

TRAFFIC

R E P O R T

MARCH 2018

EASTWARD BOUND

Analysis of CITES-listed flora and fauna exports from Africa to East and Southeast Asia

Willow Outhwaite and Lauren Brown





TRAFFIC REPORT

TRAFFIC is a leading non-governmental organisation working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

Reproduction of material appearing in this report requires written permission from the publisher.

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

Published by:
TRAFFIC International
David Attenborough Building,
Pembroke Street,
Cambridge
CB2 3QZ,
UK

© TRAFFIC 2018. Copyright of material published in this report is vested in TRAFFIC. ISBN no: 978-1-85850-429-2

UK Registered Charity No. 1076722
Suggested citation: Outhwaite, W. & Brown, L. (2018). *Eastward Bound: Analysis of CITES-listed flora and fauna exports from Africa to East and Southeast Asia 2006 to 2015*. TRAFFIC International, Cambridge, United Kingdom.

Front cover photograph and credit:
Nile Crocodile *Crocodylus niloticus*
© Zoe Bowden / Creative Commons 2.0
<https://creativecommons.org/licenses/by-nc-nd/2.0/>

Design by Marcus Cornthwaite
marcus.cornthwaite@traffic.org

EASTWARD BOUND

Analysis of CITES-listed flora and fauna exports
from Africa to East and Southeast Asia

Willow Outhwaite and Lauren Brown



Nile Crocodile *Crocodylus niloticus*



TABLE OF CONTENTS

Acronyms	iv
Acknowledgements	iv
Executive Summary	1
Methods	4
Caveats	7
Results	8
Recommendations	14
Appendix 1 Detailed Results	18
<i>Overview of trade from Africa to Asia</i>	
Sub-regional Profile: North Africa	36
Sub-regional Profile: East Africa	52
Sub-regional Profile: West Africa	68
Sub-regional Profile: Central Africa	86
Sub-regional Profile: Southern Africa	106
Appendix 2 Implementation of CITES	137
Appendix 3 Source Codes	140
Appendix 4 Purpose Codes	140
Appendix 5 Annual Reports submissions	141
Appendix 6 Current trade suspensions	143
Appendix 7 Parties included in NIAP	145
Bibliography	146
Image credits	149

ABBREVIATIONS AND ACRONYMS

AC	Animals Committee
AFRICA-TWIX	Africa Trade in Wildlife Information eXchange
ASEAN	Association of Southeast Asian Nations
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoP	Conference of the Parties (to CITES)
DRC	Democratic Republic of the Congo
Hong Kong SAR	Hong Kong Special Administrative Region
IUCN	International Union for the Conservation of Nature
NIAP	National Ivory Action Plan
NDF	Non-Detriment Finding
PC	Plants Committee
REIO	Regional Economic Integration Organisation
RST	Review of Significant Trade
SC	Standing Committee
Taiwan (PoC)	Taiwan (Province of China)
UNEP-WCMC	UN Environment World Conservation Monitoring Centre

ACKNOWLEDGEMENTS

The preparation, development and production of this publication was made possible with funding provided by Arcadia—a charitable fund of Lisbet Rausing and Peter Baldwin. This report was produced under a project established to Reduce Trade Threats to Africa's Wild Species and Ecosystems Through Strengthened Knowledge and Action in Africa and Beyond.

We are very grateful to the large number of TRAFFIC staff based in regional offices in Africa and Asia who reviewed this document and provided invaluable local expertise. We are also thankful to TRAFFIC colleagues who provided ongoing technical and design support, including Thomasina Oldfield, Julian Rademeyer, Roland Melisch, Richard Thomas and Marcus Cornthwaite. The authors also wish to thank the UN Environment World Conservation Monitoring Centre for provision of the CITES trade data.

Arcadia is a charitable fund of Lisbet Rausing and Peter Baldwin. It supports charities and scholarly institutions that preserve cultural heritage and the environment. Arcadia also supports projects that promote open access and all of its awards are granted on the condition that any materials produced are made available for free online. Since 2002, Arcadia has awarded more than USD500 million to projects around the world.

TRADE IN CITES LISTED SPECIES

AFRICA TO ASIA

1,393,003

live individuals were exported

975

different CITES-listed taxa were exported from Africa to Asia

South Africa

was the largest exporter of live birds, plants and mammals, whereas Zimbabwe exported the most skins and meat

Africa exported significant volumes of wildlife, particularly timber and plant derivatives, in 2016 and 2017

41

African countries exported wildlife products to 17 Asian countries/territories

51

different commodities were exported: live specimens, meat and skins dominated trade

Leopard Tortoise

was the species exported live in the largest quantity, over 80% were exported by Zambia



EXECUTIVE SUMMARY

A Ball Python *Python regius*

Exported in large quantities for use in the exotic pet trade

EXECUTIVE SUMMARY

The focus on trade from Africa to East and Southeast Asia is often on illegal trade, particularly on iconic species such as elephants and rhinos.

Many people would be surprised to learn that 975 different taxa listed in the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES) were exported from Africa to Asia: and some of those traded in the largest quantities were species that have received relatively little attention within CITES.

Trade was reported involving 40 of 54 African countries and from one disputed territory and all 17 Asian countries/territories in this study, although the quantities, species and commodities traded varied enormously.

Animals and plants from Africa were derived from a variety of sources, and trade in commodities from captive/artificially-propagated sources made up a significant proportion. However, a total of 498 taxa were exported from wild or ranched sources demonstrating the ongoing importance of sustainable management.

The aim of this report is to shine a light on the legal trade of CITES-listed species from Africa to Asia, to illustrate the diversity of trade and highlight significant changes that have occurred over the most recent decade where data are available (2006 to 2015). A brief analysis of available data for 2016 and 2017 was conducted to identify emerging patterns.

Trade data submitted by exporting and importing countries are stored in the publicly accessible UN Environment World Conservation Monitoring Centre CITES Trade Database. Data for the period 2006 to 2015 were used for this analysis, encompassing all species of plants and animals listed in Appendix I or II. A number of caveats are recognised with this approach, but the results demonstrate the diversity of trade and highlight species, commodities and countries which dominate the trade.

|| A total of 1,393,003 live individuals, 1,558,794 skins and 2,009,377 kg of meat were exported, in addition to a variety of other products traded using different units

CITES trade data reveal the diverse nature of the trade in CITES-listed plants and animals from Africa to East and Southeast Asia (hereafter “Asia”): a trade that involves most African countries, all such Asian countries/territories and nearly 1,000 different taxa. Interestingly, African countries had unique trade patterns in terms of the different taxa they exported to Asia: only 18% of all taxa were exported by more than one African country.

Reptiles dominated trade in live individuals, skins and meat: the most common species being Leopard Tortoise *Stigmochelys pardalis* and Nile Crocodile *Crocodylus niloticus*. The sub-regional profiles and country case studies (Appendix 1) in this report demonstrate the incredible diversity of trade, from live plants (Madagascar), scorpions (Togo) and eels (Morocco and Tunisia), to hippo teeth (United Republic of Tanzania), timber products (Republic of the Congo) and seal skins (Namibia).

The results of this analysis lead to recommendations aimed at improving use of trade data for decision making, and sharing of data among stakeholders.

INTRODUCTION

In 2015, 975 different taxa that are included in either Appendix I or II of CITES were exported from Africa to Asia. Some of those traded in the largest quantities were species that receive relatively little attention, such as Leopard Tortoise *Stigmochelys pardalis*, Ball Python *Python regius* and European Eel *Anguilla anguilla*.

It is also inaccurate to use the term “Africa” as if trade from this vast continent containing 54 countries and one disputed territory is homogenous (hereafter, “African country/countries” is taken to refer to any or all of these 55 entities). In reality, trade is incredibly diverse. For example, CITES-listed exports from West Africa are characterised by live reptiles and arachnids, whereas North African trade focuses on live European Eels and their meat, and Southern Africa exports a vast array of live birds and plants, as well as exporting a great deal of Nile Crocodile *Crocodylus niloticus* meat and skins. Within each sub-region there is also a great deal of variation in trade.



Grilled European Eel *Anguilla anguilla*

A popular Asian dish, served here in Japan

Animals and plants from Africa are traded from a variety of sources, and trade from captive/artificially-propagated sources makes up a significant proportion of exports. Some African countries export only wild individuals, whereas others report deriving their exports solely from captive/artificial-sources. A total of 498 taxa were exported from wild or ranched sources from 38 different countries: all of which will have required the national CITES Scientific Authority to have determined that the export is not a threat to the survival of the species (through the making of a Non-Detriment Finding (NDF), which should take into consideration the species’ biology, conservation status, trade/harvest levels etc.).

Exporting CITES-listed wildlife can generate a large amount of income for a country, and may contribute to livelihoods. Trade was reported from 40 of the 54 countries and from one disputed territory considered to constitute “Africa” for this analysis. Although a small number of African countries are suspended from exporting CITES-listed species, the full reasons why trade was not reported from the remainder are not clear. Trade was reported into all 17 Asian countries/territories included in this study, although the quantities and commodities imported into each varied enormously.

It is also useful to compare patterns of legal trade from a country with that of illegal trade. Some countries thought to have a large illegal trade have very small or non-existent legal trade. Other countries have legal trades that far outweigh the estimated size of the illegal trade.

975 taxa

included in CITES App. I or II
were exported from Africa
to Asia between 2006–2015

498 taxa

were exported from wild or
ranching sources from 38
different African countries

40 African

countries and one
disputed territory exported
wildlife to Asia

All 17

Asian countries/territories
imported wildlife from
Africa

The aim of this report is to shine a light on the legal trade of CITES-listed species from Africa to Asia, to illustrate the diversity of trade, and highlight changes that have occurred between 2006 and 2015. A brief analysis of available data for 2016 and 2017 was conducted to identify emerging patterns.

// *The findings in this report can be used by CITES Authorities and others within Africa and Asia to understand better the nature of the legal trade involving their country, and to appreciate the type of (often underused) analysis that CITES trade data can support.*

This report may also be useful to IUCN Specialist Groups and conservation groups to inform them of trade in species of interest. Such specialists can be incredibly valuable when using their knowledge to assist CITES Authorities, for example by providing information for NDFs.

The findings of this report are structured by the five different sub-regions of Africa. Country case studies are included in each sub-regional profile to illustrate the diversity of trade in CITES-listed species. Based on the results of this analysis, recommendations have been formulated. Further information on the implementation of CITES by countries/territories can be found in Appendix 2.

METHODS

This report used data from the CITES Trade Database¹ to understand the trade in CITES-listed wildlife from Africa to Asia. The CITES Trade Database is managed by the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat, and contains reports submitted annually by importing and exporting countries/territories on their trade in CITES-listed specimens, including quantities, species and commodity type (e.g. live, skin). Due to the large volume needed for this analysis, the data were obtained directly from UNEP-WCMC. The parameters used for this analysis were:

- **Timeframe:** 2006–2015 (separate analysis was conducted for 2016 – 2017)
- **Species:** All Appendix I and II-listed animal and plant species
- **Exporting countries:** All African countries plus one disputed territory (see Figure 1)
- **Importing countries:** All ASEAN countries (in Southeast Asia) and East Asian countries/territories (see Figure 2)
- **Source codes:** All excluding “I” (see Appendix 3 for a description of the different codes)
- **Purpose codes:** All (see Appendix 4 for a description of the different codes)
- **Commodity and Unit:** All
- **Quantity:** Highest of the importer or exporter reported quantity (where quantities reported differ)
- **Type of trade:** Direct trade only (no re-exports)

¹ Available at <https://trade.cites.org/>

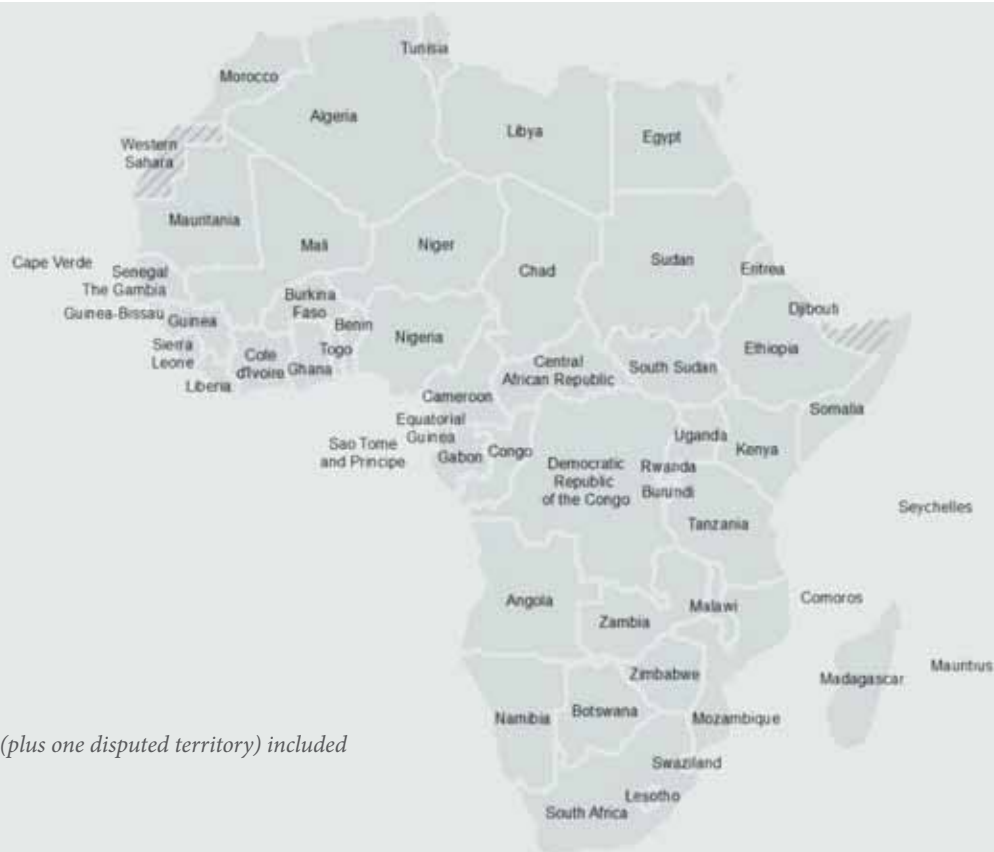


Figure 1

Exporting African countries (plus one disputed territory) included in this analysis



Figure 2

Importing Asian countries/territories included in this analysis

The term “Asian” is used throughout this report to represent 17 East Asian and Southeast Asian countries/territories. Southeast Asian countries are those that are current members of the Association of Southeast Asian Nations (ASEAN). Asian countries/territories combined are known to be significant importers of a range of wildlife commodities globally. Countries from South, Western and Central Asia, as well as European Union Member States’ outermost regions, overseas departments, regions and territories (e.g. Réunion) and all others not labelled on the maps in Figures 1 and 2 were excluded from this analysis.

CITES trade data were obtained in August 2017. Parties are requested to submit their data for inclusion in the CITES Trade Database by 31st October of the year following the year for which the report was due. As of October 2017, reports had not been submitted by 42 African countries for 2016 (Appendix 5), and only Angola had submitted their data for 2017². Therefore, the most recent complete 10-year period to base this analysis on was 2006 to 2015. An analysis of incomplete data for 2016 and 2017 has been included in the Results to highlight new patterns of trade.

Species that are covered under CITES are listed in three Appendices according to the degree of protection they require:

- **Appendix I** includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances
- **Appendix II** includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilisation incompatible with their survival
- **Appendix III** contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade

Appendix-III listed species were not included in this analysis, as in cases where not all range States have listed their populations it can skew results in a broad analysis such as this one and artificially “boost” a country’s exports compared with those of non-listed range States. Exceptions to this are those species that were uplisted to Appendix I/II from III during the period 2006 to 2015, of which there are relatively few.

Exporting countries have been divided into sub-regions in this report: North, East, West, Central and Southern Africa. The divisions were largely based on those used by the United Nation’s Department of Economic and Social Affairs Statistics Division (2018), although some amendments have been made to make the number of countries in each sub-region more equal (particularly between East and Southern Africa). The divisions do not necessarily reflect the membership of an African country to a certain Regional Economic Integration Organisation (REIO), noting also that some African countries are a member of several REIOs.

² Available at https://cites.org/sites/default/files/annual_reports.pdf



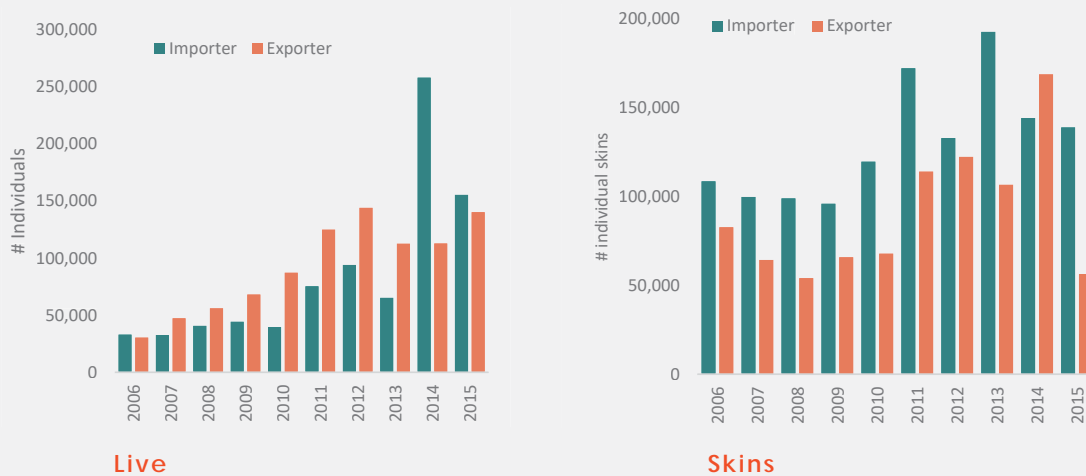
Common Hippopotamus *Hippopotamus amphibius*

Six countries exported Common Hippopotamus teeth

Often there is a discrepancy in the quantity reported by importers and exporters, reasons for this include:

- Differences in the units used, e.g. skins may be reported by number, area or weight;
- Specimens may be exported at the end of one year but not received by the importer until the following year;
- Trade may be reported at species level by one country/territory, whilst another country/territory reports it at a higher taxonomic level;
- Some countries/territories report on the basis of the permits they have issued rather than on the actual number of items traded. This may lead to an overestimation of trade volume.

