identified at 80 species, 2 genera, 1 subspecies, 1 order, and 1 family).

Non-CITES-listed Species Predominating in the Market

Only 21 out of 87 taxa (24.1%) were listed in CITES (130 individuals), and all 21 species had records of import.

Among the 66 non-CITES-listed taxa, four are identified at higher taxa (23 individuals), and the remaining 62 were recorded at the species level, totalling 286 individuals, including Japan’s endemic species Sword-tailed Newt *Cynops ensicauda* (VU) (8 individuals). It also included Turkey’s endemic species Baran’s Newt *Neurergus barani* (EN) (three individuals) and Ecuador’s endemic species Rio Pescado Stubfoot Toad *Atelopus balios* (CR) (two individuals).

Invasiveness

Of the 74 CITES-listed species imported into Japan, three species, namely, Green And Black Poison Frog, Yellow-banded Poison Dart Frog *Dendrobates leucomelas*, and Axolotl *Ambystoma mexicanum*, were found in CABI-HST as having possible invasive future risks to Japan. The number of imported individuals between 2020 and 2024 for Green And Black Poison Frog and Yellow-banded Poison Dart Frog was high, accounting for 4,783 and 1,606 individuals, respectively, and although only eight individuals of axolotl were imported, the species is known for being kept as pets in Japan.

Yellow-banded Poison Dart Frog *Dendrobates leucomelas*
It was identified as having potential risk of becoming invasive in Japan.



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Mammals

Overview

The monetary value of import of all live primates (including non-CITES-listed species) between 2015 and 2024 retrieved from the Comtrade database is shown in Fig. 21. As highlighted, Japan's import value did not stand out until 2022, after which it ranked as the second highest following the US, reaching its peak in 2023 with USD96,101,943.

As Comtrade and Trade Statistics of Japan have different units for imported products and the majority of the records for primates are recorded in the unit kilogram instead of the number of specimens, a comparison of the overall import and CITES import quantity was not depicted. The import quantity and number of species/taxa of CITES live mammals Japan imported are independently shown in Fig. 22. The quantity of mammal imports showed fluctuations throughout the period 2015–2024. However, the number of involved species/taxa showed a declining trend, although the overall number of species involved was not high (a maximum of 12 species/taxa were recorded in 2021).

Figure 21. Import Value of Top 10 countries of Primates

Comtrade import monetary value of the top 10 countries of primate imports for each year.

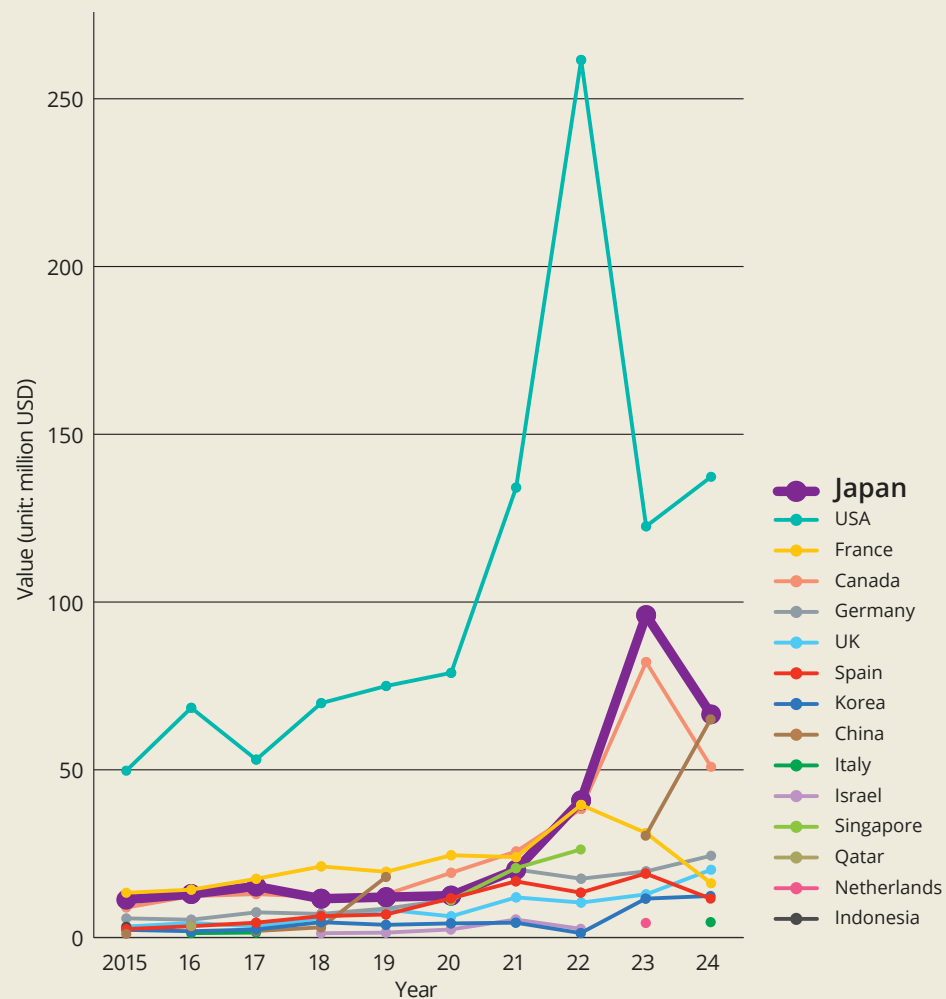
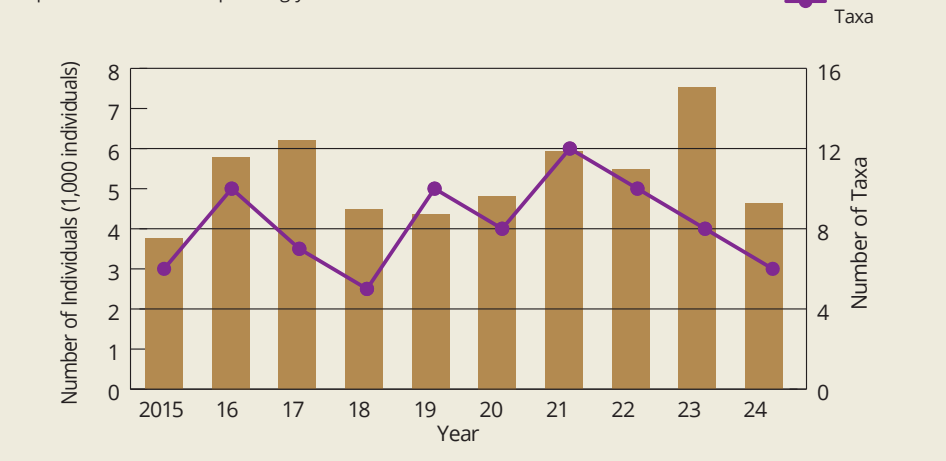


Figure 22. CITES Import Quantity and Taxa Count of Mammals

Import quantity and the number of identified CITES-listed mammal taxa that Japan imported for the corresponding years.



CITES Import into Japan Between 2020 and 2024

Overview

Japan imported 20 unique taxa (including 17 species, two genus, and one hybrid), totalling 28,380 individuals, exported from 15 unique countries and three origin countries. With regard to import volume, Japan imported the second highest volume of CITES-listed mammal species (Table 6).

Table 6. Top 5 import countries of CITES-listed live mammals (2020–2024)

Ranking	Country	Number of Individuals	Number of Taxa	Number of Exporters	Number of Origin Countries
1	the US	76,421	43	27	12
2	Japan	28,380	20	15	3
3	Spain	9,743	5	4	2
4	China	8,750	3	3	0
5	Thailand	3,516	58	16	7

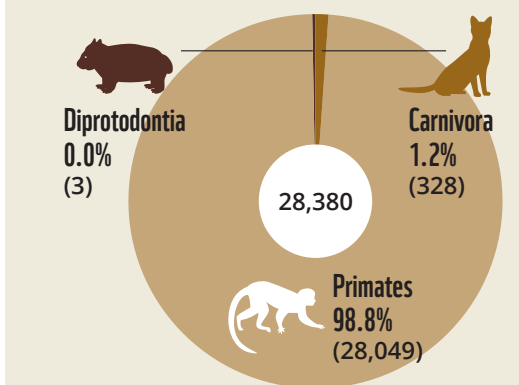
Taxonomy, Appendix Composition, and IUCN Status

Most of the imported individuals were of the order primates (28,049 individuals, 98.8%; Fig. 23) and listed in CITES Appendix II. These compositions are driven by the fact that the species with the highest import volume, namely, Long-tailed Macaque *Macaca fascicularis*, accounted for 98.8% of the import quantity (28,049 individuals) which is listed in CITES Appendix II. The species is assessed as EN in the IUCN Red List. It should be noted that Long-tailed Macaque is imported primarily for the purpose of biomedical and toxicology research and not for pets in Japan.

Carnivora species such as Kinkajou *Potos flavus* (141 individuals), Sand Cat *Felis margarita* (94 individuals), Binturong *Arctictis binturong* (23 individuals (VU)), and European Wildcat *Felis silvestris* (19 individuals) followed Long-tailed Macaque by quantity.

Figure 23. Taxonomic Order Breakdown of Mammals

Breakdown of the taxonomic order of mammals.



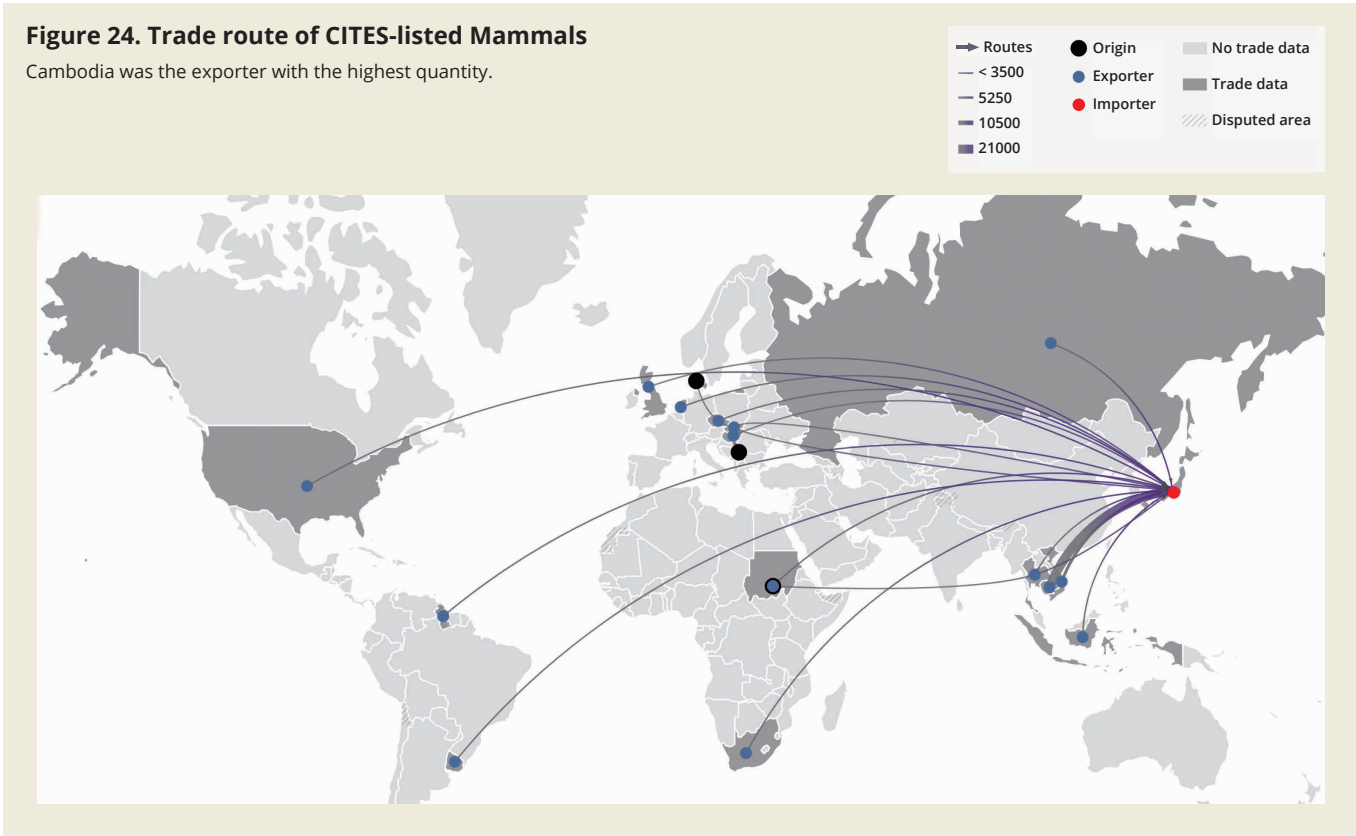
Binturong Arctictis binturong

It is assessed as Vulnerable in the IUCN Red List. Although there were no individuals advertised at the time of collecting data for this study, it is said to be traded between over 2.5 million to 4 million JPY in Japan (USD 15,730–25,169).

Major Exporters and Sources

Over 75% of the total import quantity came from Cambodia, as the country was the exporter of Long-tailed Macaque with the largest amount (21,334 individuals), followed by Viet Nam (6,715, Long-tailed Macaque individuals). Guyana was the third largest export country, exporting 136 individuals of Kinkajou and one Tayra *Eira Barbara*, followed by Thailand (including 73 individuals of Sand Cat) and Indonesia (including 23 individuals of Binturong; Fig. 24).

All the Kinkajou from Guyana were wild sourced, whereas Binturong from Indonesia were captive bred. Of the 73 Sand Cat individuals from Thailand, 53 had a source code wild as they originated from Sudan, its native range.



Significant Features

Species of Carnivora Traded for a High-market Price

The exact purpose of importing carnivora species with over 10 individuals (i.e., Kinkajou, Sand Cat, Binturong, and European Wildcat) is difficult to confirm. However, all but one species was advertised on pet store websites fetching high prices. Price range for Kinkajou was JPY 437,800-2.2 million (USD 2,754-13,843), that of Sand Cat was JPY 2.2-4.95 million (USD 13,843-31,146), and that of European Wildcat was JPY 250,000-1 million (USD 1,573-6,292), showcasing how rare mammal species are kept as pets in Japan.



Sand Cat *Felis margarita*
It is a wild feline species that is not suitable for pet but advertisements were found online selling the individuals for pets with the highest price recorded among other CITES listed mammalian species Japan imported between 2020 and 2024.

Invasiveness

Among the 17 CITES-listed mammal species Japan imported during 2020–2024, four species were found to have been introduced elsewhere in the world on GRIIS. Long-tailed Macaque has the highest volume, which is known to have been released into Izu Islands in Japan in 1971 for tourist attraction, but it is thought to have disappeared by around 1995 (NIES, 2024). Other identified species included European Wildcat (19 individuals imported), African Civet *Civettictis civetta*, and Gray Wolf *Canis lupus*.



Overview

The monetary value of import of all live birds (birds of prey and parrots combined, including non-CITES-listed species) between 2015 and 2024 retrieved from the Comtrade database is shown in Fig. 25. As highlighted, Japan's import value initially shows a decreasing trend and then a slight increase after 2023.

As Comtrade and Trade Statistics of Japan recorded the imports of birds of prey and parrots with two different units (number of specimens and kilograms), the comparison of overall import quantity and CITES import quantity were not depicted. The import quantity and number of species/taxa of CITES live mammals Japan imported are independently shown (as was the case with mammals) in Fig. 26. The quantity of bird imports showed a decreasing trend throughout the period 2015–2024. However, the number of involved species/taxa increased after it reached its lowest in 2021, reaching 130 unique species/taxa identified in 2024.

Figure 25. Import Value of Top 10 countries of Birds

Comtrade import monetary value of the top 10 countries of bird imports for each year (bird of prey and parrots combined).

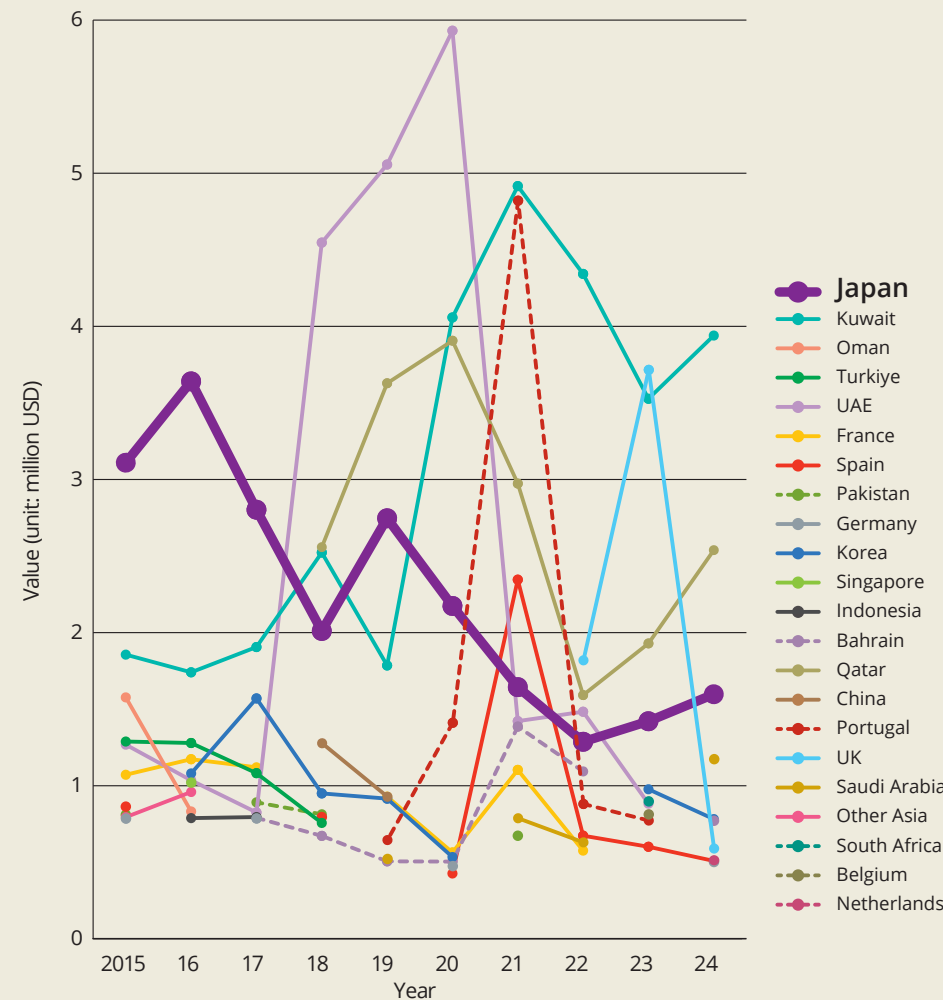
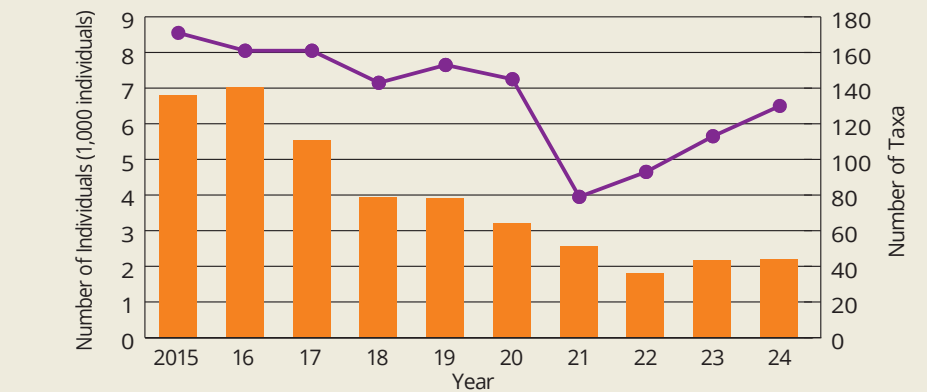


Figure 26. CITES Import Quantity and Taxa Count of Birds

Import quantity and the number of identified CITES-listed bird taxa that Japan imported for the corresponding years.



CITES Import into Japan Between 2020 and 2024

Overview

Japan imported 206 unique CITES listed bird taxa (identified as 199 species, three genus, and four hybrids) totalling 11,972 individuals between 2020 and 2024. The total import quantity was not as high as that of the other major importer countries, as Japan ranked the 14th largest importer country. However, the number of imported species was higher than that of the other major importer countries (Table 7).