The reported trade data for live individuals revealed that for most years exporters report a higher quantity than importers (Figure 3a), whereas the opposite is true for skins (Figure 3b). Therefore, the quantity used for this analysis is the highest quantity reported by either importer or exporter, although it is recognised that this may result in an overestimation of the size of the trade. Where phrases such as “exported by” or “imported by” are used, this does not mean the trade was reported by that exporter or importer, it may have only been reported by their trading partner.



Figures 3a and 3b

Comparison of number of live individuals and skins reported as exported by African countries (orange) vs. imported by Asian countries/territories (green) (2006 to 2015)

CAVEATS

It should be noted that for some species exported in large quantities from Africa, Asia is not the main destination so will not appear in this analysis, or only a small part of overall trade will be visible. For example, exports of African Cherry *Prunus africana* bark to Asia from Africa equalled 29,000 kg, but this was vastly outweighed by the 8,578,855 kg exported to Europe. Therefore, the results of this analysis should not be considered a full review of all CITES-listed exports from Africa.

It is also important to recall that many species which are traded in large quantities from Africa to Asia were only recently listed in CITES, so will not appear in this review of trade data for 2006 to 2015 in large amounts. For example, exports of shark and manta ray products do not feature highly in this analysis as, although many were listed at the 16th Conference to the Parties to CITES (CoP16) in 2013, the listings did not enter into effect until September 2014 and therefore Parties will not have reported trade until then. For all of the species listed at CoP17 (2016), including more sharks and rays and important timber species such as *Dalbergia*, their listings did not enter into effect until 2017.

Similarly, this analysis often sums up all trade between 2006 to 2015, but countries/territories may have made their own regulatory changes within this time period which influenced levels of trade, and these changes are not detailed within this more general analysis.

This broad analysis focused on commodities traded in the highest amount meaning there is limited discussion of other commodities which may still be important economically or of conservation concern.

Finally, it is also recognised that not all trade reported in the CITES Trade Database was sourced legally. For example, specimens may have been taken which exceeded national harvesting quotas, or taken from the wild and falsely claimed to be captive-bred. Although it is possible that such specimens make up a significant proportion of total trade reported, it is assumed that the majority were obtained legally.

African Cherry *Prunus africana*

African Cherry bark is exported in large quantities from African nations. It is classified as Vulnerable by the IUCN Red List



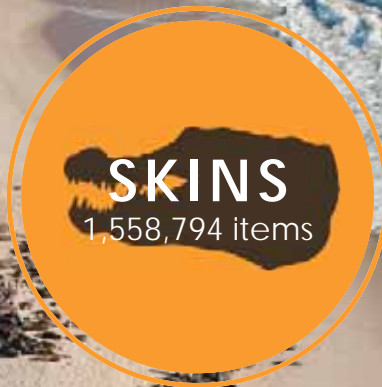


ANALYSIS RESULTS

Cape Fur Seal *Arctocephalus pusillus* in South Africa

One of three species whose meat was exported

OVERVIEW OF FINDINGS



A Cape Fur Seal *Arctocephalus pusillus* colony

The analysis of CITES trade data reveals the diverse nature of the trade in CITES-listed plants and animals from Africa to East and Southeast Asia (“Asia”): a trade that involves most African countries, all Asian countries/territories in this analysis and nearly 1,000 different taxa. Detailed results of this analysis can be found in the sub-regional profiles and country case studies in Appendix 1, but a summary is provided here.

// The species exported by the most countries (18) was the Nile Crocodile *Crocodylus niloticus*.

A total of 41 African countries exported CITES-listed wildlife to 17 Asian countries/territories. The trade from different African countries to Asia was quite distinct: 82% of all taxa were only exported from one country.

A total of 1,393,003 live individuals, 1,558,794 skins and 2,009,377 kg of meat were exported, in addition to products traded in other terms using different units. Fifty-one different commodities were exported from Africa to Asia: live individuals, meat and skins dominated trade. Plants were exported as 15 different commodities, most significantly powder, extract, logs and live plants. This compares with the 41 commodities of animals exported, most importantly live, meat and skins.

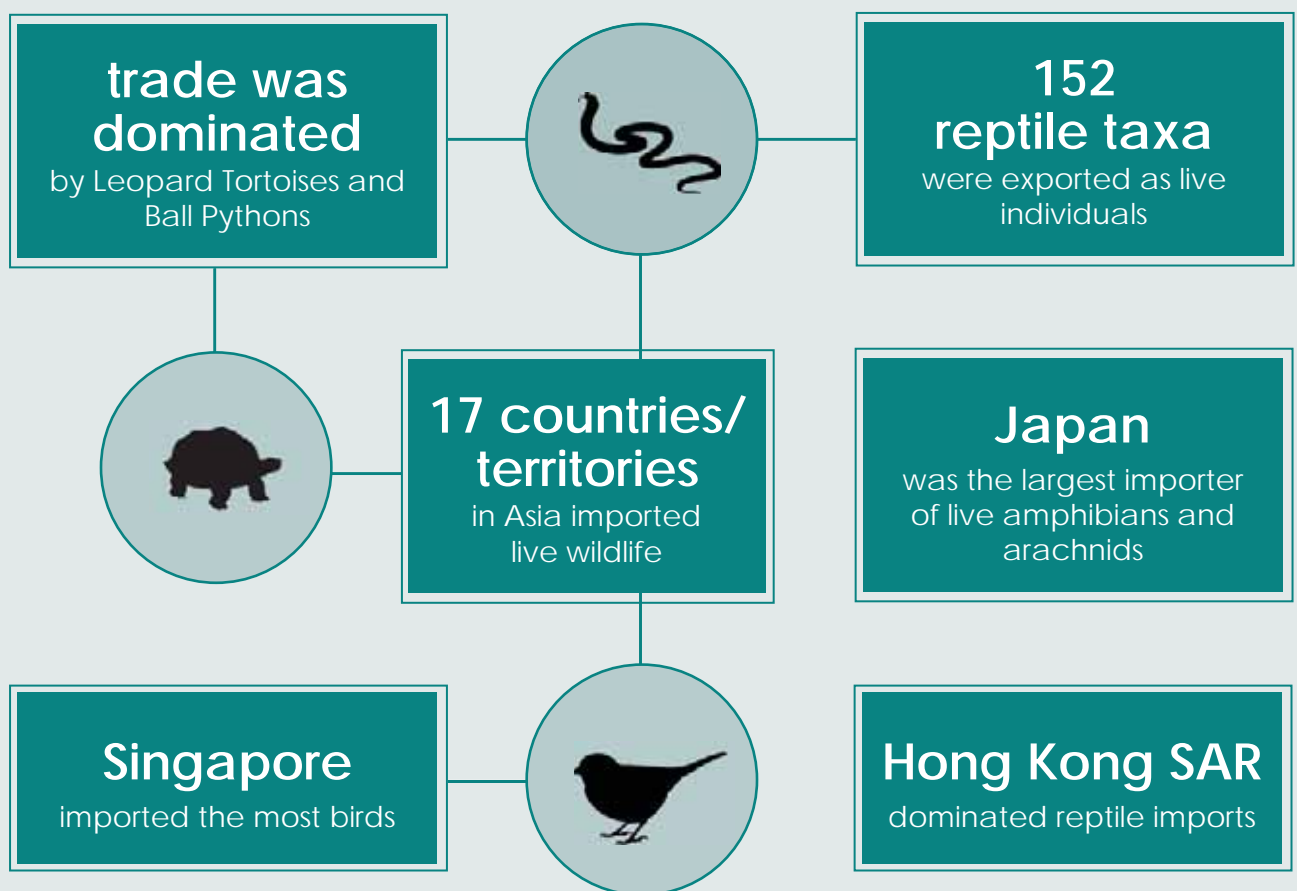


LIVE EXPORTS

number of individuals

Exports of live individuals reported as number of individuals have generally increased since 2006. In total, 36 countries covering all sub-regions of Africa exported live wildlife to Asia.

The predominant exporters varied depending on class, for example South Africa was the largest exporter of birds, plants and mammals, whereas Madagascar was the only exporter of individuals of live amphibians to Asia. The proportion of trade from captive sources (source codes C, F, A, D³) increased gradually from 42% in 2006 to a peak of 66% in 2013, although there was a lot of variability between countries regarding the proportion of exports from captive sources.



³ See Appendix 3 for explanation of source codes

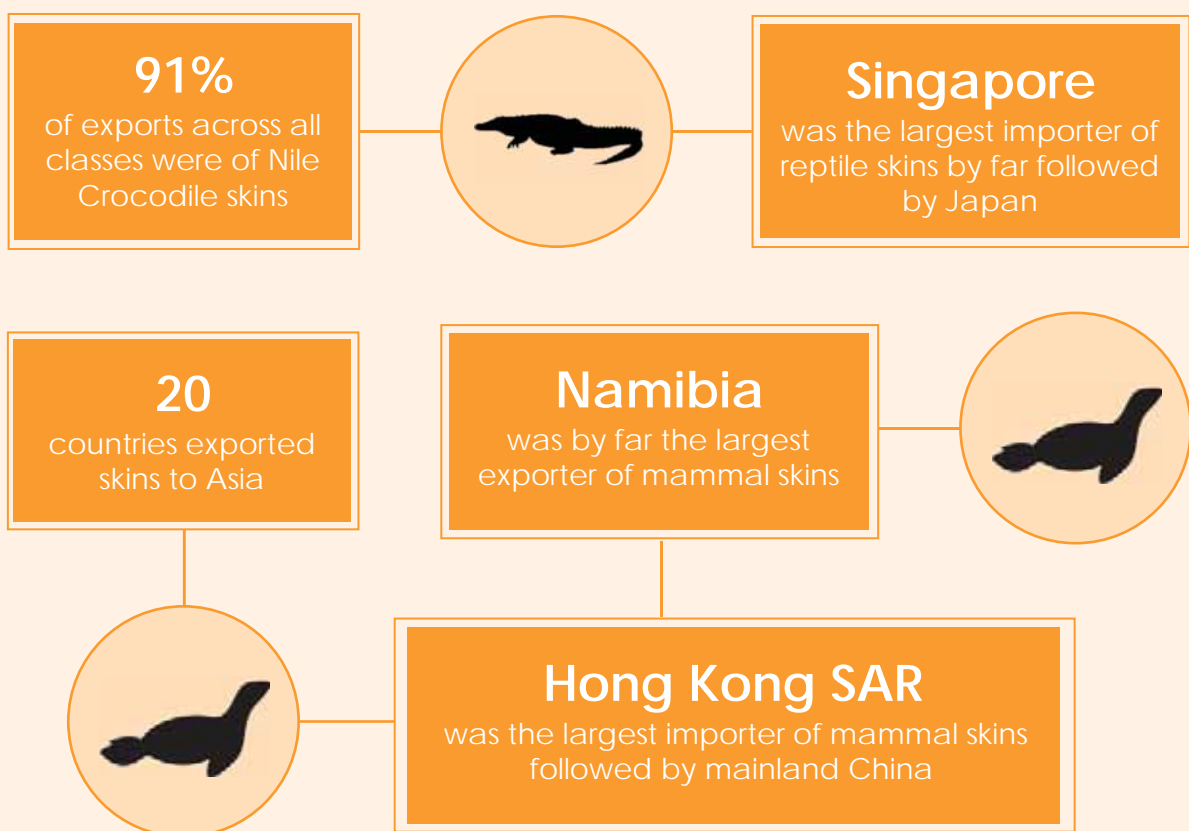


SKIN EXPORTS

number of individuals

Overall, exports of skins reported as number of individuals have shown a general increase since 2006 although there has been a degree of variability in this. The proportion of skins from captive sources (source codes C, D, F) has also been variable, peaking at 64% in 2012 and declining to 24% in 2015. Exports of Nile Crocodile skins outshone all other species, accounting for 91% of skin exports across all classes. Most exports of Nile Crocodile skins were from captive-bred or ranched animals.

Zimbabwe was the largest exporter of reptile skins followed by Zambia. Sixteen East and Southeast Asian countries/territories imported skins from Africa.





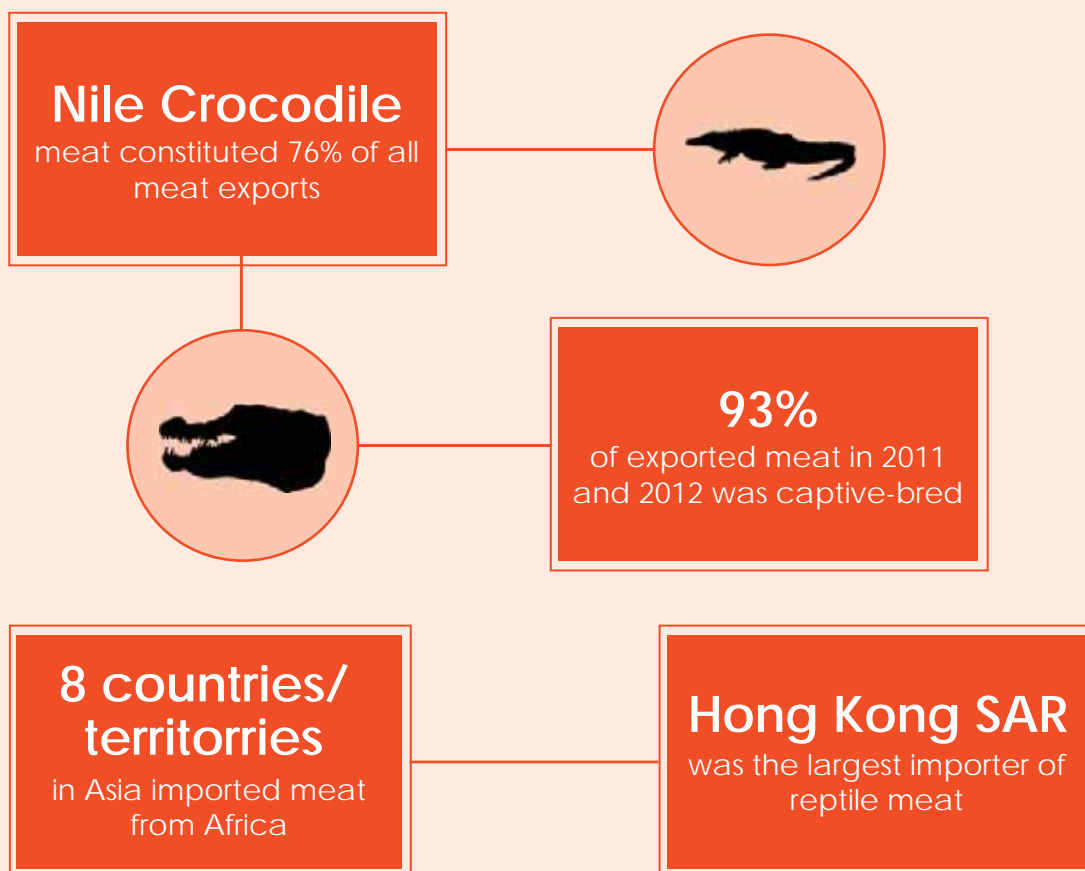
MEAT EXPORTS

kilogrammes

Exports of meat reported in kilogrammes were very variable, with spikes in 2007 and 2013 much higher than the other years. Exports of meat reported in kilogrammes included just three species: Nile Crocodile, European Eel *Anguilla anguilla* and Cape Fur Seal *Arctocephalus pusillus*.

Captive-bred (source code C) meat made up most exports in some years, reaching 93% in 2011 and 2012. However, exports of large quantities of wild European Eel meat in 2013 to 2015 reduced the percentage, reaching 0% in 2015.

The Republic of Korea imported the most European Eel meat followed by Hong Kong SAR. Hong Kong SAR was the largest importer of reptile meat: all of which was from Nile Crocodile.





European Eels *Anguilla anguilla*

A large flock of Grey Parrots (Psittacus erithacus) is captured in flight over a green field. The birds are shown in various stages of flight, with their wings spread, revealing dark grey feathers and bright red rumps. The background is a blurred green landscape, suggesting a natural habitat. The word "RECOMMENDATIONS" is overlaid in large, white, sans-serif capital letters, underlined, across the middle of the image.

RECOMMENDATIONS

Grey Parrots *Psittacus erithacus* in flight

The most commonly exported bird between 2006–2015

ENHANCING OUR UNDERSTANDING OF WILDLIFE TRADE

This analysis makes the following recommendations:



The *African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora* adopted by the African Union in May 2015 (African Union, 2015), outlines objectives related to sustainable use of wildlife, and eradicating illegal trade. A number of the actions within the Strategy relate to enhanced regional and international co-operation (e.g. promote collective engagement by the region with the transit and demand/consumer States) and the promotion of data sharing (including the use of existing databases). With this in mind, and considering the results of this report, the following recommendations are made:

1 | Increased use of CITES trade data

The results of this report illustrate how CITES trade data can be used to better understand the dynamics of wildlife trade: highlighting the major commodities and species in trade, and the countries involved. CITES trade data can be used by Parties to help fulfil their CITES commitments (e.g. making of Non-Detriment Findings⁴, conducting Periodic Reviews⁵, providing responses to the Review of Significant Trade (RST)⁶ / Review of Trade in Animal Specimens Reported as Produced in Captivity⁷) and national commitments (e.g. monitor if quotas are exceeded).

The CITES Trade Database can be freely accessed by all, and other interested stakeholders such as IUCN Specialist Groups and conservation groups, academics and journalists can benefit from understanding the trade in species of their interest.

The utility of CITES trade data is not restricted to those with an interest in wildlife trade, people from other disciplines can make use too. For example, the database could be used for monitoring movement of invasive species.

⁴ Non-Detriment Findings (NDFs) are reviews conducted by CITES Scientific Authorities which assess whether exports are detrimental to the survival of that species in the wild.