Table 7. Top 5 bird importing countries and Japan's import (2020–2024)

Ranking	Country	Number of Individuals	Number of Taxa	Number of Exporters	Number of Origin Countries
1	UAE	146,556	255	38	42
2	Bahrain	88,405	134	21	26
3	Kuwait	71,409	125	24	26
4	Saudi Arabia	60,183	117	39	19
5	Türkiye	53,035	88	18	12
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14	Japan	11,972	206	15	23

Taxonomic and Appendix Composition

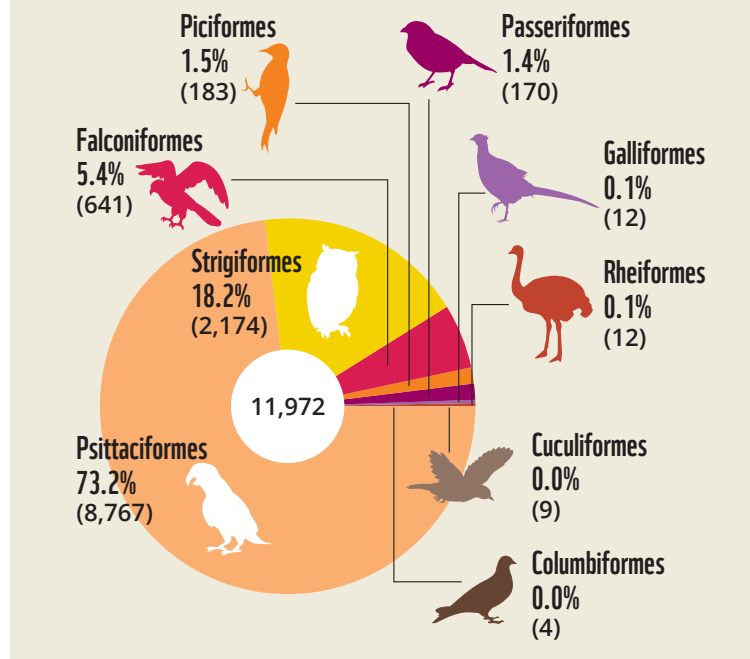
73.2% of the total number of imported individuals (8,767 out of 11,972 individuals) belonged to the order Psittaciformes, which contains all parrot species, followed by the order Strigiformes (2,174 individuals, 18.2%), which contains all owl species (Fig. 27).

The imported individuals were predominantly composed of Appendix II species (199 taxa, 11,348 out of 11,972 individuals, accounting for 94.8%), as well as five Appendix I species totalling 620 individuals (5.2% of total quantity), most of which were Gray Parrot *Psittacus erithacus* with 531 individuals.

Top five species with highest import quantity were: Sun Parakeet *Aratinga solstitialis* (1,055 individuals), Galah *Eolophus roseicapilla* (660 individuals), Grey Parrot (531 individuals), Green-cheeked Parakeet *Pyrrhura molinae* (525 individuals), and Green-thighed Parrot *Pionites leucogaster* (510 individuals).

Figure 27. Taxonomic Order of Birds

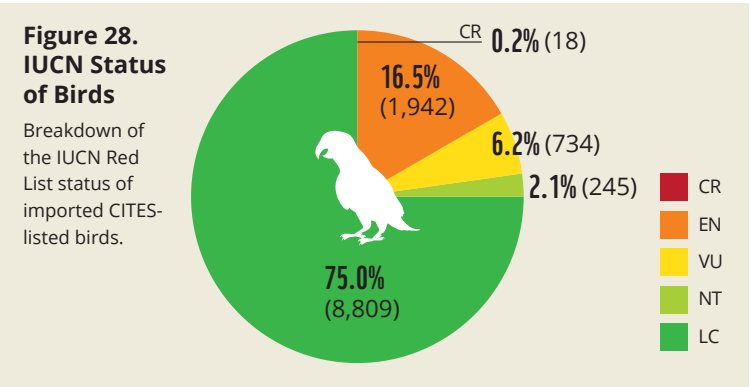
Breakdown of the taxonomic order of birds.



IUCN Red List Status

A total of 196 out of 199 species were assessed in the IUCN Red List, 23 of which were threatened (2,694 individuals; Fig. 28).

Among the threatened species, Sun Parakeet, was assessed as EN (1,055 individuals). Other threatened species with high quantity included Swift Parrot *Lathamus discolor* (CR) (18 individuals), Gray Parrot (EN) (531 individuals), White Cockatoo *Cacatua alba* (EN) (287 individuals), Green-thighed Parrot *Pionites leucogaster* (VU) (510 individuals), and Blue-eyed Cockatoo *Cacatua ophthalmica* (VU) (100 individuals).

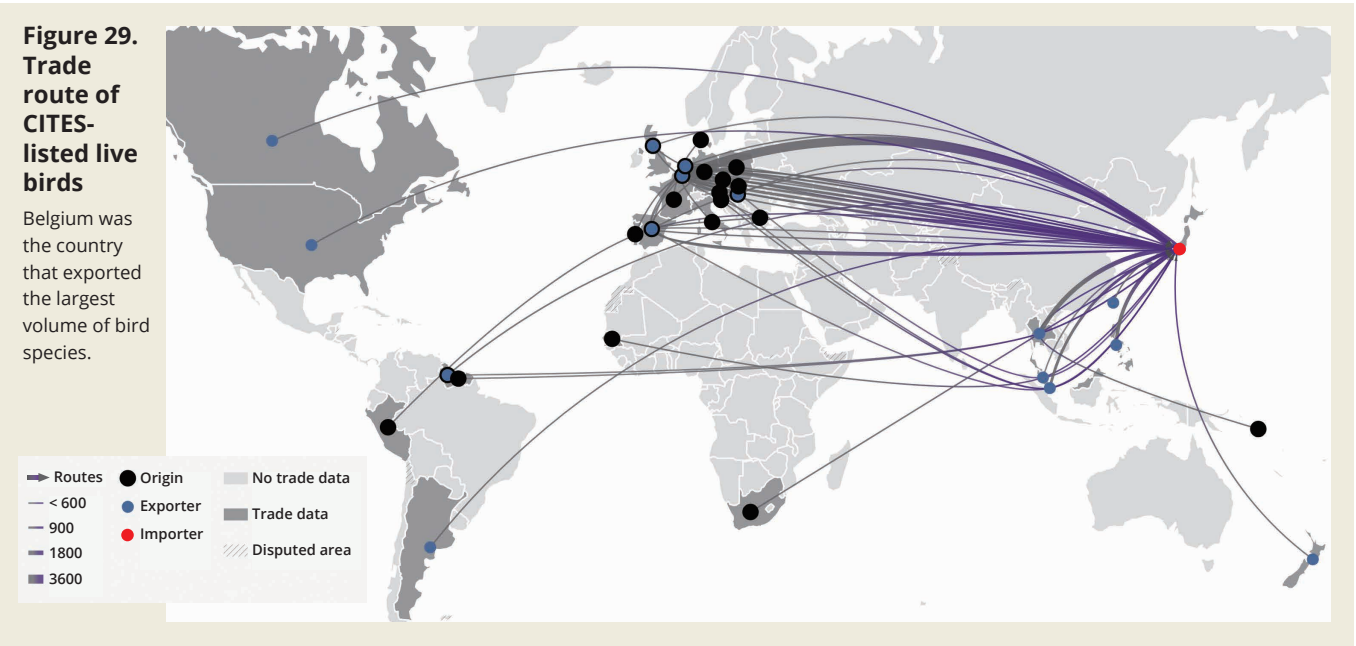


Green-thighed Parrot *Pionites leucogaster*
Occurs in Latin America, it is assessed as VU in the IUCN Red List. Japan imported 510 individuals mostly from Belgium and the Philippines (total of 432 individuals).

Exporter and Origin Countries

The largest exporter of CITES-listed bird species to Japan was Belgium, accounting for over 40% of the total import volume (4,914 out of 11,972 individuals), followed by Thailand (1,923 individuals), the Philippines (1,438 individuals), and Singapore (1,132 individuals), accounting for 78.6% of the total volume when aggregated (Fig. 29). Belgium exported not only the largest volume but also the highest number of species (139 species).

A total of 1,749 individuals of the total import quantity had identified origin countries, with the Netherlands and Germany being the major origin countries, exporting 793 and 313 individuals each, the majority of which went to Belgium before being re-exported to Japan.



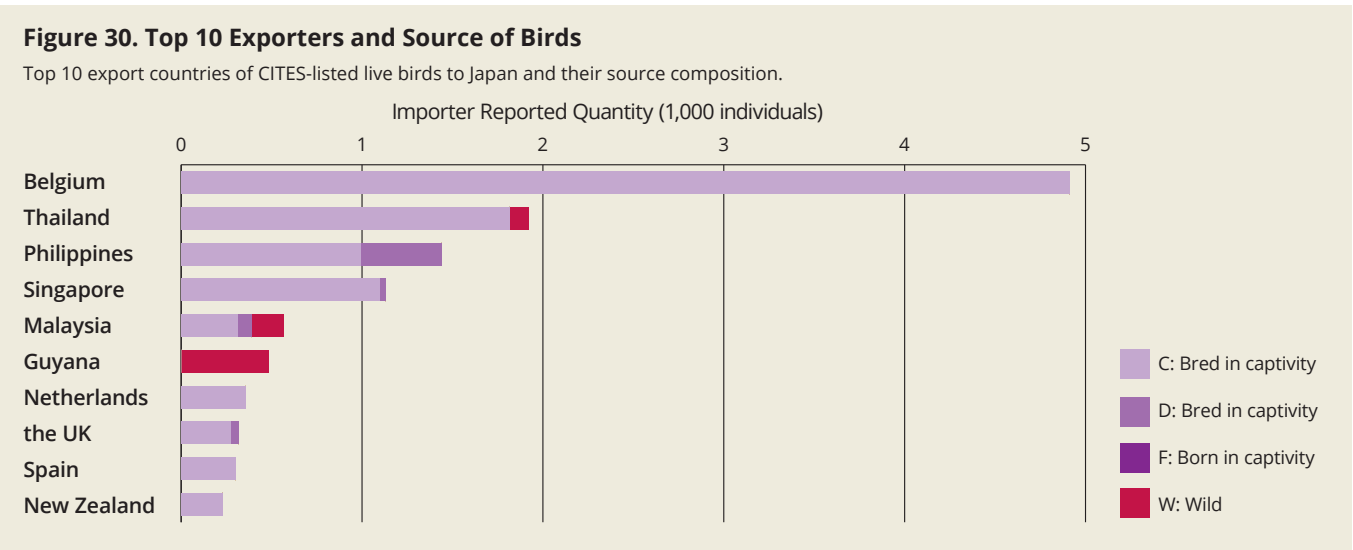
Major Exporters and Sources

Among the top 10 countries with the largest quantity, most of the individuals exported from European countries, including the 4,914 individuals exported from Belgium, were captive bred (C; 5,842 out of 5,890 individuals, accounting for 99.1%), whereas countries in Asia included 560 individuals of Appendix I animals bred in captivity and 284 wild-sourced individuals.

A total of 14 unique species with 485 individuals (332 parrots Psittacidae and 153 toucans Ramphastidae) from Guyana were all wild sourced (Fig. 30).



Toco Toucan *Ramphastos toco*
It is widely distributed across Latin America and Japan imported 57 wild sourced individuals of this species from Guyana between 2020-2024.



Significant Features

Endangered Species from Countries in East Asia

The individuals exported from countries in East Asia contained several threatened species. Of the 1,055 individuals of Sun Parakeet (EN), 481 were exported from Thailand, followed by the Philippines (280 individuals) and Singapore (163 individuals). Around 80% of Gray Parrot (EN) were exported from the Philippines (424 individuals), followed by Malaysia (78 individuals) and Singapore (29 individuals).



Sun Parakeet *Aratinga solstitialis*
Species assessed as EN in the IUCN Red List. Japan imported 1,055 individuals between 2020 and 2024 mostly from countries in Asian.

All Endemic Species Exported from Non-native Countries

Of the 199 identified bird species, 35 were endemic (1,894 individuals). Their range states were Australia with 19 species, followed by Indonesia with seven species, Brazil with four species, and Papua New Guinea, New Zealand, Venezuela, South Africa, and the Philippines with one species each.

All 19 endemic Australian species (total of 1,296 individuals) were exported from countries other than Australia, where all but one endemic species were exported exclusively from European countries (Galah *Eolophus roseicapilla* was exported from countries in Asia, New Zealand, and the US).

Seven endemic bird species (336 individuals) of Indonesia were also exported by countries other than Indonesia itself, where four species were mainly exported from European countries and the other three species (Violet-necked Lory *Eos squamata*, Chattering Lory *Lorius garrulus*, and Ornate Lorikeet *Trichoglossus ornatus*) were exported exclusively from the Philippines and Singapore. One species, namely Dwarf Sparrowhawk has no CITES record where Indonesia is identified as export or origin country. The endemic species of Indonesia are strictly protected under the national law (Bea Cukai Langsa, 2026), making it impossible to hunt, trade, or even possess the species listed in its nationally protected species list.

Brazil’s four species were exported from the Philippines, Belgium, and Singapore.

Invasiveness

Of the 199 CITES-listed bird species Japan imported during 2020–2024, 17 were found in at least one dataset: GRIIS, EICAT, or CABI-HST (Supplementary Document Table 7). CABI-HST identified five species, namely, Gray Parrot, Orange-winged Amazon *Amazona amazonica*, Blue-crowned Hanging Parrot *Loriculus galgulus*, Common Barn Owl *Tyto alba*, and Great Horned Owl *Bubo virginianus*, all of which had import volume greater than 60 individuals.



Common Barn Owl *Tyto alba*
It is one of the common owl species you can find advertised online or displayed at so called “animal cafes” in Japan.

2.4 Illegal Trade

Interceptions at the Japanese Border

Between 2020 and 2024, the Japanese customs intercepted at least 20 incoming incidents⁸ involving 1,209 individuals of 26 unique taxa of CITES-listed live or dead reptiles, amphibians, mammals, and birds (Table 8). Reptiles had the largest quantity (667 individuals), followed by amphibians (483 individuals), mammals (43 individuals), and birds (16 individuals). Only 375 individuals (31%) were identified at species level, and other individuals were recorded at higher taxa. All but three taxa were listed in CITES Appendix II⁹.

Modus Operandi and Case Management

A total of 14 out of 20 cases were intercepted from commercial cargo flights, where 97.2% of all individuals (1,176 individuals) were found, whereas the remaining six cases were found from personal luggage. The reasons for interception were a missing export permit for all six cases found in luggage and nine cases of commercial cargo, missing information on the permit for three cases of cargo, and one each for the expiration of permit and discrepancy in the import quantity on the permit for the remaining two cargo cases.

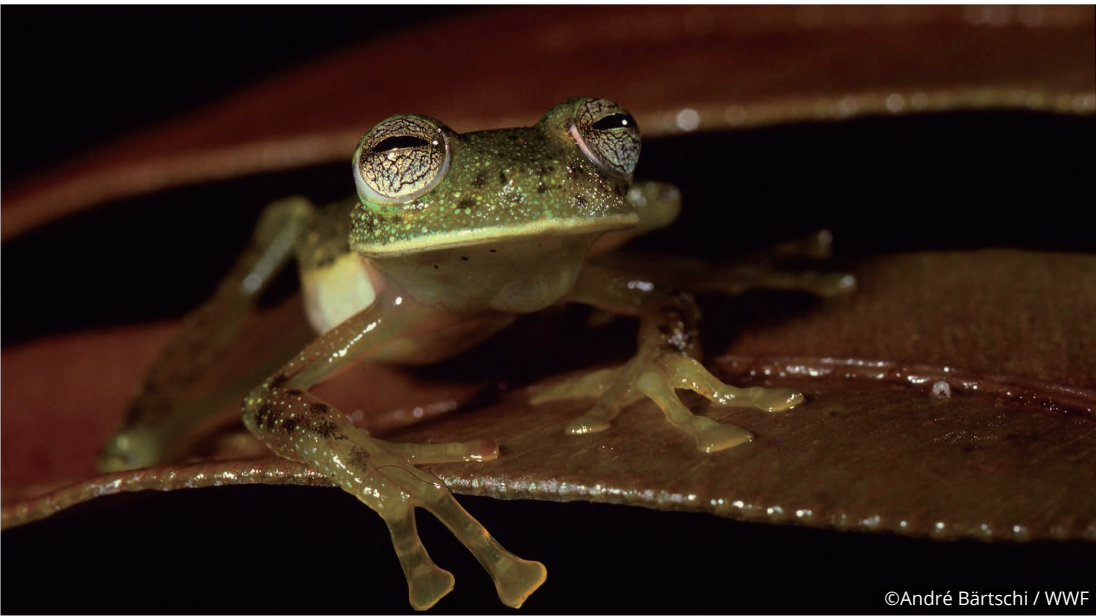
Of the 14 cases intercepted from cargo, eight eventually passed customs clearance, four ended in voluntary relinquishment of the consignment, and two ended in disposal of the consignment. Five out of six cases of intercepts from passenger luggage were forwarded to the police for further investigation, and the remaining one case ended in voluntary relinquishment of the consignment.

Exporters/Origins and Taxonomic Patterns

Frogs and Iguanas from Nicaragua

Although only one intercepted case came from Nicaragua, the incident had the highest number of intercepted individuals per case with a total of 341 individuals from four taxa, including 111 Spiny-tailed Iguana *Ctenosaura spp.*, 100 Red-eyed Tree Frog, 80 *Oophaga oophaga spp.*, and 50 poison dart frog *Dendrobatidae*, which were found at Tokyo Customs Narita Air Cargo Sub-Branch for not accompanying an export permit. The case ended as voluntary relinquishment of the individuals (case No. 4).

A cargo of 250 individuals of frogs (100 Red-eyed Tree Frog, 100 glass frogs, and 50 poison dart frogs) exported from the US also originated from Nicaragua. The consignment was intercepted at Tokyo Customs Narita Air Cargo Sub-Branch for missing information on the export permit. The case eventually passed customs clearance (case No. 15).



A Glass frog in a national park in Peru. Glass frogs are one of the most sought-after amphibian families among hobbyists. The seizure records were not identified at species level but there are species in this family that are highly threatened and live only in a restricted area in Latin America.

8. There was an interception of 90 genera of *Graptomys spp.* on February 4, 2024, exported from the US in cargo. However, the unit for this interception was “pieces” and not the number of specimens. Therefore, it was not included in this report.
9. Florida softshell turtle *Apalone ferox* is now listed in Appendix II, but it was previously listed in Appendix III when the incident took place: case number 5.

Lizards and Snakes from Africa, Asia, and the US in Cargo

A total of 66 individuals of Ornate Mastigure *Uromastyx ornata* from Egypt (case No. 20), 170 individuals of the same genus spiny-tailed lizard *Uromastyx spp.* from Sudan (case No. 9), 150 individuals of lizards from Nepal (case No. 3), 51 Pacific Boa *Candoia carinata*¹⁰, 19 Solomon Island Spiny Monitor *Varanus spinulosus* from Solomon Islands (case No. 19), and 58 pythons (case Nos 8 and 10) were all found from commercial cargo.

Mammals and Birds from Thailand with a High Rate of Case Continuation

Thailand was the exporter country identified with the highest number of incidents, accounting for seven (total of 66 individuals, case1, 6, 11, 14, 16, 17 and 18). Of these seven incidents, six involved either mammals or birds (case Nos 1, 6, 11, 14, 16, and 17), all found from passenger luggage except one (case No. 6). Most mammals were primates (40 out of 43 individuals, 93%), including the Common Marmoset *Callithrix jacchus* (six individuals), galagos *Galago spp.* (two individuals), and Golden-handed Tamarin *Saguinus midas* (one individual), whereas the other individuals were simply labelled as monkeys. All five cases intercepted from passenger luggage were forwarded to the police for further investigation. All mammals and reptiles identified at the species level were not native to Thailand.

Common Marmoset
Callithrix jacchus
Import of primate species is highly restricted in Japan yet smuggling attempts involving this species have been reported many times in the past.



10. Japanese names used to describe the species were incorrect or ambiguous, therefore “カタリーナパシフィックボア” and パシフィックツリーボア were combined as Pacific Boa in this case.

Table 8. Interceptions of CITES-listed species at the Japanese customs during the period 2020–2024

Case no.	a. Date of incident b. Found from c. Reason of interception d. How it was processed	Exporter and Origin country if identified	Scientific name	Common name	Number of seized individuals
1	a. March 10, 2020 b. Luggage c. Missing export permit d. Case continued	Thailand	<i>Athene noctua</i>	Little Owl	5
			<i>Buteo japonicus</i>	Eastern Buzzard	2
			<i>Callithrix jacchus</i>	Common Marmoset	6
			<i>Galago spp.</i>	Galago	2
			<i>Gracula religiosa</i>	Common Hill Myna	3
			<i>Saguinus midas</i>	Golden-handed Tamarin	1
2 ¹¹	a. August 16, 2020 b. Cargo c. Missing export permit d. Cleared custom	Cameroon	<i>Chamaeleonidae</i>	Chameleon	24
3	a. January 20, 2021 b. Cargo c. Missing export permit d. Disposal	Nepal	<i>Sauria</i>	Lizard	150
4	a. March 27, 2021 b. Cargo c. Missing export permit d. Voluntary relinquishment	Nicaragua	<i>Agalychnis callidryas</i>	Red-eyed Tree Frog	100
			<i>Ctenosaura spp.</i>	Spiny-tailed Iguana	111
			<i>Dendrobatidae</i>	Poison Dart Frog	50
			<i>Oophaga spp.</i>	Oophaga	80
5	a. July 22, 2021 b. Cargo c. Missing export permit d. Voluntary relinquishment	Taiwan	<i>Apalone ferox</i>	Florida Softshell Turtle	5
6	a. October 06, 2021 b. Cargo c. Missing export permit d. Cleared custom	Thailand	<i>Civettictis civetta</i>	African Civet	3
7	a. October 19, 2021 b. Cargo c. Missing export permit d. Cleared custom	Italy (Togo as the origin)	<i>Pythonidae</i>	Python	1
8	a. November 11, 2021 b. Cargo c. Expiration of the permit d. Cleared custom	USA	<i>Pythonidae</i>	Python	57
9	a. November 28, 2021 b. Cargo c. Missing export permit d. Cleared custom	Sudan	<i>Uromastyx spp.</i>	Spiny-tailed Lizard	170
10	a. March 21, 2022 b. Cargo c. Discrepancy in the permit d. Disposal	USA	<i>Pythonidae</i>	Python	1

11. This case included 30 individuals of Emperor scorpion *Pandinus dictator*, but they are excluded from the table as the taxa are out of the scope of this report.