⁵ Periodic Reviews are conducted to identify whether species are listed in the most appropriate CITES Appendix. If it is concluded they are not, a proposal can be put forward to suggest an amendment (e.g. uplisting, deletion).

⁶ The Review of Significant Trade is a CITES process which aims to detect species that are subject to unsustainable levels of international trade, and then identify problems and solutions.

⁷ The Review of Trade in Animal Specimens Reported as Produced in Captivity is a CITES process which aims to detect species that are incorrectly being exported as from captive-sources from specific countries, when in fact a wild source code would be more appropriate, and then identify problems and solutions.

2 | Increased sharing of data

Although the percentage of Parties that did not submit their annual reports between 2010 and 2015 was relatively low (8%), often reports were submitted several years after the deadline. Countries are encouraged to submit their annual reports in a timely fashion so that these data can be used by themselves and other Parties to implement CITES more effectively.

// *Aside from the CITES Trade Database, there are other mechanisms which allow for the sharing of wildlife trade data*

For example, all Parties are now required to submit information to CITES on illegal trade (species, trade routes, value of the goods, methods of concealment and subsequent sanctions): which will contribute to a much clearer understanding of the global illegal trade, and help inform better decisions to reduce it. The raw data will not be made publicly available so there is no danger of interference with ongoing enforcement procedures.

Regional mechanisms also exist to share data, such as AFRICA-TWIX (Trade in Wildlife Information eXchange) which is an online tool developed to facilitate the exchange of real-time information and co-operation between enforcement officers in Central African countries.

The CITES website also includes contact details for CITES Authorities in all Parties, so information can be shared easily bilaterally. Other stakeholders such as conservation organisations and academics should also aim to share relevant data where it would be of use to others

AFRICA TWIX

Contribuer à la réduction du commerce illégal des espèces
par un meilleur partage de l'information.

"une pilote en Afrique Centrale"

Africa - Trade in Wildlife

(Exchange"): outil Internet

faciliter l'échange d'information

entre autorités de ges

et S

Enhancing information sharing and co-operation

Paulinus Ngeh, Regional Director for TRAFFIC's Central Africa office attends an AFRICA-TWIX meeting



APPENDIX 1 DETAILED RESULTS

Cape Seahorse *Hippocampus capensis*

A species exported live from South Africa

OVERVIEW OF TRADE FROM AFRICA TO ASIA

The first section of this appendix summarises the nature of the trade in CITES-listed animals and plants from Africa to Asia. This is followed by five profiles that characterise the trade to Asia at the sub-regional level, including case studies for specific African countries.

It is also important to recall that many species which are traded in large quantities from Africa to Asia were only recently listed in CITES, so will not appear in this review of trade data for 2006 to 2015 in large amounts or at all. For example, exports of shark and manta ray products do not feature highly in this analysis as, although many were listed at CoP16 (2013) the listings did not enter into effect until September 2014 and therefore Parties will not have reported trade until then. For all of the species listed at CoP17 (2016), including more sharks and rays and important timber species such as *Dalbergia*, their listings did not enter into effect until 2017.

1.1 Taxa in Trade

The trade in reptiles from Africa to Asia was significantly larger than for other taxonomic classes across live individuals, skins and meat (kg) (Figure 4).

Trade in live individuals encompassed a variety of different classes (Figure 4), and illustrate the popularity of African species as pets and for fresh meat in Asia.

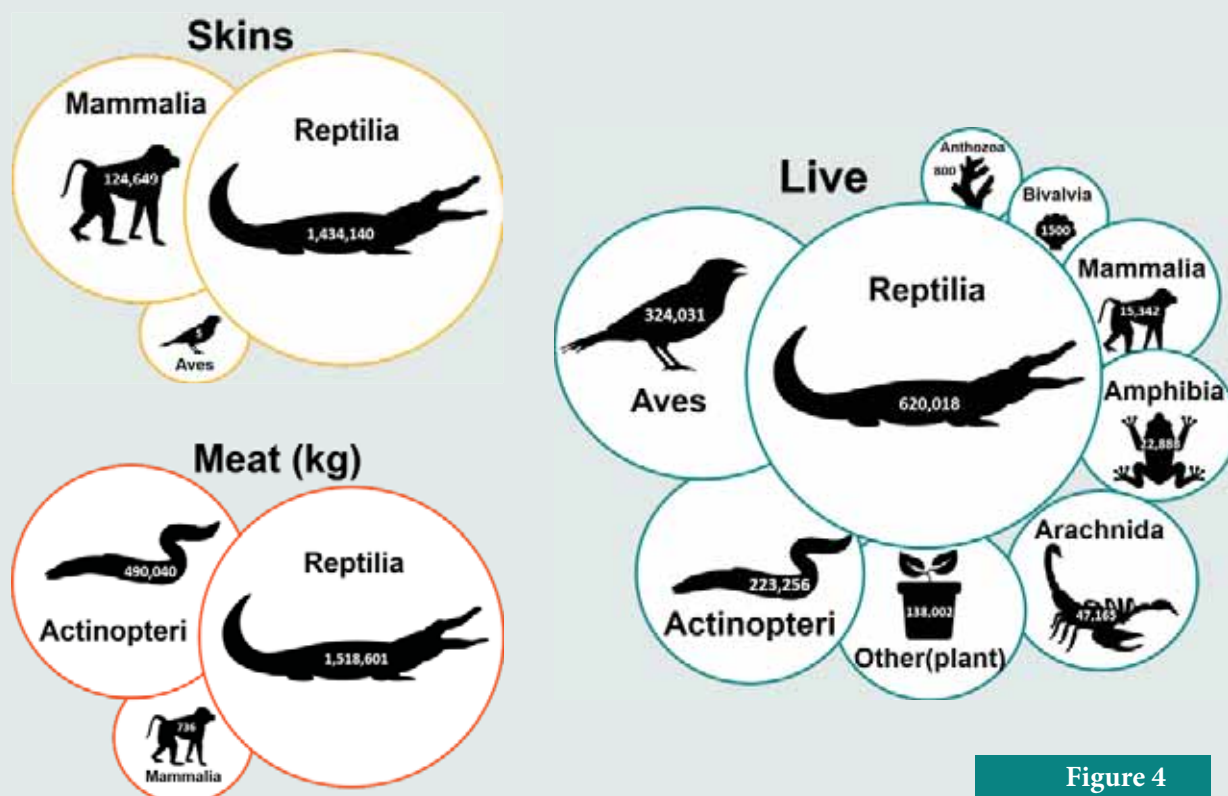


Figure 4

Exports of skins, live (both reported as number of individuals) and meat (kilogrammes) divided by taxonomic class

1.2 Top species in trade

As reptiles were the most common class in trade, it is unsurprising that the species traded in the highest quantities for live individuals, skins and meat were all reptiles (Figure 5).

LIVE

It is interesting that of the 152 reptile taxa that were traded as live, Leopard Tortoises *Stigmochelys pardalis* and Ball Pythons *Python regius* dominated live reptile exports, accounting for 36% and 23% of exports respectively. Most of the Leopard Tortoises were exported from Zambia (183,328) while the Ball Pythons were exported mainly by Ghana (93,168) and Togo (37,661). All exports of individual live European Eel *Anguilla anguilla* were from Morocco (170,092) or Tunisia (53,104).

SKINS

Exports of Nile Crocodile *Crocodylus niloticus* skins outshone all other species, accounting for 91% of skin exports across all classes. Most exports of Nile Crocodile skins were from captive-bred (53%) or ranched animals (43%). Zimbabwe (465,366), Zambia (410,477) and South Africa (379,169) were all large exporters of Nile Crocodile skins.

MEAT

Exports of meat reported in kilogrammes included just three species: Nile Crocodile, European Eel and Cape Fur Seal *Arctocephalus pusillus*, with Nile Crocodile meat making up 76% of exports.

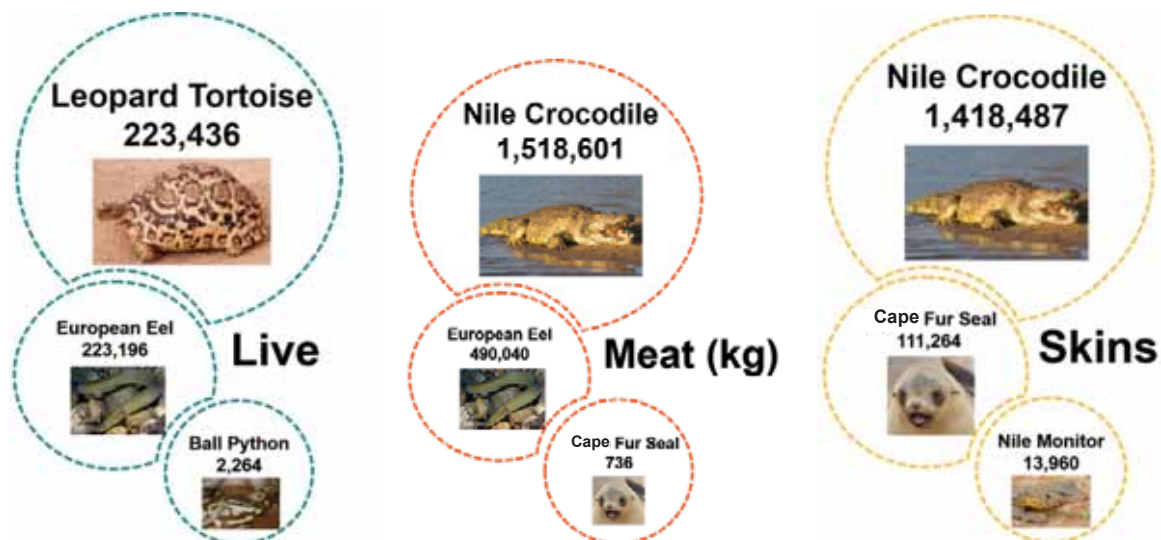


Figure 5

Exports of the three-species exported in the highest quantities as skins, live (both reported as number of individuals) and meat (kilogrammes)

1.3 Commodities in trade

In total, 51 different commodities were exported from Africa to Asia: although **live individuals, meat and skins dominated trade**. This included 1,393,003 live individuals, 1,558,794 skins and 2,009,377 kg of meat.

Trade was reported using a variety of units: back skins, bags, belly skins, foot², grammes, hornback skins, kilogrammes, metre², metre³, milligrammes, millilitres, pairs, sets and number of individuals. However, **the vast majority of trade was reported using kilogrammes and number of individuals (Figures 6a and 6b)**.

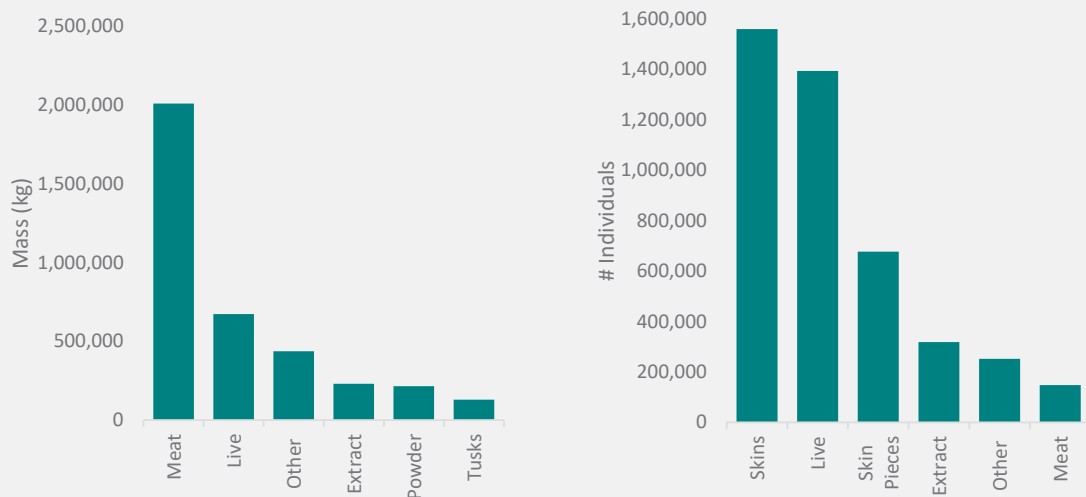


Figure 6a and 7b

Exports of the three-species exported in the highest quantities as skins, live (both reported as number of individuals) and meat (kilogrammes)



1.4 Source of species in trade

LIVE

Exports of live specimens reported as number of individuals have generally increased since 2006. The proportion of trade from captive sources (source codes C, F, A, D) increased gradually from 42% in 2006 to a peak of 66% in 2013 (Figure 7). A large export of wild European Eel (197,006) in 2014 reduced this to 24%, but in 2015 exports of large quantities of artificially propagated cacti in the genus *Rhipsalis* (44,575) pushed the figure back up to 63%.

There was a lot of variability between countries regarding the proportion of exports that were from captive sources: eight including Morocco, Tunisia and Senegal only exported live individuals from the wild, whereas others, such as Central African Republic and Cote d'Ivoire only reported exporting from captive sources.

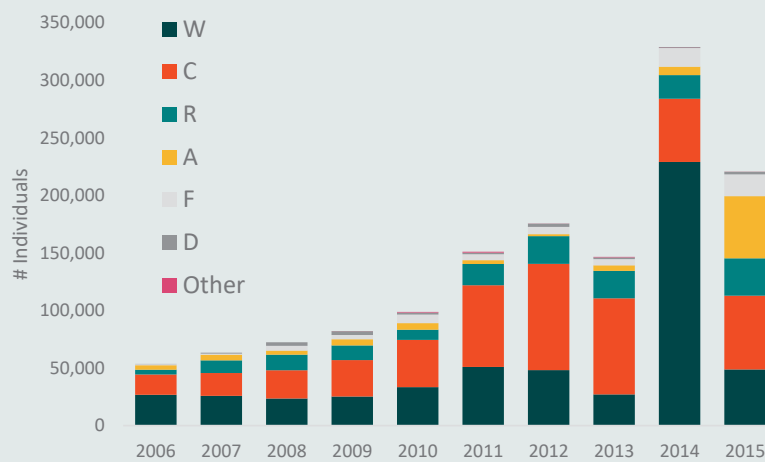


Figure 7

Source of live exports reported as number of individuals (2006 to 2015) (see Appendix 3 for full description of source codes)

Rhipsalis cereuscula

Large quantities of cacti from the genus *Rhipsalis* were exported in 2015



Nile Crocodile *Crocodylus niloticus* skin

SKINS

Overall, exports of skins reported as number of individuals have shown a general increase since 2006 although there has been a degree of variability in this (Figure 8). The proportion of skins from captive sources (source codes C, D, F) has also been variable, peaking at 64% in 2012 and declining to 24% in 2015. Wild trade (source code W) made up a relatively minor proportion of exports (ranging from 4% in 2007 to 23% in 2011, when a large export of wild Nile Crocodile skins (35,707) mainly from Zambia, bolstered wild exports) (Figure 8). Skins from ranched animals (source code R) made up a significant portion of trade, from 21% in 2012 to 66% in 2015: the high proportion of ranched skins in 2015 was caused by a reduced amount of captive-bred skins in trade.

Some countries sourced most of the skins they exported from captive sources, such as South Africa (95%) and Zimbabwe (75%). Other significant exporters, such as Zambia (3%), Namibia (2%) and Mozambique (1%) sourced far fewer.

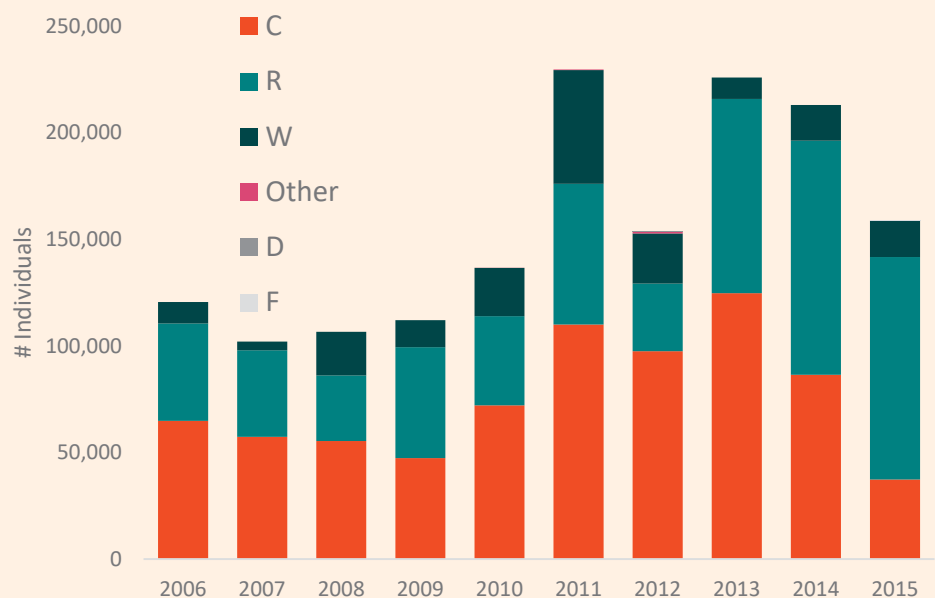


Figure 8

Source of exports of individual skins reported as number of individuals (2006 to 2015) (see Appendix 3 for full description of source codes)

MEAT

Exports of meat reported in kilogrammes were very variable, with spikes in 2007 and 2013 much higher than the other years (Figure 9). Captive-bred (source code C) meat made up most exports in some years, reaching 93% in 2011 and 2012 (Figure 9). However, exports of large quantities of wild European Eel meat in 2013 to 2015 reduced the percentage down, reaching 0% in 2015.

No exports of meat (kilogrammes) from captive sources was reported from Tunisia, Namibia and Morocco, whereas 100% of meat from South Africa and 93% from Zimbabwe was from captive-bred animals.