Case no.	a. Date of incident b. Found from c. Reason of interception d. How it was processed	Exporter and Origin country if identified	Scientific name	Common name	Number of seized individuals
11	a. June 03, 2022 b. Luggage c. Missing export permit d. Case continued	Thailand	<i>Primates</i>	Monkey	21
12	a. January 13, 2023 b. Cargo c. Missing export permit d. Voluntary relinquishment	South Korea	<i>Gekkota</i>	Gecko	3
13	a. January 19, 2023 b. Cargo c. Missing export permit d. Voluntary relinquishment	Malaysia (Indonesia as the origin)	<i>Ptyas mucosa</i>	Oriental Rat Snake	5
14	a. August 02, 2023 b. Luggage c. Missing export permit d. Case continued	Thailand	<i>Cacatuidae</i>	Cockatoos	4
			<i>Copsychus malabaricus</i>	White-rumped Shama	2
15	a. September 09, 2023 b. Cargo c. Missing information on the permit d. Cleared custom	USA (Nicaragua as the origin)	<i>Agalychnis callidryas</i>	Red-eyed Tree Frog	100
			<i>Centrolenidae</i>	Glass Frog	100
			<i>Dendrobatidae</i>	Poison Dart Frog	50
16	a. November 12, 2023 b. Luggage c. Missing export permit d. Case continued	Thailand	<i>Primates</i>	Monkey	6
17	a. December 04, 2023 b. Luggage c. Missing export permit d. Case continued	Thailand	<i>Primates</i>	Monkey	4
18	a. December 13, 2023 b. Luggage c. Missing export permit d. Voluntary relinquishment	Thailand	<i>Geoemyda spengleri</i>	Black-breasted Leaf Turtle	7
19	a. August 28, 2024 b. Cargo c. Missing information on the permit d. Cleared custom	Solomon Islands	<i>Candoia carinata</i>	Pacific Boa	51
			<i>Varanus spinulosus</i>	Solomon Island Spiny Monitor	19
20	a. October 06, 2024 b. Cargo c. Missing information on the permit d. Cleared custom	Egypt	<i>Uromastyx ornata</i>	Ornate Mastigure	66

Cases Intercepted Outside Japan in which Japan was the Possible Destination

Apart from the cases intercepted at the Japanese border, at least six cases of wild live or dead reptiles, amphibians, mammals, and birds were intercepted outside Japan during the period 2020–2025¹².

Case 1 Colombia

This case was intercepted at El Dorado Airport in Bogota, Colombia, in March 2020. A parcel containing 2,500 Amazon Matamata *Chelus fimbriata* (150 were already dead at the point of discovery) bound to the US and Japan was found by a sniffer dog (BBC, 2020; Robin des Bois, 2020).

Case 2 Canada

The second case happened at Vancouver International Airport in December 2020, where 50 parrots and toucans (family Ramphastidae, one toucan was found dead), including Green Aracari *Pteroglossus viridis* and Black-necked Aracari *Pteroglossus aracari*, heading to Japan from Guyana transiting in Canada, were intercepted as the consignment was infringing Canadian law to prevent infectious diseases. Although it did not have a proper permit, the parcel eventually continued its journey to Japan (Weisgarber, 2021; Robin des Bois 2021).

Case 3 Hungary

The third case took place in Hungary, where a man who is said to have sent European reptiles to Japan and provided fake certificates to the future owners got arrested at his home. The police found a total of 73 herpetofauna species, including the European pond turtle *Emys orbicularis*, Milos wall lizard *Podarcis milensis*, painted frog *Discoglossus pictus*, and grass snake *Natrix natrix* (Robin des Bois, 2022).

Case 4 Mexico

The fourth case was intercepted at Mexico City International Airport on February 21, 2025. A total of 137 live animals (121 turtles and 16 frogs) were found in suitcases destined for Narita International Airport. The confiscated individuals included 53 Eastern Box Turtle *Terrapene carolina*, 53 Narrow-bridged Musk Turtle *Claudius angustatus*, 10 Cora Mud Turtle *Kinosternon cora*, three Spotted Box Turtle *Terrapene nelsoni*, two Cuatro Cienegas Slider *Trachemys taylori*, and 16 Spiny-headed Treefrog *Triprion spinosus* (Gobierno de Mexico, 2025a).

Case 5 Mexico

The fifth case was also intercepted at Mexico City International Airport on May 19, 2025. A man known as “Gustavo N,” a notorious wildlife trafficker who has been arrested in other countries (Ecuador and New Zealand) for smuggling attempts in the past was arrested before boarding a flight destined to Japan carrying two suitcases containing 299 reptile individuals (141 Abro-nia *Abronia spp.*, 61 Horned Lizard *Phrynosoma spp.*, 26 *Xenosaurus spp.*, 24 Mexican Alligator Lizard *Barisia spp.*, 20 Spiny Lizard *Sceloporus spp.*, 10 Helmeted Iguana *Corytophanes spp.*, nine Kingsnake *Lampropeltis spp.*, four Basilisk *Basiliscus spp.*, three *Laemantcus spp.*, and one *Spilotes spp.*) (Gobierno de Mexico, 2025b).

Case 6 Thailand

The sixth case was intercepted at Suvarnabhumi Airport in Thailand in July 2025. A 53-year-old Japanese man was arrested for concealing various species of reptiles in his suitcase, including two Indian Star Tortoise *Geochelone elegans*, two Blue-speckled Tree Monitor *Varanus macraei*, and 21 water turtles contained in six snack boxes (Wipatayotin, 2025).

12. The incidents intercepted in 2025 are included in this section, as reviewing the latest incidents provided additional insights into this study.

3 Discussion

From reviewing the overview of Japan’s overall import and CITES-listed species trade data of live animals between 2015 and 2024 using Comtrade, Trade Statistics of Japan, and CITES, Japan remains the most significant consumer country of wild animals. Overall, Japan’s import quantity of herpetofauna species was significant even among other major importer countries, especially after 2020, with 407 reptile taxa and 74 amphibian species listed in CITES imported during the period 2020–2024, including 150 threatened species. With regard to the import of mammals, the import quantity of species traded in the domestic pet market was not high, but the imported species often fetched high prices in the market. For bird species, the number of imported CITES-listed species showed an increasing trend after 2023, importing numerous species from countries especially in Europe and Asia.

Furthermore, by closely examining Japan’s import data of CITES between 2020 and 2024 from different angles combining distribution information, level of extinction to threat, legislations in native countries, domestic market surveys, risk of invasiveness, and illegal trade, some notable concerning aspects have emerged.

Imports of Various Species from the Wild

Captive-bred individuals accounted for the highest proportion of all the imported live CITES-listed animals for the examined focal taxa. However, the study found that the species/taxa exported from certain countries were predominantly sourced from the wild, indicating that Japan’s demand is putting direct harvesting pressure on species with little or no established stable captive breeding schemes.

The identified major exported countries and taxa sourced exclusively from the wild were Sauria and amphibian species from Madagascar, Serpentes and bird species from Guyana, and Sauria species from the Democratic Republic of Congo.

In particular, endemic chameleon, gecko, and frog species exported from Madagascar are of great concern, as the island has a unique landscape on earth, and harvesting wild specimens could be detrimental to the survival of the species if not well managed. CITES imposed a mass scale export ban on Madagascar on all but four species of chameleon back in 1994 as many of the endemic species were exploited to meet international pet demand (Carpenter et al., 2005), but the trade of most of the species was resumed after around 2010 as sustainable trade was thought to be possible. However, in recent years, many chameleon species have been illegally hunted in the protected area of the Island, and the demand in the inter-

national pet trade, including Japan, is fuelling the illicit activity (Kessler, 2021). Although the evidence is anecdotal and many of the endemic species of Madagascar Japan imported in recent years were not necessarily threatened species, many of the IUCN Red List assessments were obsolete, with most of them having the latest assessment from 2011. Moreover, information regarding non-detriment findings (NDF), a process required for exporter countries of species to assess the potential risks of trade on species viability, of the identified species could not be found online, making it difficult to assess how the demand for the species affects their population. Although many guidelines on how to prepare NDFs have been established, no binding power guarantees the level of robustness of the output. According to the CITES Report of the Secretariat on NDFs examining 36 publicly available NDFs, only 17% (6/36) fully considered the historical and current patterns of harvest and mortality (CITES, 2020).

As species of Madagascar are known to be susceptible to international market demand (Cash et al., 2025), ensuring the sustainability of harvesting wild populations with more data before the international trade of precious species only present in specific regions starts decimating its population is essential.

Endemic Species Protected in Native Range Traded Internationally

Based on CITES trade data, Japan has imported numerous endemic species of reptiles (172 species), amphibians (40 species), and birds (35 species) from countries across the globe, many of which have been identified as protected in their native range (e.g., endemic species of Australia, China, Mexico, Viet Nam, Peru, and Indonesia). Moreover, some endemic species had no single historical CITES record of being legally exported from their native ranges.

The mechanism by which the endemic species currently protected under the domestic laws of their native range got out of the native range remains unknown. The species might have been exported before they became subject to their domestic regulations. As it is impossible to track down the exact origin of the protected species traded internationally, the possibility of laundering or contravention of domestic laws is almost impossible to be substantiated.

However, possible laundering of endemic species has been previously documented, including the laundering of Viet Nam’s endemic species into Japan (Janssen & Indenbaum, 2019) and Indonesia’s bird species into the Philippines (Sy et al., 2022), a concerning pattern observed in this study. As a

recent example, Galápagos Land Iguana *Conolophus suberistatus* (VU), a species only native to Galapagos Island in Ecuador, has been imported into Japan from Uganda several times between 2017 and 2023. However, as the species is protected under a strict law in Ecuador that prohibits the exploitation of the species, it is theoretically impossible that the species are traded internationally. It is suspected that the individuals were illegally taken out of Galapagos Island, smuggled into Uganda, and eventually laundered into “consumer countries,” including Japan (IFAW, 2024).

In the latest CITES Conference of Parties (CoP 20) held in 2025, several important decisions related to endemic species were made, including encouraging countries issuing or accepting permits to consult with the country of origin of the endemic species when there is any remaining uncertainty about the legal origin of the specimens, breeding stock, parental stock, or founder stock (CITES, 2025), highlighting the significance of the issue at the global level.

As a country that imports numerous species protected in their native ranges, not necessarily directly from native ranges but through non-range states, Japan should enhance cooperation with major exporters and origin countries of the species to verify the veracity of permits issued by immediate exporters and to check how the parental stock of the species arrived in the exporter countries to ensure the traded specimens have legal origin.

Mismatch Between CITES Data and Market Surveys

A comparison between CITES import trade data and domestic market survey data revealed mismatches between the CITES records, such as species advertised with no official import record (Borneo earless monitor, Maasai girdled lizard, Balsas spiny-tailed iguana, Oaxaca Spiny-tailed Iguana, Fierenana Leaf-tailed Gecko, and Zhou’s Leopard Gecko) and species advertised with records for the source code that did not match the import records (Biak Tree Monitor).