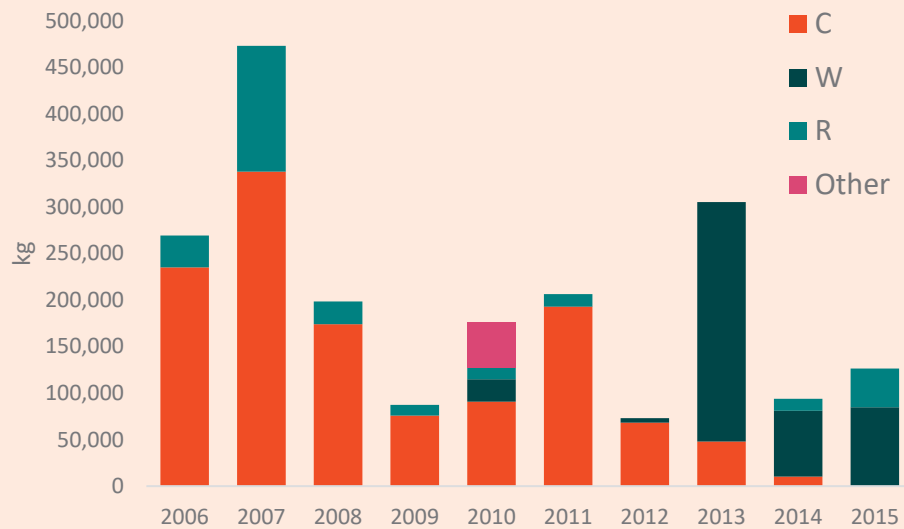


Figure 9

Source of meat reported as kilogrammes (2006 to 2015)



African Spurred Tortoise *Centrochelys sulcata*

1.5 Trends in trade

LIVE

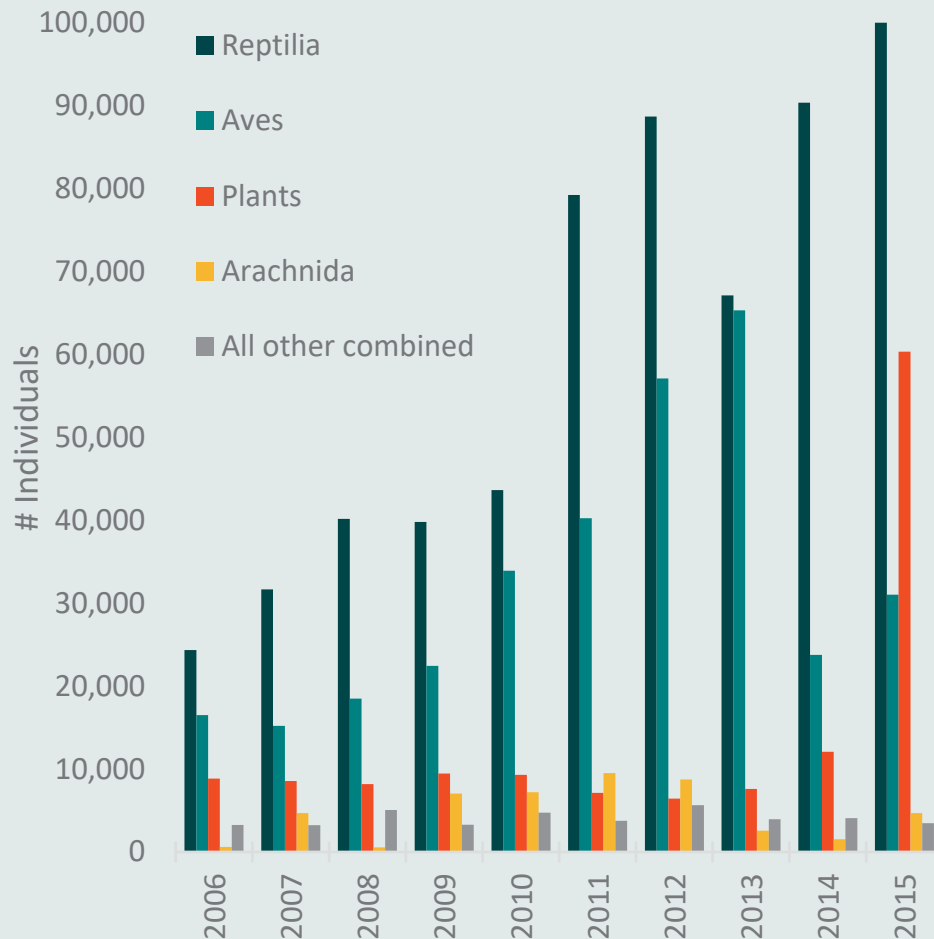
Reptiles

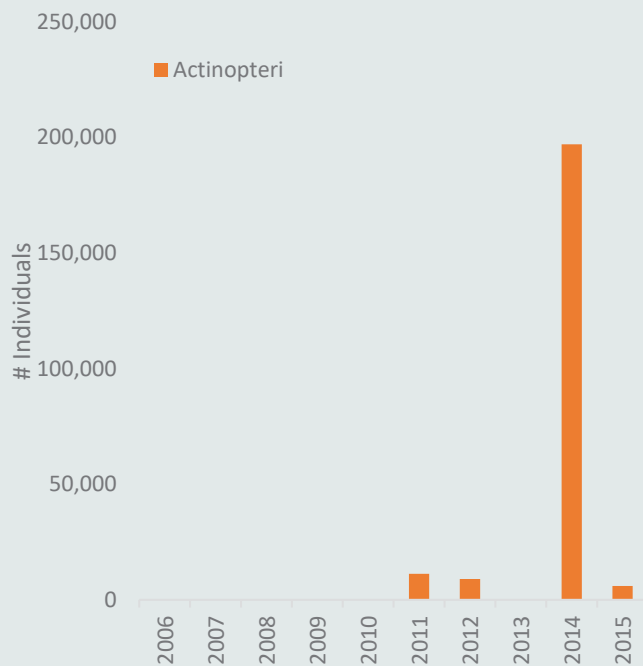
Exports of live reptiles (reported as individual) increased dramatically from 2006 to 2015 (Figure 10a). Much of this growth has been driven by increased exports of three species: Leopard Tortoise, Ball Python and African Spurred Tortoise *Centrochelys sulcata*. Exports of these three species combined grew from 8,488 live individuals in 2006 to 78,295 in 2015: accounting for 68% of all live reptile exports in 2015.

Birds

The Grey Parrot *Psittacus erithacus* was the most commonly exported bird between 2006 and 2015: 96,522 individuals were exported to Asia, most of which were reported as being from captive-sources from non-range State South Africa (40,475) or of wild birds exported by the Democratic Republic of the Congo (34,283). The Grey Parrot was up-listed to Appendix I in 2017, although several Parties including Democratic Republic of the Congo took out a Reservation. Note that IUCN now recognises the former African Grey Parrot as two species: Grey Parrot *Psittacus erithacus* and Timneh Parrot *P. timneh*.

Live bird exports from Africa to Asia peaked in 2013 at 65,315 (Figure 10a). A significant portion of 2013's trade was due to a larger than average export of Fischer's Lovebird *Agapornis fischeri*: 17,030 compared with an annual average of 1,384 for the other nine years. Although Fischer's Lovebird is native to Republic of Tanzania (hereafter 'Tanzania'), all exports of the species to Asia between 2006 and 2015 were of birds from captive-sources exported by South Africa.





Figures 10a and 10b

Exports of live species reported as number of individuals divided by taxonomic class

Plants

Exports of individual live plants from Africa remained fairly stable at an annual average of 8,629 between 2006 and 2014, before jumping to 60,344 in 2015 (Figure 10a). Much of this was driven by exports by a number of species of *Rhipsalis*, a genus of epiphytic cacti (44,575), the most common being the Mistletoe Cactus *R. baccifera*. Although the genus was first listed in Appendix II in 1975, no exports of live plants of this genus to Asia were reported 2006 to 2014. All exports in 2015 were of reportedly artificially propagated individuals from Tanzania and Kenya.

Actinopteri

The vast majority of exports of live individuals in this class were European Eel, which was listed in Appendix II in 2009, from Morocco and Tunisia, and the remainder (60) were of Cape Seahorse *Hippocampus capensis* from South Africa. Exports peaked in 2014 at 197,036 (Figure 10b): most of which were European Eel from Morocco (163,822).

SKINS

Reptiles

Exports of reptile skins (reported as individuals) generally increased over the period 2006 to 2015, with several notable spikes in 2011 and 2013/2014 (Figure 11). These spikes were all driven by the variability in Nile Crocodile skin exports, which made up 99% of all reptile skin exports. Several countries exported above average amounts during those years (e.g. Mozambique, South Africa, Zambia, Zimbabwe), which drove the sudden increases.

Mammals

Exports of mammal skins (reported as individuals) ranged from 1,972 in 2007 to a peak of 20,651 in 2012, (Figure 11). Although skins of 25 mammal species were exported, those of the Cape Fur Seal were responsible for 89%. Most of these were exported by Namibia (108,272). Interestingly, the second most common mammal skin was African Elephant *Loxodonta africana* (11,285), nearly all of which were exported from Zimbabwe (8,744) or South Africa (2,533).

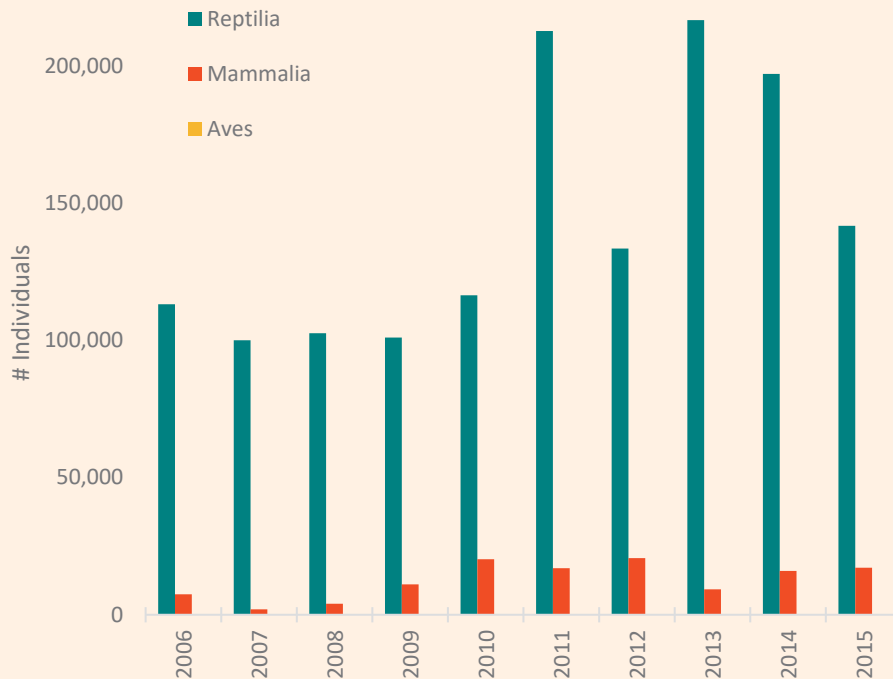


Figure 11

Exports of skins reported as number of individuals divided by taxonomic class

MEAT

Reptiles

All exports of reptile meat (reported as kilogrammes) were of Nile Crocodile, which decreased over the period 2006 to 2015, from a high of 472,730 kg in 2007 to 23,030 kg in 2014 (Figure 12). Between 2010 and 2013 a total of 143,067 specimens were exported without a unit, it is not clear what quantity of meat this refers to e.g. a full crocodile or a steak.

Actinopteri

All exports reported as kilogrammes in this class were of European Eel *Anguilla anguilla*, which were first reported in the CITES Trade Database in 2010 (the species was listed in Appendix II in 2009). Exports to Asia appear to be erratic between 2010 and 2015, ranging from 4,509 kg in 2012 to 257,345 kg in 2013 (Figure 12). Morocco exported in 2010, then Tunisia in 2012: and then both countries in 2013. In 2014 and 2015, only Tunisia exported. However, both Morocco and Tunisia also exported large quantities of live European Eels between 2010 and 2015 (170,092 and 53,104 respectively), and Tunisia also exported 4,839 of meat reported as number of individuals.

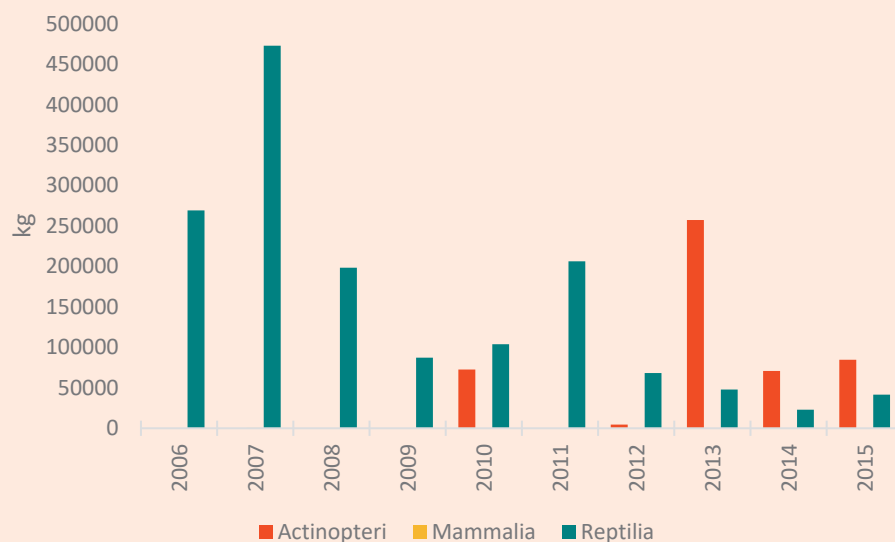


Figure 12

Exports of meat reported as kilogrammes divided by taxonomic class



Fennec Fox *Vulpes zerda*

1.6 Exporters

Trade was reported from 41 African countries out of the 55 considered to constitute Africa for this analysis.

LIVE EXPORTS

In total, 36 countries covering all sub-regions of Africa exported live wildlife (reported as number of individuals) to Asia. The predominant exporters varied depending on class, for example South Africa was the largest exporter of birds (231,413), plants (54,575) and mammals (8,111), whereas Madagascar was the only exporter of live amphibians to Asia (Figure 13).

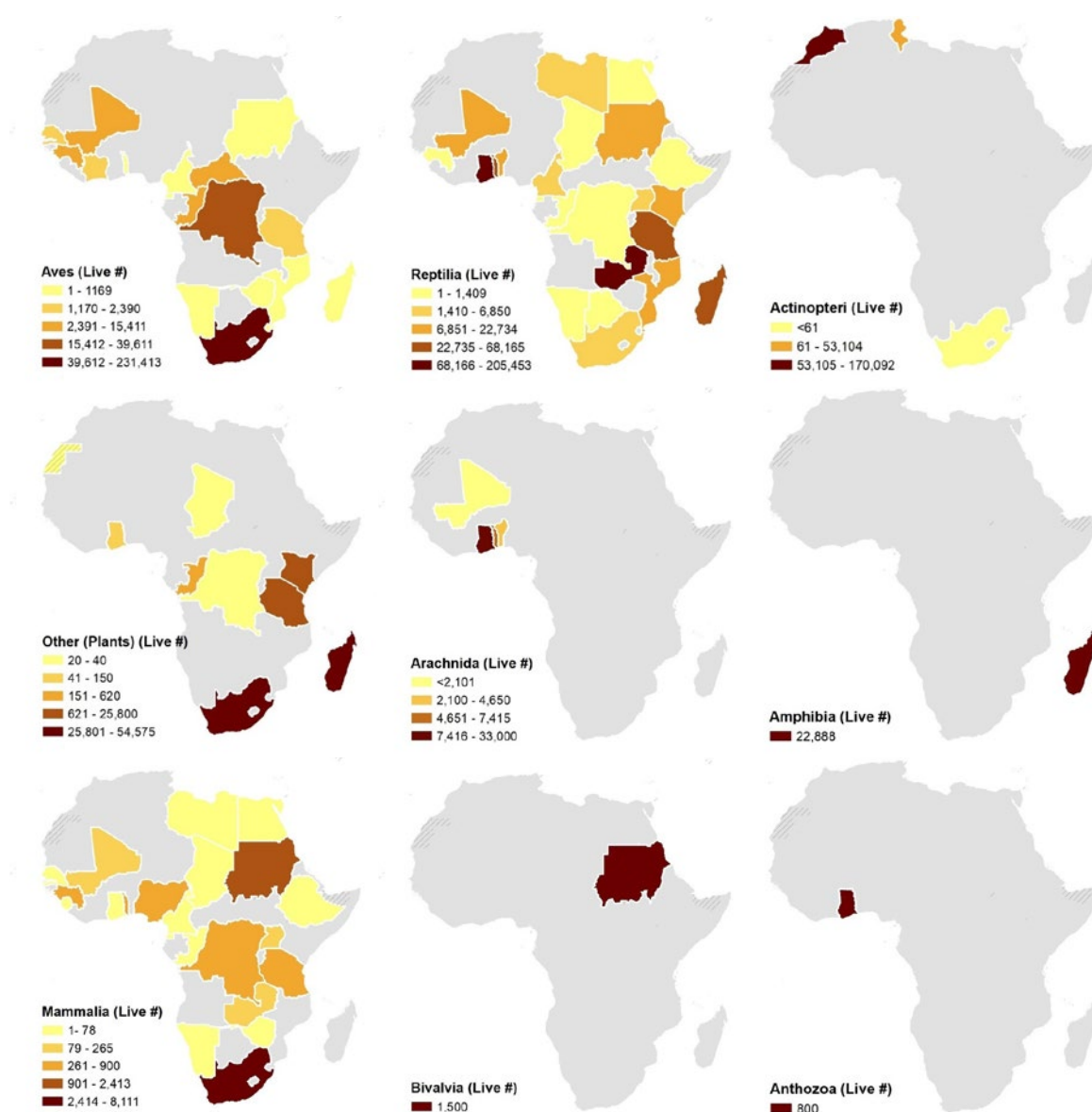


Figure 13

Exports of live species reported as number of individuals divided into taxonomic class and exporting country

SKIN EXPORTS

Twenty countries exported skins (reported as number of individuals) to Asia; Zimbabwe being the largest exporter of reptile skins (465,366) followed by Zambia (410,477) (Figure 14). Namibia was by far the largest exporter of mammal skins (109,587) followed by Zimbabwe (8,909).

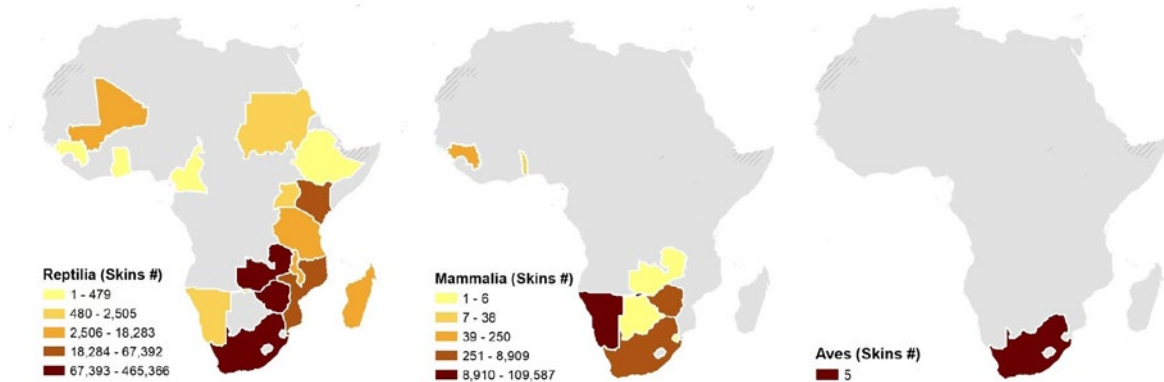


Figure 14

Exports of individual skins reported as number of individuals divided into taxonomic class and exporting country

MEAT EXPORTS

Six countries exported meat using the unit kilogrammes, with Zimbabwe exporting the largest amount of reptile meat (826,960 kg) (Figure 15). Tunisia and Morocco were the only countries to export Actinopteri meat, all of which was European Eel (273,390 kg and 216,650 kg respectively). Namibia was the only country to export mammal meat reported in kilogrammes (736 kg). South Africa and Tunisia also exported meat reported as number of individuals (143,067 of Nile Crocodile, and 4,839 of European Eel respectively).



Figure 15

Exports of meat reported as kilogrammes divided into taxonomic class and exporting country

1.7 Importers

// Trade was reported with all 17 countries/territories in East and Southeast Asia for this analysis

LIVE IMPORTS

In total, 17 countries/territories in East and Southeast Asia imported live wildlife (reported as number of individuals) from Africa. The main importers varied by class, for example Japan was the largest importer of live amphibians (15,029) and arachnids (15,300), whereas Singapore imported the most birds (98,788) and Hong Kong SAR dominated reptile imports (272,807).

15,029

amphibians were imported by Japan

15,300

arachnids were imported by Japan

98,788

birds were imported by Singapore

272,807

reptiles were imported by Hong Kong SAR

SKIN IMPORTS

Sixteen East and Southeast Asian countries/territories imported skins (reported as number of individuals) from Africa; Singapore being the largest importer of reptile skins by far (933,583) followed by Japan (261,282). Hong Kong SAR was the largest importer of mammal skins (64,941) followed by mainland China (44,565).

933,583

reptile skins were imported by Singapore

261,282

reptile skins were imported by Japan

44,565

mammal skins were imported by mainland China

64,941

mammal skins were imported by Hong Kong

MEAT IMPORTS

Eight countries imported meat (reported in kilogrammes) from Africa. The Republic of Korea imported the most Actinopteri (European Eel) meat (242,082 kg) followed by Hong Kong SAR (193,850 kg). Hong Kong SAR was the largest importer of reptile meat (1,336,471 kg): all of which was from Nile Crocodile.

242,082 kg

Actinopteri imported by the Republic of Korea

193,850 kg

Actinopteri imported by Hong Kong SAR

1,336,471 kg

Nile crocodile meat imported by Hong Kong



Emperor Scorpion *Pandinus imperator*

Emperor Scorpions made up 20% of Ghana's live exports to Asia

1.8 Trade in 2016 and 2017

A brief analysis of exports of species listed in Appendix I and II from Africa to Asia in 2016 and 2017 was conducted, and although data were downloaded in February 2018 it is recognised that this is still not a complete dataset for both years and the data rely almost exclusively on Asian importing country/territory reports (see Methods for full explanation).

|| The most striking finding from 2016 to 2017's data is the large volume of logs (10,004,228 m³) exported from Africa to Asia (Figure 16c)

This compares with exports of 151,011 m³ of logs for the entire period from 2006 to 2015. This was driven by exports of African Teak *Pericopsis elata*: the Democratic Republic of the Congo (DRC) reported exporting 9,696,353 m³ in 2017, most of which was destined for mainland China (4,903,938 m³) or Viet Nam (3,801,068 m³). It is likely that the sudden increase in exports reported for 2016 and 2017 can be explained as some kind of reporting error, but this cannot be verified by comparing with importers' reports as many reports have not yet been submitted.



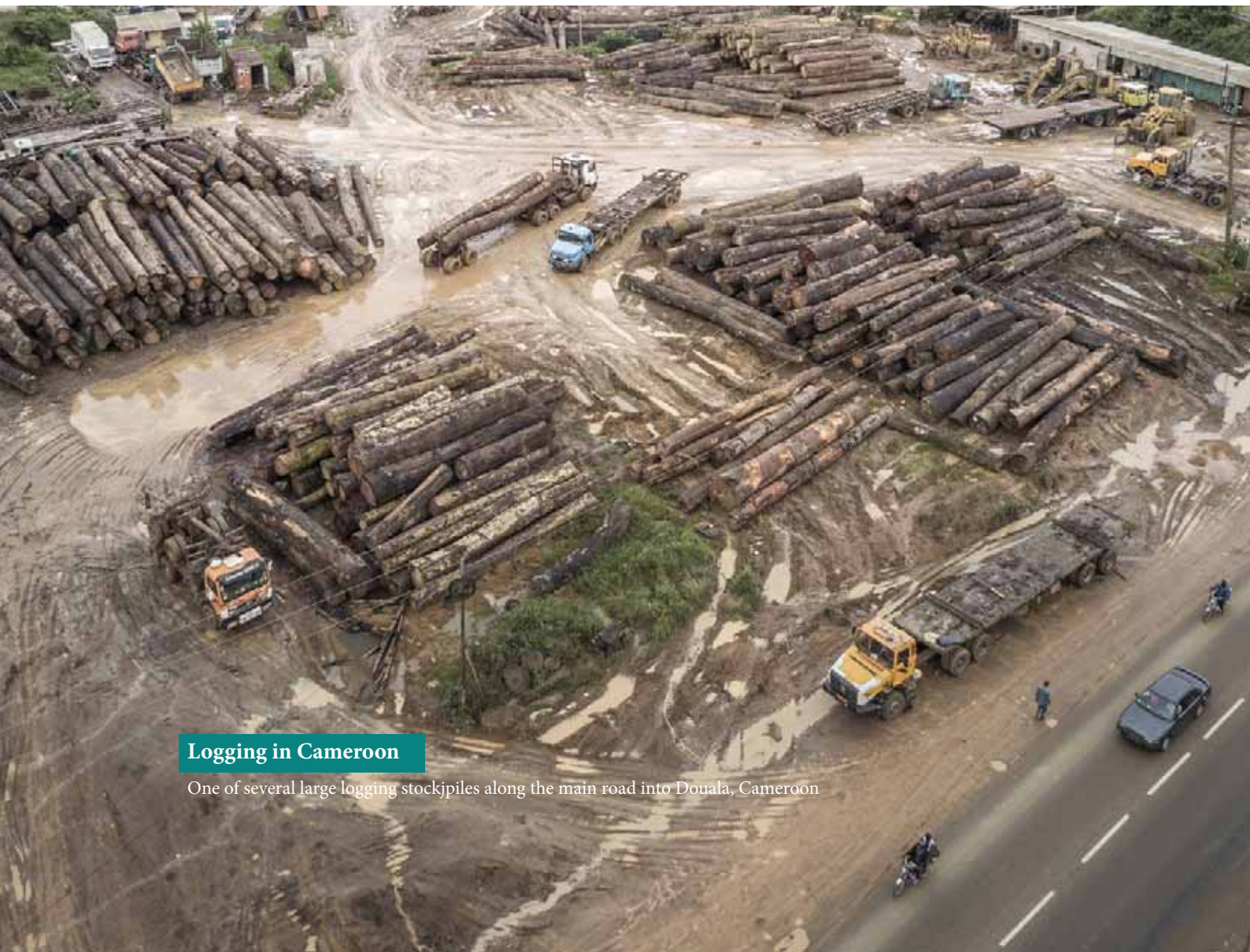
Figure 16

Quantity of CITES-listed wildlife (2016 to 2017)
Clockwise from top left: Reported in kilogrammes, reported in number of individuals, reported in cubic metres

Three species in the genus *Guibourtia* were listed at CoP17 and the listing came into effect in January 2017. DRC is one of the few African countries to have reported their trade for 2017 so far, and this amounted to 302,795 m³ of Bubinga *G. demeusei* logs exported to Viet Nam that year. This seems to greatly exceed the quota of 14,895 m³ of logs, sawn wood and veneer sheets published on the CITES website for this species⁸. Possible reasons for this may be an error in reporting or the use of an incorrect source code (e.g. wild when pre-Convention may be more appropriate if these logs were from stockpiles pre-dating the CITES listing). DRC and UNEP-WCMC have been contacted to clarify any reporting errors.

In 2016, Kenya exported 124,000 kg of wild *Aloe secundiflora* derivatives to China, plus 28,000 kg leaves from artificially propagated plants (Figure 16a). Prior to 2016, Kenya had exported much lower quantities (406 kg leaves from artificially propagated plants exported to Japan in 2014/2015). It is unclear what has driven this large increase in exports of wild *A. secundiflora*: previously wild exports of *Aloe* species were apparently not permitted from Kenya (Schmelzer & Gurib-Fakim, 2008) but it is unclear if this is still the case.

⁸ https://www.speciesplus.net/#/taxon_concepts/68201/legal



Logging in Cameroon

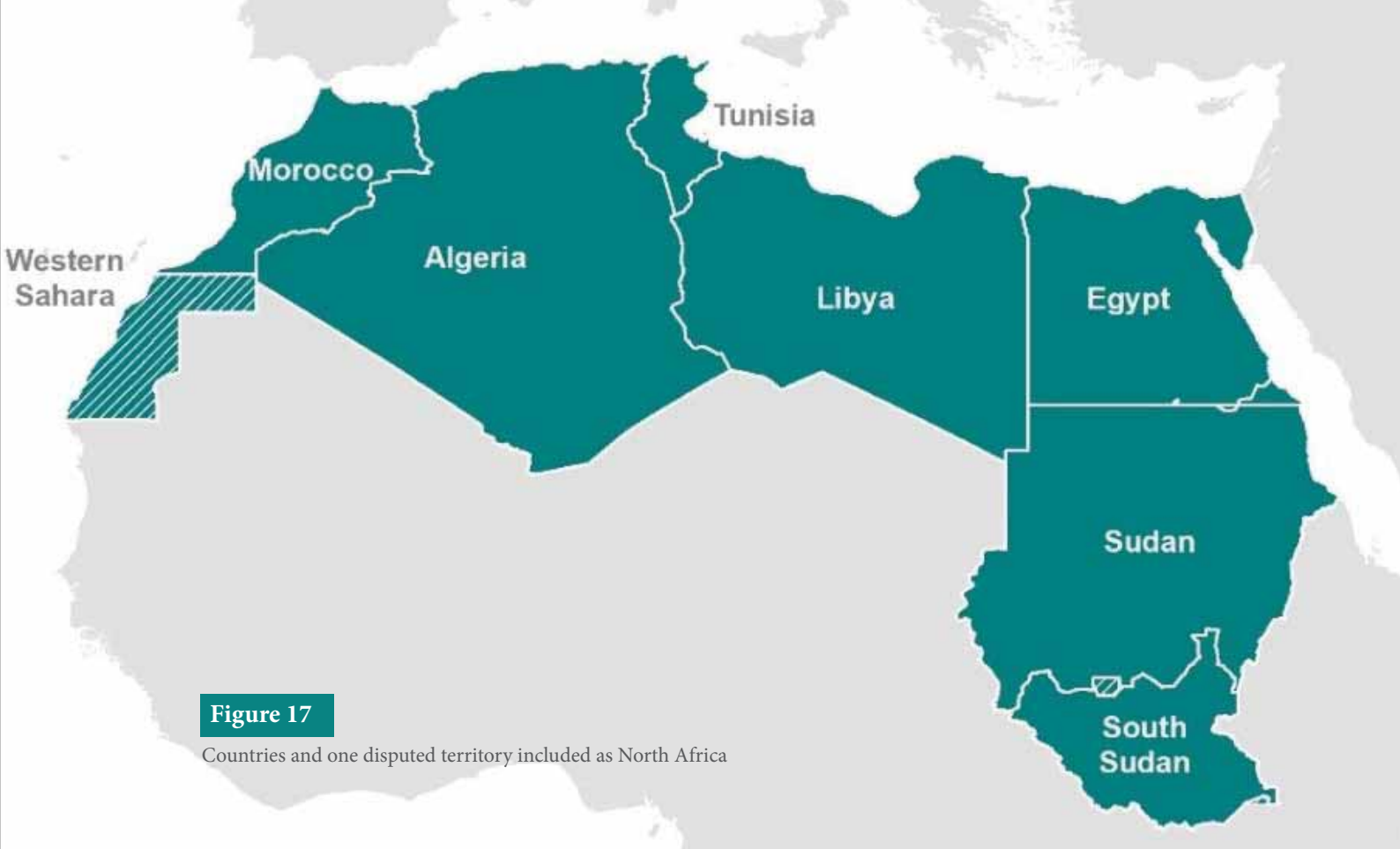
One of several large logging stockpiles along the main road into Douala, Cameroon

SUB-REGIONAL PROFILE:

NORTH AFRICA



Erg Chebbi area, Sahara Desert, Morocco



PROFILE ANALYSIS NORTH AFRICA

The countries considered to comprise North Africa for this analysis were Algeria, Egypt, Libya, Morocco, South Sudan, Sudan, and Tunisia plus the disputed territory of Western Sahara.

// *These countries are distinct to other parts of Africa in terms of the ethnicity, culture and languages spoken, although there is also significant variation within the region.*

North Africa contains a diverse range of habitats that include the Sahara Desert, the Atlas Mountains and the Mediterranean Sea: all of which influence the wildlife that can be found there.

All are members of CITES, aside from South Sudan (which became independent from Sudan in 2011), and Western Sahara, which is a disputed territory. Some very limited trade from Western Sahara was reported by importing countries/territories, but there was no trade from South Sudan reported.

According to CITES trade data, between 2006 and 2015 Morocco was the largest exporter to Asia in North Africa: exports totalled 170,092 individuals and an additional 612,656 kg, all of which were European Eel *Anguilla anguilla*. Sudan exported the greatest diversity of taxa, including reptiles, mammals, birds and clams. No trade to Asia was reported from Algeria or South Sudan by either importer or exporter between 2006 and 2015.

Morocco
was the largest exporter to Asia in North Africa

COUNTRY	MEMBER OF CITES?	YEAR JOINED CITES
Algeria	✓	1983
Egypt	✓	1978
Libya	✓	2003
Morocco	✓	1975
South Sudan	✗	
Suda	✓	1982
Tunisia	✓	1974
Western Sahara	✗	

Commodities in trade

Trade was reported using two units: kilogrammes and number of individuals. Across both units, trade was dominated by live animals (Figures 18a and 18b), although a significant amount of meat reported in kilogrammes was also reported.

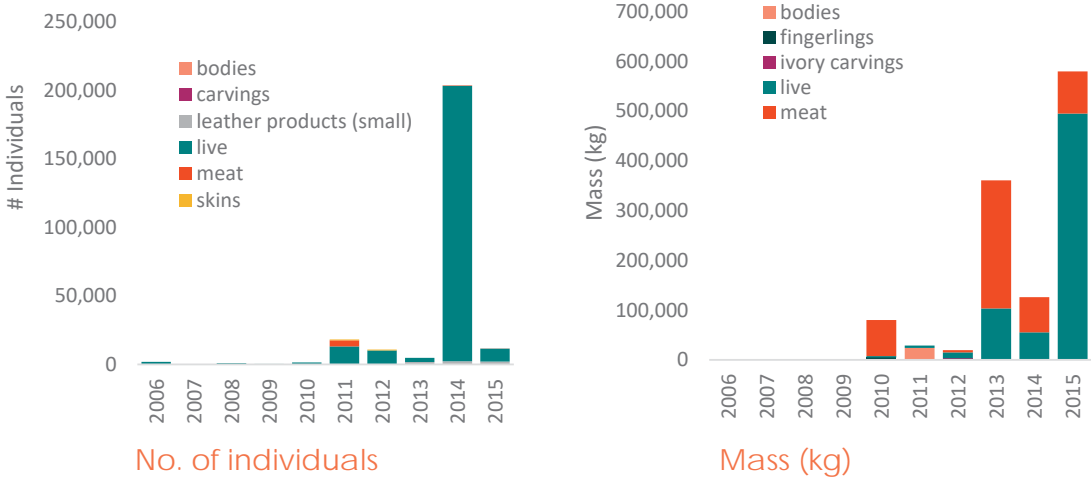


Figure 18a and 18b

Quantity of CITES-listed wildlife reported in number of individuals or kilogrammes (2006 to 2015) divided into trade terms

Top species in trade

The vast majority of exports reported both in number of individuals and kilogrammes were European Eel (Figure 19).