For species with no import records, CITES import records may still not be available to the public (e.g., imported in 2025), or the individuals sold at the market were imported pre-conventionally. Coupled with the fact that many of the individuals advertised at the market often did not have complete information regarding the source, date of birth, date of import, and origin/exporter country, concluding the illegality of the source of the individuals is difficult.

As for the species sold with records that did not match the import records, it might be due to a reporting error to the CITES, or the individuals advertised online were imported two decades ago. However, it has been previously reported that many species exported from Indonesia under the source code bred in captivity (C) or born in captivity (F) were laundered individuals taken from the wild, including Varanus species (Lyons & Natusch, 2011; Nijman & Shepherd, 2009, 2015).



Galápagos Land Iguana *Conolophus suberistatus*

Ecuador’s endemic species only found on the Galápagos Islands. Despite this limited natural distribution, Japan has previously imported specimens from Uganda, raising concerns that the founder stock may have been obtained illegally.

In addition, different monitor lizards, namely, Blue-speckled Tree Monitor *Varanus macraei*, were advertised in Japan as wild-sourced in Indonesia, although the species is protected in Indonesia (Wildview Analytics & WWF-Japan, 2025) and the possibility of laundering was raised, leaving concern whether the individuals imported under the source codes C or F came from sustainable breeding farms or were really sourced from the wild. A considerable amount of studies have examined the laundering of wild-sourced specimens as captive-bred individuals for other taxa, including mammalian, bird, and amphibian species including those identified in this study (Davies et al., 2024; Edmonds et al., 2026; Warne et al., 2023; Scotland & Weeden, 2025), raising concerns over the species imported from Japan as captive-bred individuals.

In theory, as exporter countries are required to make legal acquisition findings (LAFs), a critical mechanism for ensuring that specimens are legally acquired, including proving that the specimens were not acquired in contravention to the national laws of range states, the trade of protected species must be sourced legally before issuing export permits. However, the level of implementation of LAFs is largely varied (Korwin et al., 2019; TRAFFIC & Fauna and Flora International, 2019) because of the non-binding nature of how each country makes LAFs.

To ensure the legality of individuals imported into and traded in Japan’s domestic market, it is crucial for all stakeholders in the trade chain, including but not limited to government authorities of exporter, origin and importer countries, and wholesalers and retailers, to record, report, check, and disclose information on traded specimens accurately and authentically at the species level. The reality is currently far from achieving this goal, but this process is essential for developing a traceability system that would help prospective consumers make informed decisions and help monitor and ensure the sustainability of the trade of wildlife species in the long run.

CITES Covering Less Than the Majority of Reptiles and Amphibian Imports

A comparison of the overall import quantity and CITES import quantity showed that the CITES import quantity of reptiles and amphibians accounted for 30%–40% of the majority of the overall import quantity. Moreover, around 50% of reptile species and 75% of amphibian species recorded in the market survey were not listed in CITES.

Non-CITES-listed reptile species included 24 threatened species, including Viet Nam’s endemic species black-eyed bent-toed gecko *Cyrtodactylus nigricularis*, Thailand’s endemic species Sam Roi Yot leaf-toed gecko *Dixonius kaweesaki*, and New Caledonia’s endemic species tough-snouted giant gecko *Rhacodactylus trachycephalus* (all CR). Amphibian species included Ecuador’s endemic species Rio Pescado stubfoot toad *Atelopus balios* (CR), Turkey’s endemic species Baran’s newt

N. barani (EN), and Japan’s endemic species *C. ensicauda* (VU).

Numerous wildlife species not listed in CITES were traded in the Japanese domestic market (Drinkwater et al., 2021; Kitade & Wakao, 2022; Wakao et al., 2018). Although dozens of reptile and amphibian species traded in international pet markets have been newly listed in CITES in the past several years (WCS Colombia, 2025), the result from this study indicates that CITES regulation is still far from extensively covering traded species that are under threat of extinction, a concern that is not unique to Japan but also presented at the international level (Marshall et al., 2025).

The species described recently or with unusual, rare characteristics are particularly in high demand, but they do not get regulated until the species have already been traded heavily as they often lack data from monitoring (Hughes et al., 2021; Marshall et al., 2020). Thus, the major exporters and consumer countries must cooperate to monitor and share data of traded wildlife species to identify species that could benefit from regulations, including but not limited to CITES and domestic laws.

Interceptions of Large Quantities of Reptiles and Amphibians

From the review of interceptions of CITES-listed species at the Japanese border, 14 out of 20 cases were intercepted from air cargo transported via commercial flights. They often involved a large quantity of reptile and amphibian species, but none of the cases intercepted from cargo were brought to the police for further investigation probably because official permits were submitted following the interceptions, leading to eventual custom clearance. However, four out of 14 cargo cases ended in voluntary relinquishment of the consignments, including the one exported from Nicaragua that involved 341 reptile and amphibian individuals, the highest number of individuals recorded among 20 cases. As people importing large quantities of animals likely have incentives to trade them for commercial purposes, the fact that they did not go through further investigations is concerning.

Various species of reptiles and amphibians in large quantity were also seized from smuggling attempts busted in other countries before reaching Japan. A notable case was the one intercepted in Mexico in May 2025, in which a man, known as a notorious international trafficker, was arrested for concealing a total of 299 reptiles and amphibians in his suitcases before boarding a flight destined to Japan. This case exemplifies how Japan is likely seen as a country with a lucrative wildlife market even among traffickers based outside Japan, indicating the possible existence of a criminal network in Japan that led to his illicit activity.

Therefore, conducting further investigations on cases involv-



ing large quantities of wildlife species that are known to be traded in Japan in collaboration with enforcement authorities, as well as countries identified as exporters of smuggling attempts, is warranted to crack down on illegal wildlife trade.

Seizures of Species that Could Threaten Public Health

Although the import quantity of mammals other than long-tailed macaque and bird species was not as high as that of herpetofauna species, the prevalence of primates and bird species in seized animals exported from Thailand is of high concern. Despite the establishment of strict laws restricting the importation of animals that may carry vectors of infectious diseases, there is an incentive to illegally import these animals that are known to fetch high prices (Leupen et al., 2024; Kitade & Naruse, 2020) to meet the domestic demand of people seeking to keep rare animals. At present, there is no legal system in Japan that requires industries that handle, sell, or display wildlife species to certify the legal acquisition of the animals unless they are protected under ACES. This is a loophole that allows for the smuggled individuals to be traded once they are within the border of Japan (Kitade & Naruse, 2020). For example, otters displayed at so-called “animal cafes” in Japan had biological traits of the wild otter population present in the hotspot with rampant poaching in Thailand (Fujihara et al., 2025), indicating possible cases of smuggling. Furthermore, several types of pathogenic bacteria were found in animal cafes that allow visitors to interact with various kinds of wild animals (WWF Japan & Graduate School of Veterinary Medicine Hokkaido University, 2025), including species found from seizure cases in this study, such as Common Marmoset and Galagos. As smuggled animals do not undergo necessary quarantine, individuals carrying pathogens of zoonotic diseases

might get into the hands of the public unnoticed. For example, avian influenza A/H5N1 virus has been found in individuals of Crested Hawk-eagle *Spizaetus nipalensis* smuggled from Thailand and seized at Brussels International Airport (Van Borm et al., 2005). Furthermore, animals subjected to severe stress during trafficking may experience immunosuppression and increased pathogen shedding, thereby elevating the risk of zoonotic disease transmission (Hing et al., 2016; Rush et al., 2021).

As long as the demand for rare animals in Japan remains and no legal system that guarantees the legal acquisition of wildlife species within the Japanese border or regulation that assures adequate distance between people and wildlife species has been established, eliminating public health risk will unlikely be achieved.

Reptiles with Possible Risks of Invasion Imported on Massive Scale

A massive import of Reeves’ Turtle (97,412 individuals), the species that were recorded with the highest import quantity of all the identified CITES-listed species during the period 2020–2024, shows an emerging trend that requires attention, especially from the aspect of biological invasion as the species is known to be present in extensive areas of Japan and to cause genetic disturbance with Japanese native freshwater turtle species (Suzuki, 2024). This species is a freshwater turtle commonly kept as pets in Japan, and dozens of individuals were found from a quick search on the website that allows keepers of animals to post information about their “lost pets” (<https://lostpet.jp/>). As Japan has a history of importing massive quantities of Red-eared Slider *Trachemys scripta elegans*, which was once widely kept as pets in Japan after around 1950s but became a highly invasive species observed elsewhere in Japan (NIES, 2025) and is now designated as conditionally designated invasive alien species, it raises concern if Japan is on the path to repeat the same mistake with Reeves’ Turtle.

Other species imported in large quantities, such as Ball Python (61,723 individuals), Veiled Chameleon (19,449 individuals), Savannah Monitor (16,842 individuals), and Common Green Iguanas (11,985 individuals), were also identified as invasive in other countries. As they are also commonly traded in Japan as pets, further investigation on the accurate prevalence of the species in Japan’s domestic market is necessary.

At present, Japan does not have a structured legislative process that initiates risk assessments of species invasiveness based on the import or trade volume of the species, although this information is vital when assessing the possibility of species being released into the wild. Therefore, developing a scheme that allows the collaboration of authorities, experts, and industries to conduct more structured risk assessments to quantify the actual risk of the establishment of non-native species in Japan is of great importance.

4 Conclusions

Obtaining a comprehensive understanding of international wildlife trade is not straight forward, given the sheer volume and variety of traded species and intricate nature of involving numerous countries and actors throughout the chain of trade. However, this report helped gauge the extent of the recent trend in Japan’s import of wild live animals of reptile, amphibian, mammal, and bird species, with unique findings that have not been reported before.

The trends in the quantity of imported live animal species and the monetary value of target taxa indicated Japan’s significant presence in international wildlife trade as a consumer country of herpetofauna species, especially after around 2021. Such trends also showed how diverse and outstanding Japan’s CITES-listed species import is, even among other major consumer countries, importing numerous species from various exporter and origin countries, forming an intricate trade network. This study also found that certain species from specific countries were predominantly sourced from the wild (e.g., Madagascar and Guyana), although the majority of the imported species were captive-bred individuals, thereby raising concerns over the harvest pressure on the species.

Moreover, Japan imported various protected endemic species from non-range states that have not been exported from native ranges. Verifying how protected species entered international trade is difficult, but the results showcased how “legal imports” might have involved illicit activity at the origin of the trade chain, reiterating the responsibility of importers to meticulously check the legality of the traded species throughout the trade chain, not just the immediate point of export.

The comparison of CITES records and domestic survey not only showed how the majority of trade species are not regulated under CITES but also found CITES-listed species that had no records of import into Japan. The confirmation of the legality or illegality of advertised individuals faced challenges because of the lack of a regulatory framework that requires industries to display the sources of wildlife species advertised for sale.