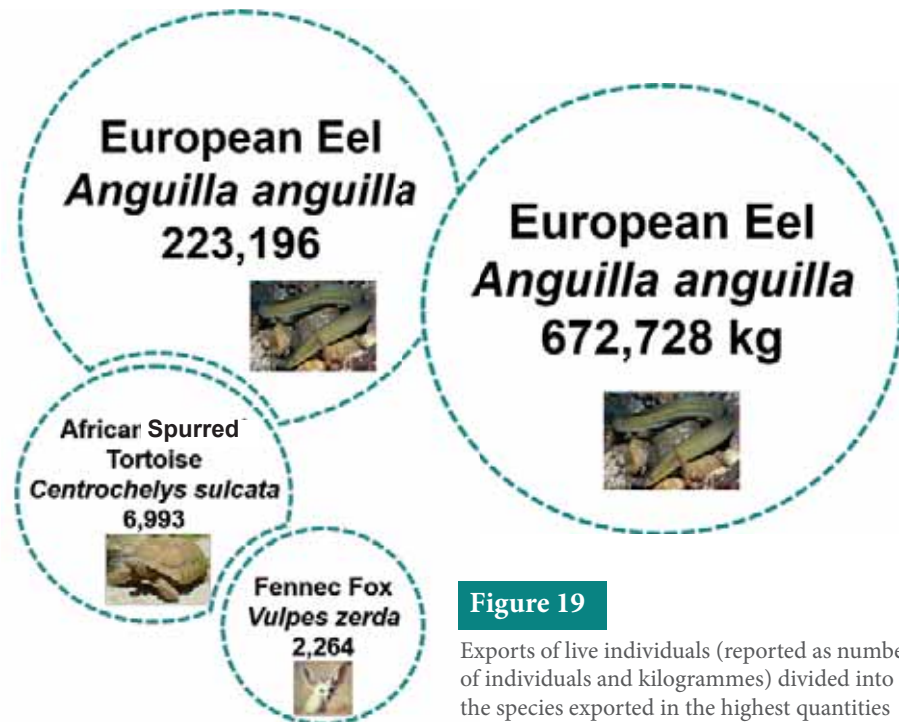


Figure 19

Exports of live individuals (reported as number of individuals and kilogrammes) divided into the species exported in the highest quantities



European Eel *Anguilla anguilla*

Live taxa in trade

Sudan exported the greatest number of live animals reported as individuals across all classes, except Actinopterygi (a class of fish that contains the European Eel which was only exported by Morocco and Tunisia (Figure 20)).

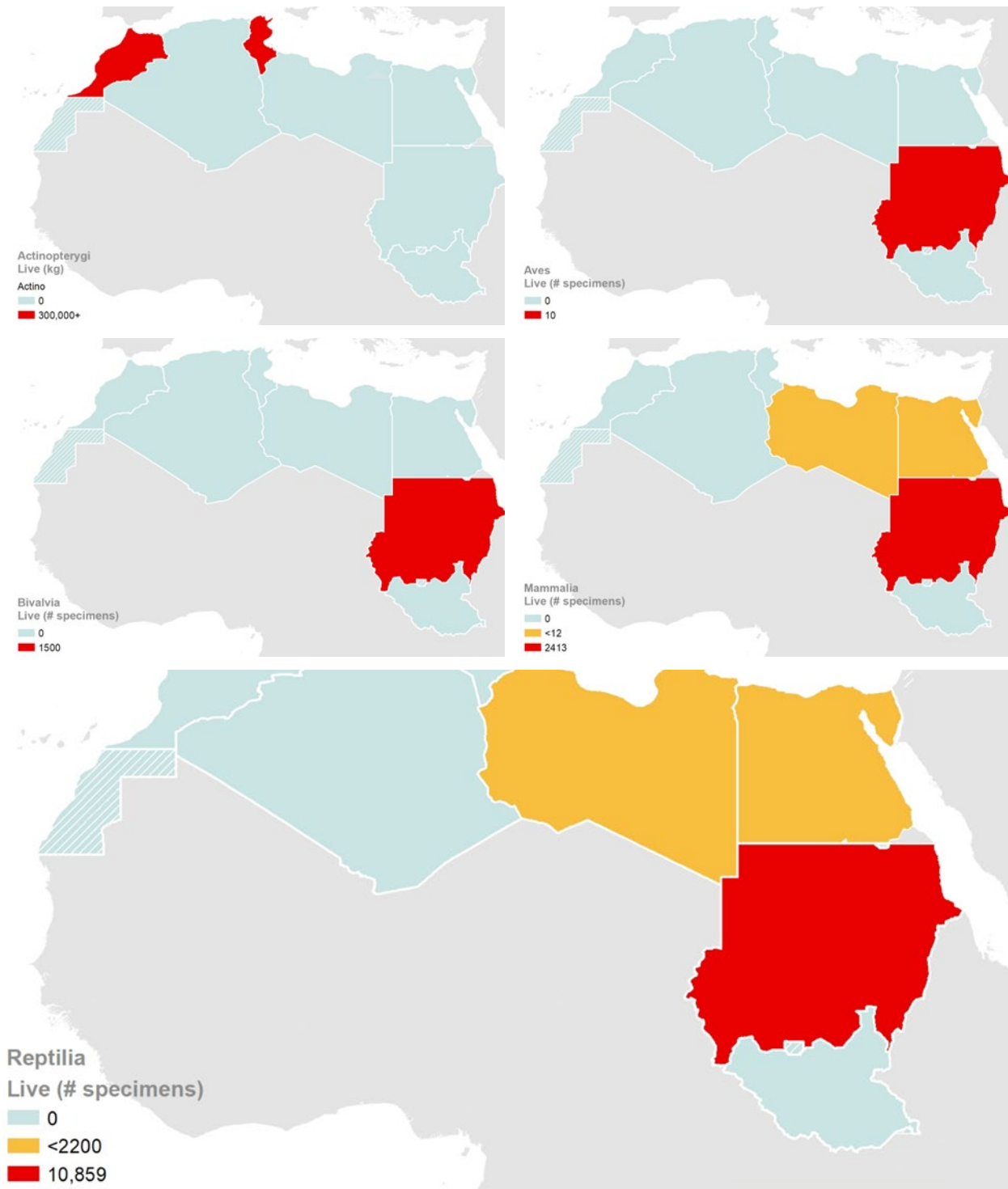


Figure 20

Live exports reported as number of individuals divided into taxonomic class and exporting country

Exporter and importers

Due to the dominance of European Eel in the trade from North Africa, it is unsurprising that Morocco and Tunisia were the largest exporters of live animals (Figures 21 and 22), although Sudan also exported a significant number of individuals.

A diverse range of countries/territories across East and Southeast Asia import wildlife from North Africa: with the Republic of Korea being the most important, largely due to its imports of European Eel (223,196 individuals plus 621,181 kg).

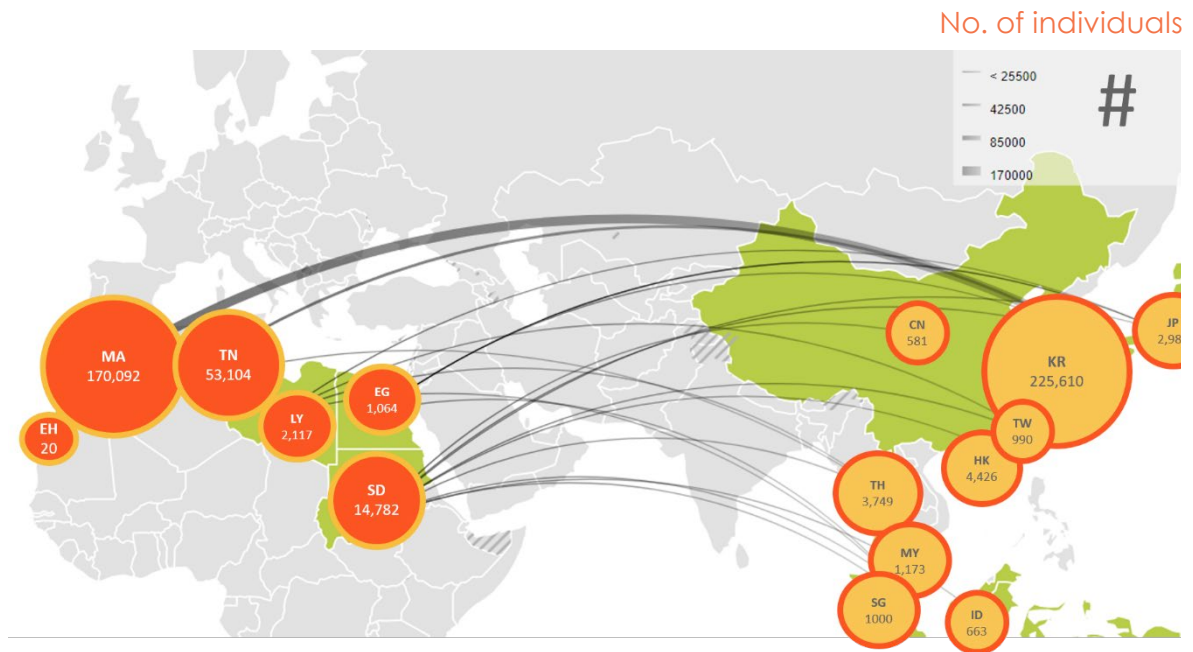


Figure 21

North African exporters and Asian importers of live species reported as number of individuals

Mass in kilogrammes

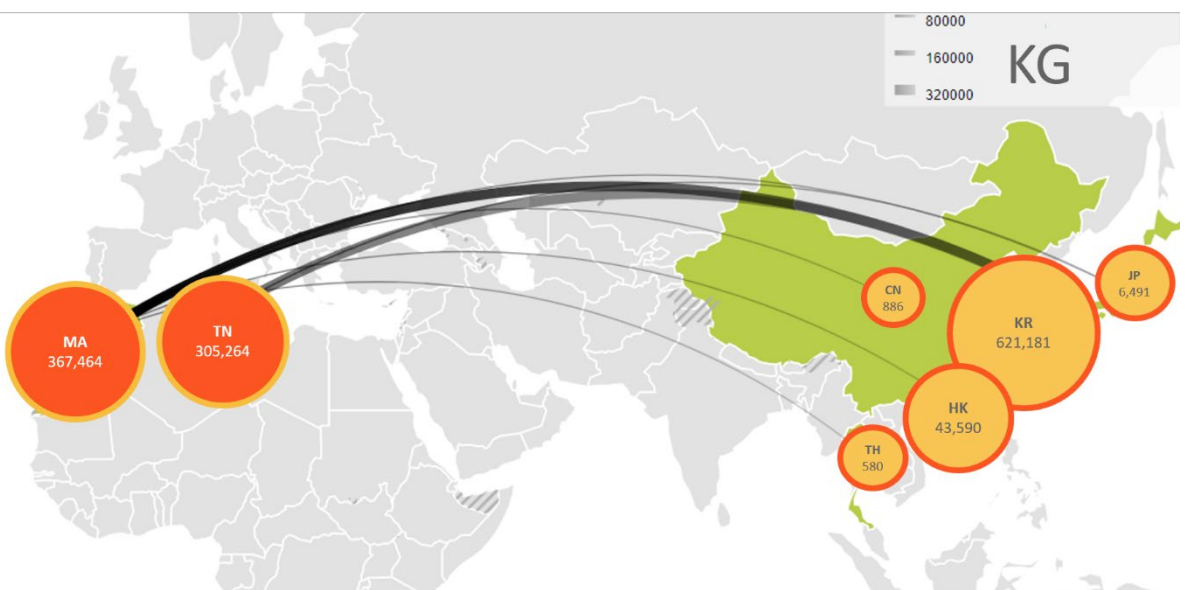


Figure 22

North African exporters and Asian importers of live species reported as kilogrammes

A large African Spurred Tortoise is shown resting on a large, light-colored rock. The tortoise's shell is dark brown with distinct scutes, and its head is visible, looking towards the left. The background is a plain, light-colored wall.

COUNTRY PROFILE:

EGYPT

African Spurred Tortoise *Centrochelys sulcata*

COUNTRY TRADE PROFILE: EGYPT

A summary of exports of CITES-listed species from Egypt to East and Southeast Asia between 2006–2015

Egypt only exported live specimens to Asia: almost all were tortoises destined for the Republic of Korea and Japan. Nearly all live specimens were captive-bred except for two wild Nile Crocodiles exported to Malaysia.

LIVE SPECIMENS

TORTOISES
1,058

FOXES
4

CROCODILES
2

TOP 3 IMPORTERS OF LIVE SPECIMENS

Total number of individuals across all species

912

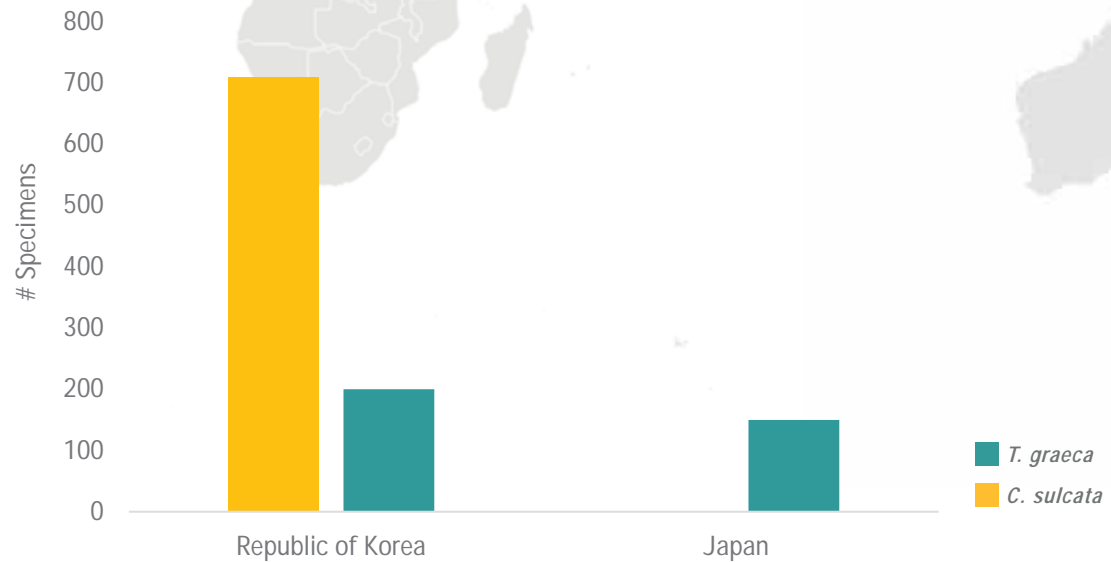
SOUTH KOREA

JAPAN

150

MALAYSIA

2



IMPORTERS OF LIVE TORTOISES SPECIMENS 2006-2015



Ivory stockpile

Egypt once harboured one of the largest illegal markets for ivory in Africa.

1,064 live
specimens of CITES-listed species were exported to Asia

Trade from Egypt to Asia

Egypt joined CITES in 1978. Between 2006 and 2015, a total of 1,064 specimens of live CITES-listed species were exported from Egypt across two classes.

The main export was of African Spurred Tortoise *Centrochelys sulcata* (708) followed by Spur-thighed Tortoise *Testudo graeca* (350). All exports consisted of live trade from captive sources, except for two live Nile Crocodiles *Crocodylus niloticus* exported in 2010 from wild sources to Malaysia (for scientific purposes).

Importers of live CITES-listed species from Egypt

Trade was reported with three different countries:

Republic of Korea, Japan and Malaysia. The main importer of African Spurred Tortoise and Spur-thighed Tortoise during 2006 to 2015 was the Republic of Korea, who imported a total of 200 individuals and 100 individuals respectively.

In addition, in 2008 four live Fennec Foxes *Vulpes zerda* were imported by the Republic of Korea.

LIVE EXPORTS



Illegal Trade from Egypt to Asia

Analysis of CITES trade data between 2006 and 2015 revealed limited legal trade from Egypt to Asia, which may be surprising when considering that there is evidence to suggest that Egypt is an important transit hub for illegal wildlife trafficking for a variety of species, perhaps influenced by the geographical location of Egypt (Egypt’s National Ivory Action Plan, date unknown).

Similarly, Egypt is thought to represent a key smuggling point for great apes which are trafficked from other African countries, notably Cameroon, the DRC and Guinea, into Egypt to be exported to the Middle East and Asia (Stiles *et al.* 2013).

Although Egypt is not a range State for the African Elephant *Loxodonta africana* there is reportedly high levels of unregulated trade in ivory and it has been suggested that at one point Egypt harboured one of the largest illegal markets for ivory in Africa (Martin & Milliken 2005).

Due to high levels of unregulated ivory trade, at CITES CoP16 Egypt was found to have failed to meet the requirements of trade in elephant specimens (*Resolution Conference 10.10* (Rev CoP16) (CoP17 Doc 57.6). Based on analyses of the Elephant Trade Information System (ETIS), Egypt was categorised at CoP16 as a country of “secondary concern”. Egypt developed a National Ivory Action Plan following a request at SC65 (2014) which detailed actions required to implement the action plan. At CoP17 (2016) Egypt was downgraded to an “important country to watch”.



COUNTRY PROFILES:

MOROCCO AND TUNISIA

European Eel *Anguilla anguilla*

COUNTRY TRADE PROFILES: MOROCCO AND TUNISIA

A summary of exports of CITES-listed species from Morocco and Tunisia to East and Southeast Asia between 2006–2015

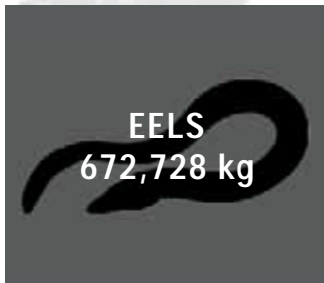
Morocco and Tunisia were significant exporters of European Eels to Asia: most of which were imported by the Republic of Korea. Excluding European Eel, exports were limited to a small number of carvings from African Elephant ivory.