As a country with a significant and rapidly evolving wildlife market, it is essential for international bodies, government authorities of major exporter, origin and importer countries, industries, and experts to undertake further research, investigation, and continuous monitoring of wildlife species and take proactive measures to develop overarching protections that ensure legal and sustainable wildlife trade.

5 Recommendations



To address the problems identified in this study and move toward a society where people engage in wildlife trade in a more responsible and respectful manner, the following recommendations are addressed to the relevant stakeholders.

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CITES Secretariat

- **Make a comprehensive review of the level of implementation of the CITES resolutions and decisions addressing LAFs ([Resolution Conf. 18.7 \(Rev. CoP20\)](#)), NDFs ([Conf. 16.7 \(Rev. CoP17\)](#)), and trade in threatened endemic species ([Decisions 20.147 to 20.151](#)) to ensure that international trade of wildlife species is regulated effectively across different parties.**
- **Strongly encourage parties to involve third-party species experts in the process of making NDFs and reiterate the need to take an adaptive management stance and review and adjust the level of protection of their native species to ensure the sustainability of the trade.**

Export and Origin Countries

- **Export and origin countries should issue export permits only when there are robust reliable LAFs and NDFs, including authentic proof of captive breeding operations and assurance of the legality throughout the whole series of actions from where the specimen is brought from its source into the possession of an exporter, as well as confirmation that information on export permits matches the actual specimens that are about to be exported.**
- **Countries that export and use endemic species or native species sourced from the wild or have large-scale ranching operations should collaborate with species experts to conduct the latest species population trend considering the harvest pressure derived from the recent trade demand.**

Japanese Government and Enforcement Authorities

- Consolidate joint forces with countries that Japan frequently trades with to facilitate communication, thereby verifying the legality and sustainability of trade, and share information when the possibility of laundering or fraudulent use of permits is detected.
- Allow imports of CITES-listed species when the export permit is issued under species name and not at the genus level and submit all records in the annual report to CITES secretariat at species level.
- Develop a traceability system for the wildlife species traded in the domestic market, requiring industries engaged in breeding, selling, and displaying wildlife species to disclose export permits or certificates of origin when requested.
- Consider developing a monitoring system that collects Japan’s comprehensive import, export, and domestic trade data of wildlife species, including species not listed in CITES (e.g., LEMIS in the US).
- Modify legal frameworks to promote the systemic assessment of the invasion risk of the species imported or traded in large quantity.
- Japan Customs should record cases of interceptions at species level to allow for more accurate analysis and monitoring of the intercepted species.

Industries

- Display sources, exporters, and origins on the advertised individuals to provide accurate information to the intended buyers and facilitate making responsible decisions.
- Consider taking a central role in developing a traceability system that incorporates all the information pertaining to the chain of custody of the species they keep, sell, and display to ensure the legality of the transactions.
- Inform prospective consumers on the possible risks of invasiveness and zoonotic diseases of the species they keep, sell, and display to minimize the risk of public unintentionally spreading the biological risks.
- Actively avoid importing species that are protected in their native ranges. Unclear origin of the specimens could put harvest pressure on the local populations of the species.
- Develop a system to identify and exclude from the market industries that engage in any illicit activities, including but not limited to actions that contravene domestic, foreign, or international laws and regulations.

Prospective Consumers

- Check if the species is appropriate to keep using tools such as Pet Guide. Gather information on the basic requirements to keep the animals in an appropriate environment from a biological and animal welfare standpoint and consider the risk of invasiveness and public health concerns. Moreover, ask the source and legality of the advertised individuals to the retailers if not provided.

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Supplementary Document: Beyond Consumption: Japan's Import of Live Wild Animals

Table 1. CITES listed Testudines species exported from China to Japan (2020-2024).

Scientific Name	Common Name	IUCN Status	Range States	Importer Reported Quantity
<i>Mauremys reevesii</i>	Reeves' Turtle	EN	[TW, ID, KR, KP, US, CN, JP, PW, CA, TL, HK]	81,415
<i>sMauremys mutica</i>	Yellow Pond Turtle	CR	[TW, CN, JP, VN, LA]	4,539
<i>Cuora mouhotii</i>	Keeled Box Turtle	EN	[BD, BT, CN, IN, MM, VN, TH, LA]	440
<i>Malaclemys terrapin</i>	Diamondback Terrapin	VU	[BM, US]	392
<i>Cuora flavomarginata</i>	Yellow-margined Box Turtle	EN	[CN, TW, JP]	290
<i>Cuora trifasciata</i>	Chinese Three-striped Box Turtle	CR	[CN, MM, VN, LA, HK]	216
<i>Geoemyda spengleri</i>	Black-breasted Leaf Turtle	EN	[CN, VN, LA]	190
<i>Sacalia quadriocellata</i>	Four-eyed Turtle	CR	[CN, VN, LA]	160
<i>Sacalia bealei</i>	Beale's Eyed Turtle	EN	[CN, HK]	160
<i>Cuora galbinifrons</i>	Indochinese Box Turtle	CR	[KH, CN, VN, LA]	160
<i>Mauremys nigricans</i>	Chinese Red-necked Turtle	EN	[CN, VN]	130
<i>Heosemys grandis</i>	Giant Asian Pond Turtle	CR	[KH, SG, MM, VN, TH, MY, LA]	100
<i>Cuora amboinensis</i>	Southeast Asian Box Turtle	EN	[BD, TL, BT, KH, ID, PH, SG, BN, IN, MM, VN, T...]	76
<i>Clemmys guttata</i>	Spotted Turtle	EN	[US, CA]	21
<i>Heosemys annandalii</i>	Yellow-headed Temple Turtle	CR	[KH, MM, VN, TH, MY, LA]	11

Table 2: CITES listed Madagascar's endemic Sauria species exported from Madagascar to Japan (2020-2024)

Taxon	Common Name	IUCN Status	Number of Imported Individuals (2020-2024)	Notes IUCN population description and price information from snapshot market survey
<i>Furcifer lateralis</i>	Carpet Chameleon	LC	1,317	Population is thought to be stable. Sold for between ¥21,890 – 32,000
<i>Uroplatus fimbriatus</i>	Common Flat-tail Gecko	LC	995	Population is severely fragmented. Sold for between ¥29,900 – 65,780
<i>Furcifer verrucosus</i>	Warty Chameleon	LC	684	Stable

Taxon	Common Name	IUCN Status	Number of Imported Individuals (2020-2024)	Notes IUCN population description and price information from snapshot market survey
				Sold for between ¥8,800 – 29,800
<i>Uroplatus sameiti</i>	-	LC	407	Unknown Sold for between ¥23,800 – 49,800
<i>Brookesia superciliaris</i>	Brown Leaf Chameleon	LC	353	Population is likely to be declining. Sold for ¥28,000
<i>Brookesia stumpffi</i>	Plated Leaf Chameleon	LC	309	Stable Sold for between ¥19,800 – 28,000
<i>Calumma malthe</i>	-	LC	272	Outside protected areas, the population is likely to be declining. It is mostly restricted to protected area. Sold for between ¥39,800 – 78,000
<i>Calumma brevicorne</i>	Short-horned Chameleon	LC	262	Decreasing. Sold for between ¥36,080 – 78,000
<i>Brookesia therezieni</i>	Permet Leaf Chameleon	LC	246	Population is thought to be both declining and severely fragmented. Sold for between ¥15,000 – 19,800
<i>Brookesia brygooi</i>	Brygoo's Leaf Chameleon	LC	240	Unknown Sold for between ¥25,000 – 32,780
<i>Brookesia thieli</i>	Domergue's Leaf Chameleon	LC	229	Population is severely fragmented and is likely declining. Sold for ¥12,000
<i>Calumma oshaughnessyi</i>	O'Shaughnessy's Chameleon	VU	223	Population is presumed to be both declining and severely fragmented. Sold for between ¥68,000 – 98,000
<i>Calumma nasutum</i>	Nose-horned Chameleon	LC	203	Population is likely declining. (No price information found)
<i>Calumma gastrotaenia</i>	Short-nosed Chameleon	LC	161	Unknown. Sold for ¥49,800
<i>Furcifer bifidus</i>	Sakorkita misy tandroka roa mirandalana	LC	157	Population is presumed to be both declining and severely fragmented. The species has since become highly desirable in international pet trade, and there is therefore the potential for illegal collection. Sold for ¥99,000
<i>Phelsuma kochi</i>	Koch's Giant Day Gecko	LC	138	Population is likely declining. Sold for between ¥9,218 – 22,000
<i>Furcifer antimena</i>	Antimena Chameleon	VU	127	The species is presumed to occur as a severely fragmented population. Sold for between ¥78,000 – 128,000
<i>Calumma boettgeri</i>	-	LC	124	Unknown. (No price information found)
<i>Furcifer campani</i>	Campan's chameleon	VU	120	Population is presumed to be both declining and severely fragmented. This species is of interest to the pet trade and used to be traded in high volumes.

Taxon	Common Name	IUCN Status	Number of Imported Individuals (2020-2024)	Notes IUCN population description and price information from snapshot market survey
				(No price information found)
<i>Furcifer willsii</i>	Wills' chameleon	LC	119	Population may be declining. (No price information found)
<i>Brookesia ebenau</i>	Northern Leaf Chameleon	VU	118	Population is presumed to be both severely fragmented and declining. Sold for ¥19,800
<i>Calumma guillaumeti</i>	-	LC	101	Population may be declining at low elevations where its forest habitat is under pressure. (No advertisements found)
<i>Brookesia betschi</i>	-	NT	71	Population is presumed to be declining; however, the population is not thought to be severely fragmented. (No advertisements found)
<i>Furcifer angeli</i>	Angel's Chameleon	LC	70	Stable (No advertisements found but record of individual keeper found)
<i>Palleon nasus</i>	Elongate Leaf Chameleon	VU	30	Population is presumed to be both declining and severely fragmented. (No price information found. The species likely entered Japanese retail market only very recently, possibly around the end of 2025)
<i>Furcifer petteri</i>	Petter's Chameleon	VU	28	Population is presumed to be both declining and severely fragmented. (No price information found)
<i>Calumma marojezense</i>	-	NT	19	Population is likely to be declining; however, the population is not thought to be fragmented. (No advertisements found)
<i>Brookesia griveaudi</i>	Marojejy Leaf Chameleon	NT	5	Population is thought to be both declining and severely fragmented. (No advertisements found)

Table 3: CITES listed Indonesia's endemic Sauria species exported from Indonesia to Japan (2020-2024).

Scientific Name	Common Name	IUCN Status	Identified Source Codes	Number of Imported Individuals	Notes
<i>Varanus melinus</i>	Banggai Island Monitor	EN	[C, F]	223	Endemic to Mangole and Taliabu islands, highly range-restricted species. Protected since 2018 in Indonesia.
<i>Varanus beccarii</i>	Black Tree Monitor	DD	[C, F]	151	No population information available for this species. However, they are known to be harvested for the pet trade. Not protected under national law.
<i>Varanus kordensis</i>	Biak Emerald Monitor	DD	[C, F]	99	Known only from Biak islands. It is under threat from the international pet

					trade.
<i>Varanus reisingeri</i>	Yellow Tree Monitor	DD	[C]	96	Known only from Misool island. It is potentially under threat from the international pet. Does not have protected status in Indonesia
<i>Varanus auffenbergi</i>	Auffenberg's Monitor	EN	[C, F]	94	Has a very restricted distribution range. It may be at risk from overcollection for the pet trade.
<i>Varanus yuwonoi</i>	Tricoloured monitor lizard	VU	[C, F]	41	Uncommonly encountered species in the wild with a much lower population density than other monitor species on Halmahera Island. High demand in international pet trade. Reports about captive breeding are unknown, thus laundering may be involved. Japan might be the top or in top3
<i>Varanus boehmei</i>	Golden Speckled Tree Monitor	DD	[C]	12	Known only from Waigeo island. Only two museum specimens are known. Captive breeding seems more feasible than for most other monitors, but there's demand for international pet market.
<i>Varanus obor</i>	Sago monitor	EN	[F]	3	Endemic to the island of Sanana. Ongoing habitat loss and harvest for the pet trade is putting pressure on its population. Very few have been recorded in CITES.

Table 4: Japan's import data of CITES listed Australian endemic reptile species which had not been exported from Australia before (2020-2024).

Scientific Name	Common Name	Export Countries in Japan's Import Records	Identified Source Code	Importer Reported Quantity
<i>Underwoodisaurus milii</i>	Thick-tailed Gecko	[DE, CZ]	[C, O]	634
<i>Nephurus wheeleri</i>	Banded Knob-tail	[DE, CZ]	[C, O]	189
<i>Nephurus amya</i>	Centralian Rough Knob-tail Gecko	[DE, NL, KR, CZ]	[C, O]	134
<i>Strophurus taenicauda</i>	Golden Spiny-tailed Gecko	[DE, CZ]	[C, O]	117
<i>Intellagama lesueurii</i>	Eastern Water Dragon	[DE]	[C]	106
<i>Nephurus levis</i>	Three-lined Knob-tail	[UA, CZ, CA]	[C, O]	97
<i>Egernia stokesii</i>	Gidgee Spiny-tailed Skink	[DE, NL, CZ]	[F, C, O]	91
<i>Tiliqua scincoides intermedia</i>	Common Bluetongue	[TH, TW, CZ]	[C]	74

<i>Strophurus williamsi</i>	Eastern Spiny-tailed Gecko	[CZ]	[C]	40
<i>Varanus kingorum</i>	Pygmy Rock Monitor	[DE, CZ]	[C]	38
<i>Varanus primordius</i>	Northern Blunt-spined Monitor	[DE, CZ]	[C]	31
<i>Strophurus ciliaris</i>	Northern Spiny-tailed Gecko	[DE, CZ]	[C]	24
<i>Strophurus spinigerus</i>	South-western Spiny-tailed Gecko	[CZ]	[C]	20
<i>Antaresia perthensis</i>	Pygmy Python	[DE, CZ, CA]	[C]	18
<i>Nephurus vertebralis</i>	Midline Knob-tail	[CZ, CA]	[C, O]	15
<i>Nephurus cinctus</i>	Northern Banded Knob-tailed Gecko	[NL]	[C]	15
<i>Tympanocryptis centralis</i>	Central Australian Earless Dragon	[CZ]	[C]	14
<i>Egernia depressa</i>	Pygmy Spiny-tailed Skink	[DE, KR, IT, CZ]	[C, O]	9
<i>Nephurus asper</i>	Rough Knob-tail	[NL, CZ]	[C]	8
<i>Tiliqua rugosa</i>	Shingleback Lizard	[NL, HK]	[O]	5
<i>Strophurus wellingtonae</i>	Western Shield Spiny-tailed Gecko	[DE, CZ]	[C, O]	5
<i>Nephurus stellatus</i>	Stellate Knob-tail	[DE]	[C]	5
<i>Egernia ephesus</i>	Eastern Pilbara Spiny-tailed Skink	[DE, CZ]	[C, O]	4
<i>Egernia hosmeri</i>	Hosmer's Spiny-tailed Skink	[DE]	[C]	4
<i>Saltuarius salebrosus</i>	Rough-throated Leaf-tail Gecko	[DE, CZ]	[F, C]	4
<i>Saltuarius wyberba</i>	Leaf-tailed Gecko	[CZ]	[C]	2
<i>Tiliqua nigrolutea</i>	Blotched Bluetongue	[NL]	[O]	2

Table 5: CITES listed reptile species Japan imported during 2020-2024 and found in datasets related to invasiveness.

Scientific Name	Common Name	Invasive Species Dataset	Importer reported quantity
<i>Mauremys reevesii</i>	Reeves' Turtle	[GRIIS]	97,412
<i>Python regius</i>	Ball Python	[GRIIS, CABI-HST]	61,723
<i>Chamaeleo calypttratus</i>	Veiled Chameleon	[GRIIS]	19,449
<i>Testudo horsfieldii</i>	NaN	[CABI-HST]	16,997
<i>Varanus exanthematicus</i>	Savanna Monitor	[GRIIS]	16,842
<i>Iguana iguana</i>	Common Green Iguana	[GRIIS]	11,985
<i>Gekko gekko</i>	Tokay Gecko	[GRIIS]	9,750
<i>Morelia spilota</i>	Carpet Python	[GRIIS]	6,847
<i>Varanus salvator</i>	Common Water Monitor	[GRIIS]	5,640

<i>Mauremys mutica</i>	Yellow Pond Turtle	[GRIIS]	4,539
<i>Trioceros jacksonii</i>	Jackson's Three-horned Chameleon	[CABI-HST]	4,331
<i>Varanus niloticus</i>	Nile Monitor	[GRIIS, CABI-HST]	3,136
<i>Morelia viridis</i>	Green Tree Python	[GRIIS]	2,836
<i>Chamaeleo senegalensis</i>	NaN	[GRIIS]	2,817
<i>Graptemys pseudogeographica</i>	False Map Turtle	[GRIIS]	2,780
<i>Phelsuma grandis</i>	Giant Madagascar Day Gecko	[GRIIS]	2,697
<i>Python brongersmai</i>	Brongersma's Short-tailed Python	[GRIIS]	2,283
<i>Epicrates cenchria</i>	Rainbow Boa	[GRIIS]	2,180
<i>Ctenosaura similis</i>	Common Spiny-tailed Iguana	[GRIIS, CABI-HST]	1,932
<i>Salvator merianae</i>	Black-and-white Tegu	[GRIIS]	1,477
<i>Malayopython reticulatus</i>	Reticulated Python	[GRIIS]	1,029
<i>Rhinoclemmys pulcherrima</i>	Painted Wood Turtle	[CABI-HST]	705
<i>Kinosternon scorpioides</i>	Scorpion Mud Turtle	[CABI-HST]	700
<i>Candoia carinata</i>	Pacific Boa	[GRIIS]	613
<i>Eunectes notaeus</i>	Yellow Anaconda	[CABI-HST]	442
<i>Tupinambis teguixin</i>	Black Tegu	[GRIIS, CABI-HST]	392
<i>Varanus indicus</i>	Mangrove Monitor	[GRIIS]	354
<i>Uromastyx acanthinura</i>	North-African Mastigure	[CABI-HST]	269
<i>Emys orbicularis</i>	European Pond Turtle	[GRIIS]	200
<i>Tiliqua scincoides</i>	Common Bluetongue	[GRIIS]	156
<i>Malayemys subtrijuga</i>	Mekong Snail-eating Turtle	[CABI-HST]	109
<i>Boa constrictor</i>	Red-tailed Boa	[GRIIS]	106
<i>Python molurus</i>	Indian Rock Python	[GRIIS]	82
<i>Python bivittatus</i>	Burmese Python	[GRIIS, CABI-HST]	71
<i>Macrochelys temminckii</i>	Western Alligator Snapping Turtle	[GRIIS, CABI-HST]	30
<i>Trionyx triunguis</i>	African Softshell Turtle	[CABI-HST]	28
<i>Python sebae</i>	Central African Rock Python	[CABI-HST]	6

Table 6: CITES listed endemic amphibian species of Madagascar that were wild sourced and exported only from Madagascar.

Scientific Name	Common Name	IUCN Status	Number of Imported Individuals
<i>Mantella baroni</i>	Baron's Mantella	LC	1,335
<i>Dyscophus insularis</i>	Antsouhy Tomato Frog	LC	477
<i>Mantella betsileo</i>	Betsileo Golden Frog	LC	451
<i>Scaphiophryne spinosa</i>	NaN	LC	296
<i>Mantella nigricans</i>	Guibé's Mantella	LC	292
<i>Scaphiophryne marmorata</i>	Marbled Rain Frog	VU	148
<i>Mantella pulchra</i>	Parker's Golden Frog	NT	112
<i>Mantella madagascariensis</i>	Madagascan Mantella	VU	9

Table 7: CITES listed bird species Japan imported during 2020-2024 and found in datasets related to invasiveness.

Scientific Name	Common Name	Invasive Species Dataset	Importer reported quantity
<i>Psittacus erithacus</i>	Grey Parrot	[CABI-HST]	531
<i>Bubo bubo</i>	Eurasian Eagle-owl	[GRIIS]	207
<i>Myiopsitta monachus</i>	Monk Parakeet	[GRIIS, EICAT]	154
<i>Athene noctua</i>	Little Owl	[EICAT]	146
<i>Platycercus elegans</i>	Crimson Rosella	[EICAT]	144
<i>Cacatua galerita</i>	Sulphur-crested Cockatoo	[GRIIS, EICAT]	125
<i>Amazona amazonica</i>	Orange-winged Amazon	[CABI-HST]	107
<i>Loriculus galgulus</i>	Blue-crowned Hanging-parrot	[CABI-HST]	98
<i>Tyto alba</i>	Common Barn-owl	[GRIIS, CABI-HST]	75
<i>Bubo virginianus</i>	Great Horned Owl	[CABI-HST]	63
<i>Psittacula eupatria</i>	-	[GRIIS]	29
<i>Agapornis personatus</i>	Yellow-collared Lovebird	[EICAT]	20
<i>Paroaria coronata</i>	Red-crested Cardinal	[GRIIS]	12
<i>Psittacula alexandri</i>	Red-breasted Parakeet	[GRIIS, EICAT]	10
<i>Cacatua tenuirostris</i>	Long-billed Corella	[EICAT]	8
<i>Cyanoliseus patagonus</i>	Burrowing Parrot	[GRIIS]	8
<i>Nandayus nenday</i>	-	[GRIIS]	5