TOP 3 IMPORTERS OF EUROPEAN EEL

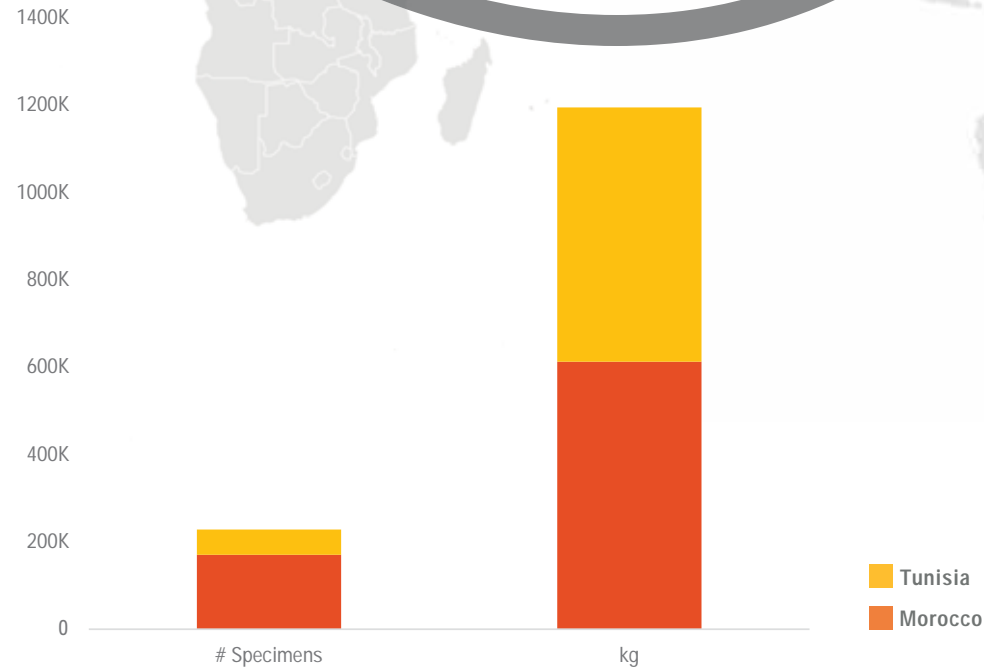
Volumes in weight by kg



LIVE SPECIMENS



OTHER SPECIMENS



TOTAL EXPORTS OF EUROPEAN EEL TO ASIA 2006–2015

Trade from Morocco and Tunisia to Asia

Tunisia joined CITES in 1975 and Morocco followed in 1976, and have been combined for analysis as they share similar patterns of trade.

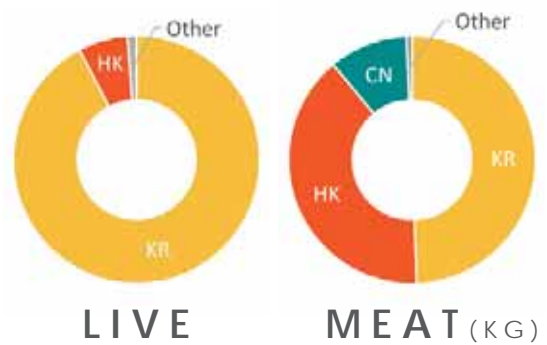
Between 2006 and 2015, a total of 228,052 specimens of CITES-listed species were exported from Morocco and Tunisia combined: most exports were live European Eels *Anguilla anguilla* (223,196) and European Eel meat (490,040 kg and 4,839 individuals). The remainder of exports included 17 ivory carvings exported from Tunisia to Japan in 2009.

Exports of all live European Eel were wild-sourced, except in 2015 when Tunisia and Morocco both exported 2,000 kg of captive-bred eels. The majority of meat exports were also wild-sourced, except in 2010 Morocco exported 48,650 kg that was classified as pre-Convention.

Importers of European Eels from Morocco and Tunisia

Trade was reported with six different East and Southeast Asian countries/territories: mainland China, Hong Kong SAR, Japan, Republic of Korea, Taiwan (PoC) and Thailand. The largest importer of both live and meat was Republic of Korea (228,005 individuals and 866,374 kg combined).

Almost all exports were for the purpose of commercial trade, with the exception of 2,000 kg which was imported to the Republic of Korea under purpose code B.



European Eel trade

The European Eel was listed in CITES Appendix II in 2009. For decades countries within the European Union (EU) were the main exporters of European Eel (Nijman, 2017), however after the EU CITES Scientific Review Group were unable to determine if trade was detrimental to the survival of the species, in December 2010, a strict “zero-export quota” was adopted banning all imports and exports of European Eel into and from the EU.

Exports of European Eel from Morocco were first reported in the CITES Trade Database in 2010, shortly followed by Tunisia in 2012. Morocco was the largest exporter of European Eel between 2010 and 2015, and exports from both countries peaked in 2015 when a total of 579,330 kg of live eels and meat were imported into Asia. At the 29th Animals Committee (AC29) in 2017, European Eel was included in the Review of Significant Trade (RST) process due to its Endangered status and a sharp increase in trade. Trade from Morocco, Tunisia and Algeria will now be assessed to consider its sustainability.

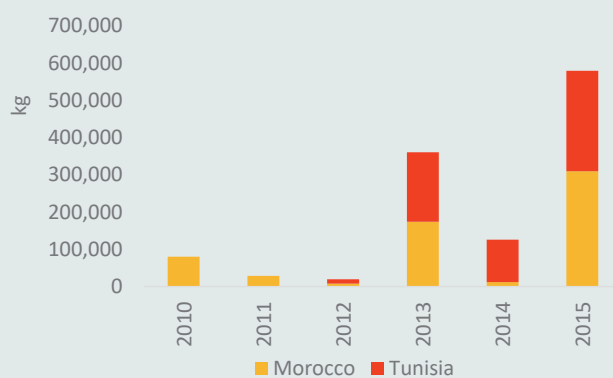


Figure 23

Export of European Eel from Morocco and Tunisia to Asia 2010–2015 (reported as kilogrammes)



COUNTRY PROFILE:

SUDAN

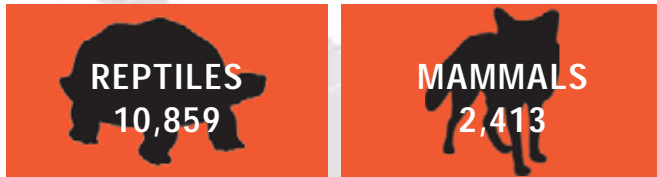
Saharan Spiny Tailed Lizard *Uromastyx geyri*

COUNTRY TRADE PROFILE: SUDAN

A summary of exports of CITES-listed species from Sudan to East and Southeast Asia between 2006–2015

Sudan was a relatively small exporter of CITES-listed specimens to Asia. A large proportion of exports from Sudan were of live specimens: most of which were African Spurred Tortoise or Fennec Fox. Exports of skins were predominately Nile Monitors: most of which were destined for China.

LIVE SPECIMENS

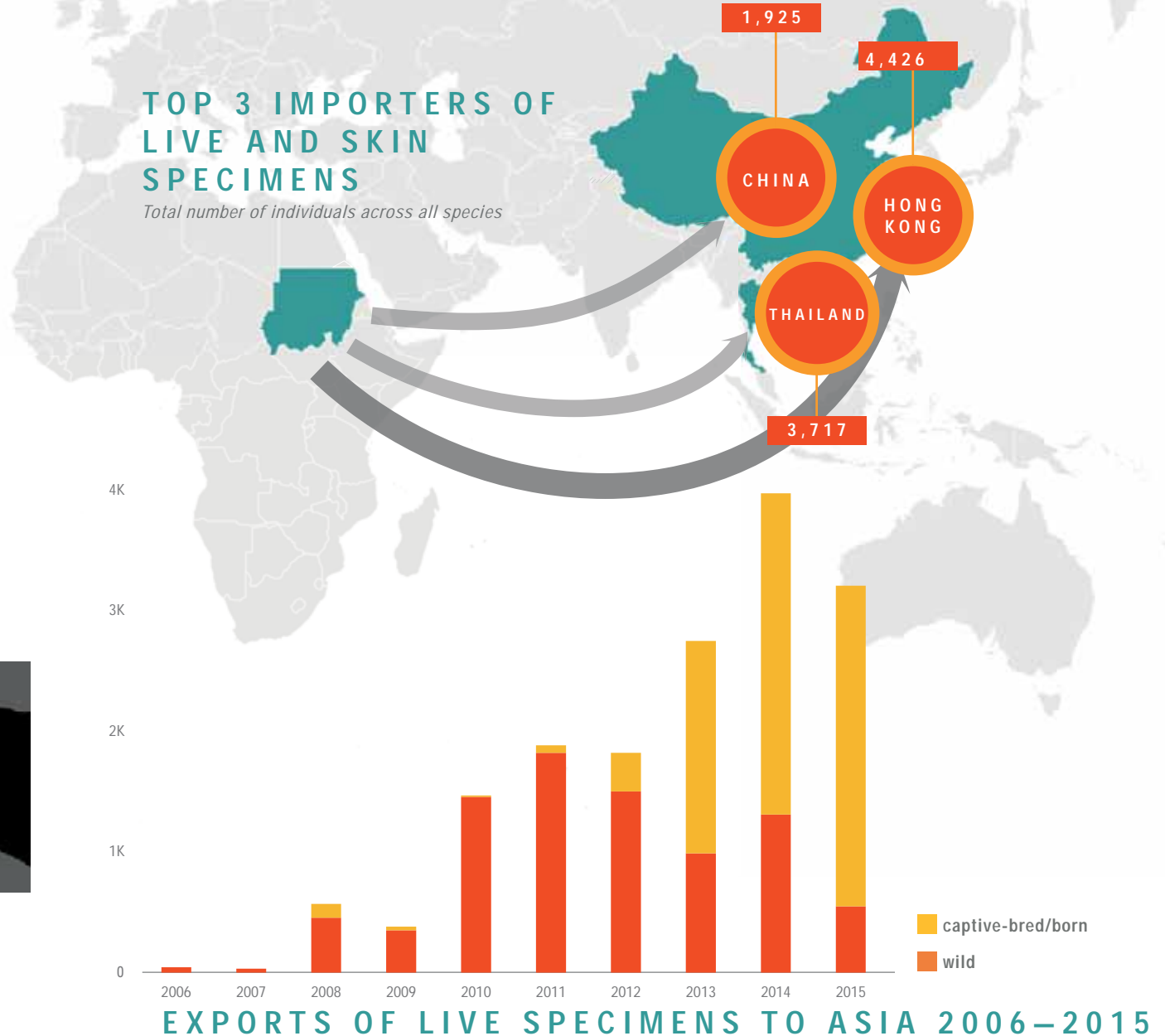


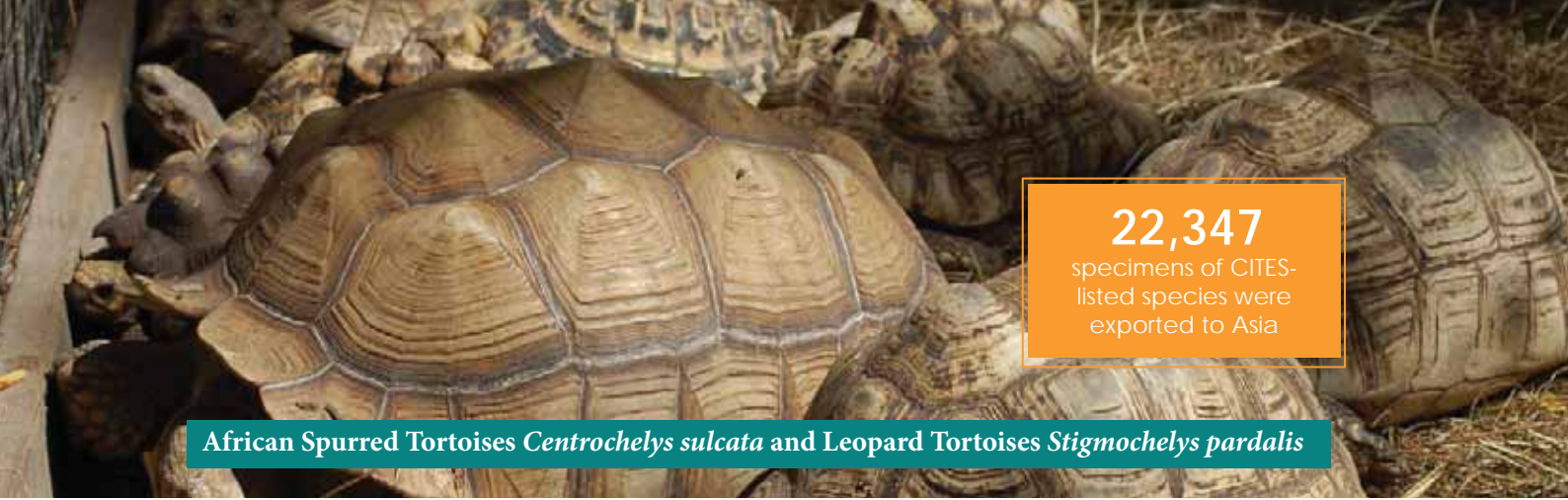
OTHER SPECIMENS



TOP 3 IMPORTERS OF LIVE AND SKIN SPECIMENS

Total number of individuals across all species





22,347
specimens of CITES-listed species were exported to Asia

African Spurred Tortoises *Centrochelys sulcata* and Leopard Tortoises *Stigmochelys pardalis*

Trade from Sudan to Asia

Sudan joined CITES in 1982. In 2011 South Sudan gained independence from Sudan but has yet to join CITES. The CITES Trade Database does not include any reports of imports (or exports) from South Sudan.

Between 2006 and 2015, a total of 22,347 specimens of CITES-listed species were exported from Sudan: most were live animals (14,782) or small leather products (6,218). In addition, China reported importing 13.7 kg of pre-Convention ivory carvings from Sudan in 2012.

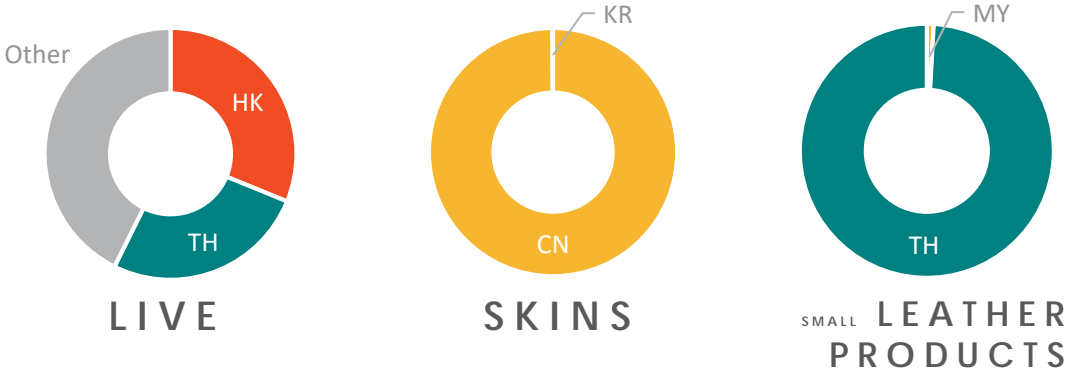
The most common species exported as live were African Spurred Tortoise *Centrochelys sulcata* (6,285) and Fennec Fox *Vulpes zerda* (2,254). Exports of lizards in the genus *Uromastyx* totalled 4,554 individuals. Exports of skins and small leather products were predominantly Nile Monitor *Varanus niloticus* (960 and 6,218 respectively).

Importers of CITES-listed species from Sudan

Trade was reported with nine different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Indonesia
- Japan
- Malaysia
- Republic of Korea
- Singapore
- Taiwan (PoC)
- Thailand

The largest importer varied by commodity type, with Hong Kong SAR being the largest importer of live individuals but mainland China dominating imports of skins.



Captive-breeding in Sudan

Exports from Sudan to Asia of live animals from captive sources (predominantly captive-bred source code C) have increased rapidly in recent years as wild exports have declined. The majority of individuals from captive sources were African Spurred Tortoise and Fennec Fox: both of which are native to Sudan. Due to a global zero quota in place since 2000, no exports of wild African Spurred Tortoises are permitted.

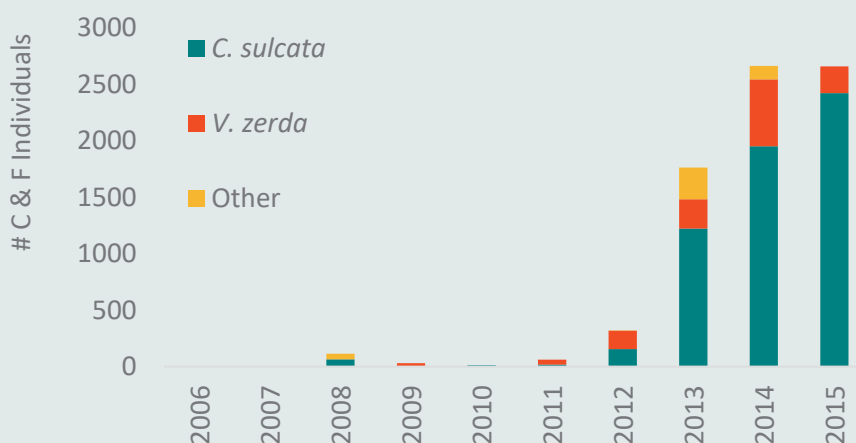


Figure 24

Export of live species from Sudan to Asia reported as captive-bred (C) or captive-born (F) (reported as number of individuals, 2006 to 2015)

The largest importer of African Spurred Tortoises from captive sources was Hong Kong SAR (3,316) followed by Thailand (1,531). Thailand was the largest importer of Fennec Foxes (511), all of which were reported as captive-bred.

5,829
captive-bred African Spurred Tortoises were exported to Asia

At AC29 in 2017, concerns were raised regarding whether these two species were genuinely being bred in captivity in Sudan, and were included in the new CITES captive-breeding review process (*Resolution Conference 17.7*). As such, Sudan is now required to provide further information on, among other things, how the parent stock were obtained, how facilities are monitored and any ongoing reliance on wild individuals.

An aerial photograph of a vast mangrove forest. A wide, light-colored river winds through the dense green trees, creating a complex network of channels and islands. The vegetation is thick and vibrant green, covering most of the landscape. The river's path is irregular, with several sharp turns and smaller tributaries branching off. The overall scene is a rich, natural environment.

SUB-REGIONAL PROFILE:

EAST AFRICA

Rufiji Delta, Tanzania

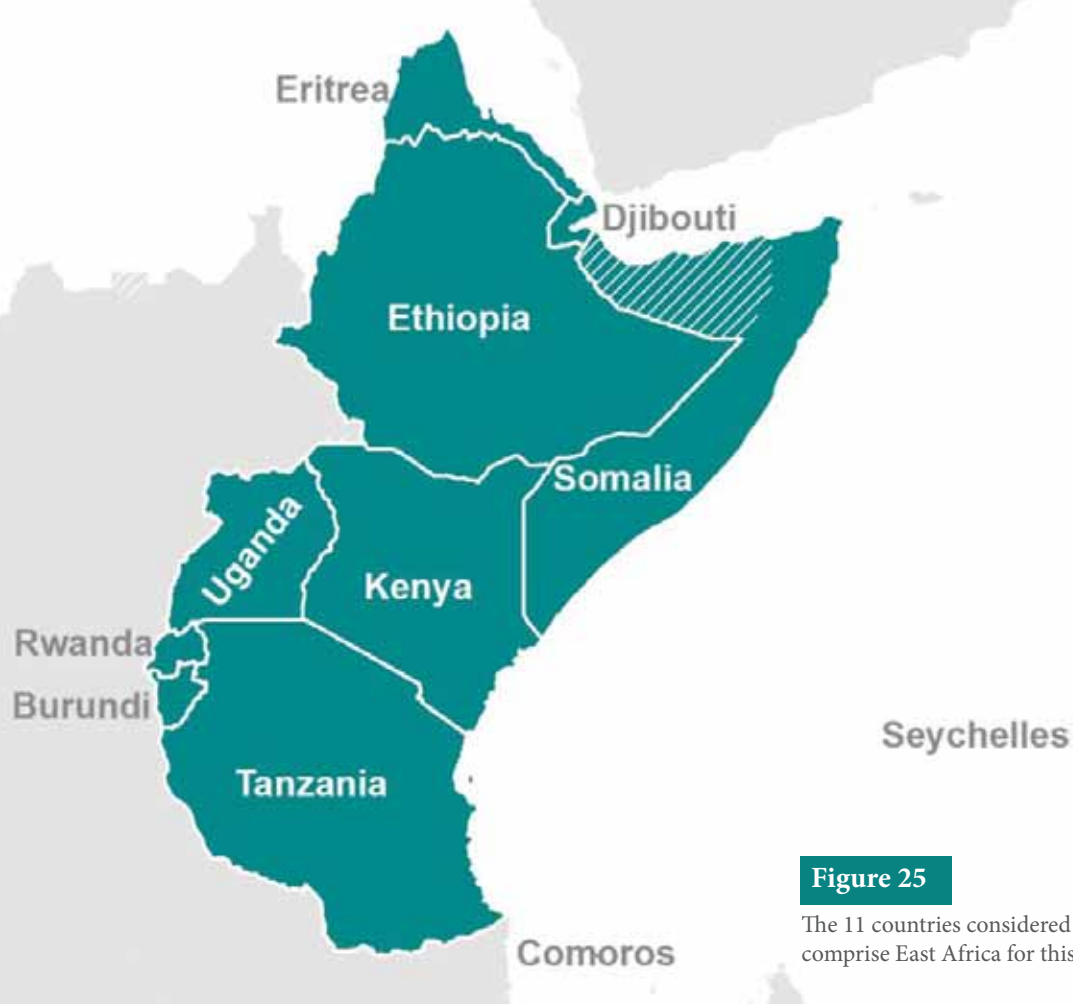


Figure 25

The 11 countries considered to comprise East Africa for this analysis

PROFILE ANALYSIS EAST AFRICA

East Africa contains some of Africa’s most iconic environments: including the grasslands of the Serengeti and Masai Mara, the lakes of the East African Rift Valley, and Africa’s highest mountains: Mount Kilimanjaro and Mount Kenya.

// *Some of the countries in the region have some of the fastest growing economies in Africa (Ethiopia, Tanzania), while others are much slower (Comoros) or even shrinking (Burundi) (IMF, 2016)*

East Africa is also home to some of the fastest growing human populations in the world (Uganda, Burundi, Tanzania) (World Bank, 2017).

According to CITES trade data, between 2006 and 2015, Asia imported a total of 254,375 individual specimens of CITES-listed wildlife plus 57,231 kg, 7,300 back skins and 6,549 belly skins from East Africa. This covered 94 taxa in total.

All countries are members of CITES:

COUNTRY	MEMBER OF CITES?	YEAR JOINED CITES
Burundi	✓	1988
Comoros	✓	1994
Djibouti	✓	1992
Eritrea	✓	1994
Ethiopia	✓	1989
Kenya	✓	1978
Rwanda	✓	1980
Seychelles	✓	1977
Somalia	✓	1985
Tanzania	✓	1979
Uganda	✓	1991

Commodities in trade

Trade was reported predominantly using number of individuals or kilogrammes, although there was some trade reported in back skins, belly skins and grammes. Trade reported using number of individuals was mainly live and skins, whereas trade reported in kilogrammes was mostly teeth (Figures 26a and 26b). Exports of leaves were reported using both number of individuals and kilogrammes, and were predominantly from species of cacti in the genera *Rhipsalis* (10,250) or *Aloe* (406 kg).

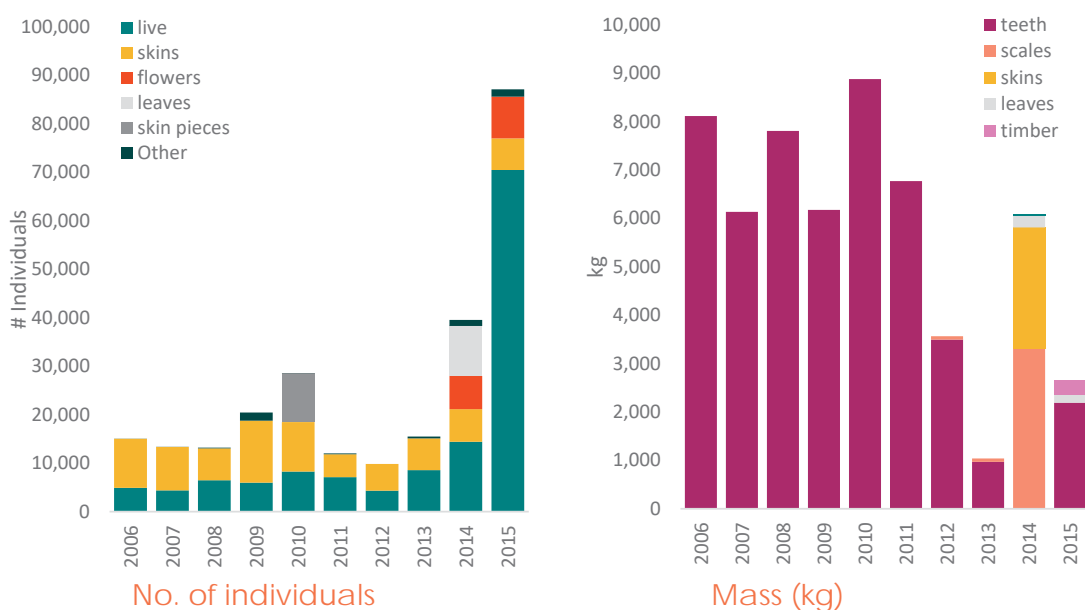


Figure 26a and 26b

Quantity of CITES-listed wildlife reported in number of individuals or kilogrammes (2006 to 2015) divided into trade terms

There was a large spike in the export of live individuals from East Africa in 2015 (70,444) which cannot be attributed to just one species, but rather an increase in the export of a number of species. Those that had the most significant influence on the peak were several cacti species in the *Rhipsalis* genus (44,575), most notably Mistletoe Cactus *R. baccifera* (14,880). Although the genus has been listed in Appendix II since 1975, all exports of live individuals since 2006 occurred in 2015. There was also an above average export of Leopard Tortoise *Stigmochelys pardalis* in 2015: 7,344, compared with annual average of 1,091 between 2006 and 2014.

70,444
live specimens were
exported in 2015

All exports of skins reported as individuals were of Nile Crocodile *Crocodylus niloticus* and remained relatively stable: ranging from 4,732 in 2011 to 12,771 in 2009. In 2010, 10,000 Nile Crocodile skin pieces were also exported.

A total of 50,534 kg and 1,650 individual teeth were exported between 2006 and 2015: all of which were from Common Hippopotamus *Hippopotamus amphibious* and exported by Uganda and Tanzania. Exports declined in recent years, and only 1 kg was reported in 2014. Uganda also exported 2,500 kg of Common Hippopotamus skins to Hong Kong SAR in 2014.

In 2014, Uganda exported 3,310 kg of Giant Pangolin *Manis gigantea* scales, most of which went to mainland China (3,211 kg).

Top species in trade

The Leopard Tortoise was the most common live species to be exported from East Africa: 34,234 were exported between 2006 and 2015 (Figure 27). Most were reported as captive-born (19,689) or captive-bred (13,240). The Mistletoe Cactus was the second most common live species to be exported, all exports were artificially propagated plants.

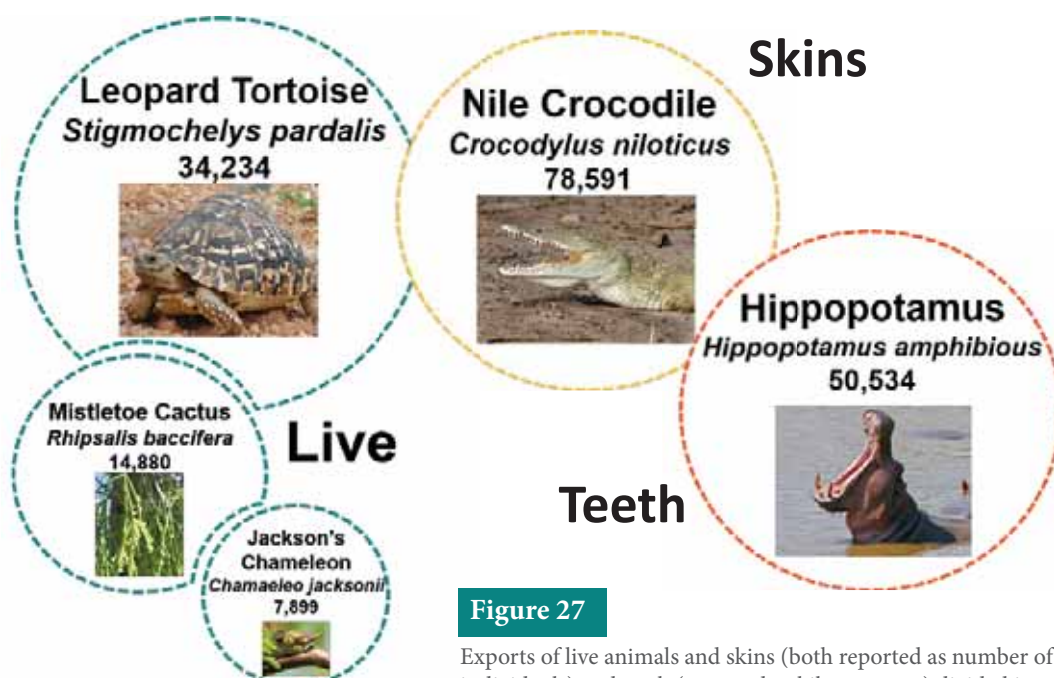


Figure 27

Exports of live animals and skins (both reported as number of individuals) and teeth (reported as kilogrammes) divided into the species exported in the highest quantities



Common Hippopotamus *Hippopotamus amphibius* teeth for sale in China

50,534 kg and 1,650 individual teeth were exported from East Africa between 2006 and 2015

Live taxa in trade

Six countries from East Africa exported live individuals to Asia, which covered a range of different taxa: including 72 species and five taxa reported only to genus or family level.

Of the countries that exported live individuals, Tanzania was the largest exporter of live reptiles (57,567), plants (25,800), mammals (655) and the only exporter of live birds (2,091) in the region (Figure 28). Tanzania also exported the greatest diversity of taxa (62), compared with Seychelles and Comoros which only exported one live species each (Aldabra Giant Tortoise *Aldabrachelys gigantea* and West Indian Ocean Coelacanth *Latimeria chalumnae* respectively). There was not much overlap of the taxa exported by each country, most were only exported by one (60) or two (15) countries.

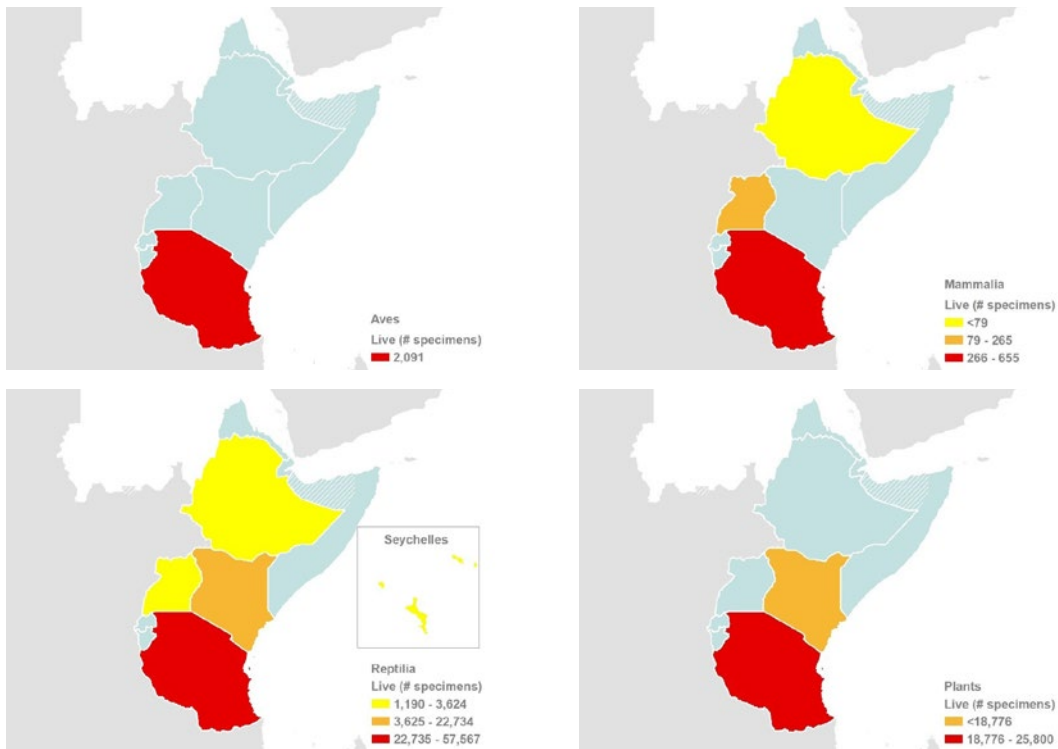


Figure 28

Exports of live birds, mammals, reptiles and plants from East Africa to Asia between 2006-2015.

Taxa in trade: skins and teeth

A total of 78,591 individual Nile Crocodile skins plus 7,300 back skins and 6,549 belly skins were exported from East Africa to Asia: Kenya was the largest exporter of skins reported as individuals (67,392) (Figure 29) and exported all back and belly skins. Also, Uganda exported 2,500 kg of Common Hippopotamus skins in 2014 to Hong Kong SAR.

Regarding exports of teeth, a total of 50,534 kg Common Hippopotamus teeth were exported by Uganda (27,751 kg) and Tanzania (22,784 kg) (Figure 29), as well as 1,650 individual teeth exported from Tanzania to Hong Kong SAR.

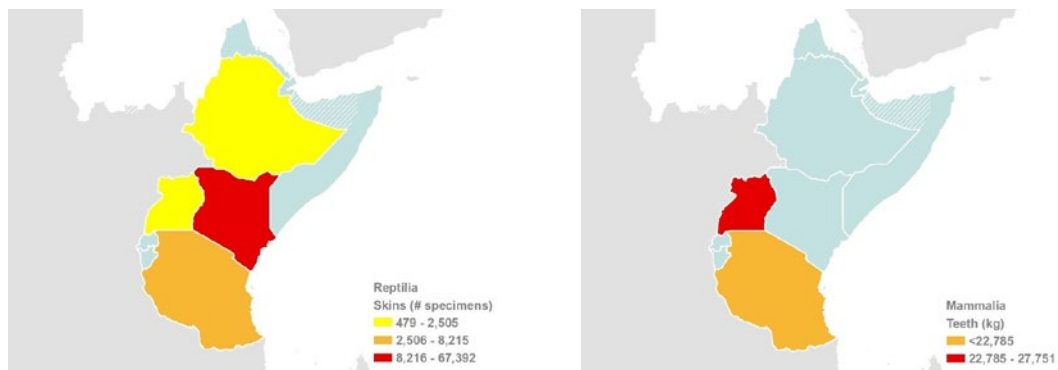


Figure 29

Exports of individual skins (reported as number of individuals) and teeth (reported as kilogrammes) divided into taxonomic class and exporting country

Exporters and importers

Of the six East African countries exporting live individuals to Asia, Tanzania was the largest exporter followed by Kenya (Figure 30). Twelve countries/territories across East and Southeast Asia imported live individuals from East Africa with Japan being the most important. Japan imported 55 different taxa from East Africa: the most numerous being various species in the cacti genus *Rhipsalis* (combined total of 44,575), all of which were artificially propagated plants from Tanzania.

Four East African countries exported individual skins to Asia, Kenya being the the largest by far (Figure 31): all of which were from ranched (65,844) or captive-bred (15,397) Nile Crocodiles. In contrast, nearly all of Tanzania's exports were of wild Nile Crocodiles skins (8,178). Singapore dominated Asian imports of skins, which were likely imported there for the purpose of tanning and re-exporting for the international leather trade (UNCTAD, 2012).

All exports of teeth from East Africa were exported by Uganda or Tanzania, and were from wild Common Hippopotamus. Most were imported by Hong Kong SAR.

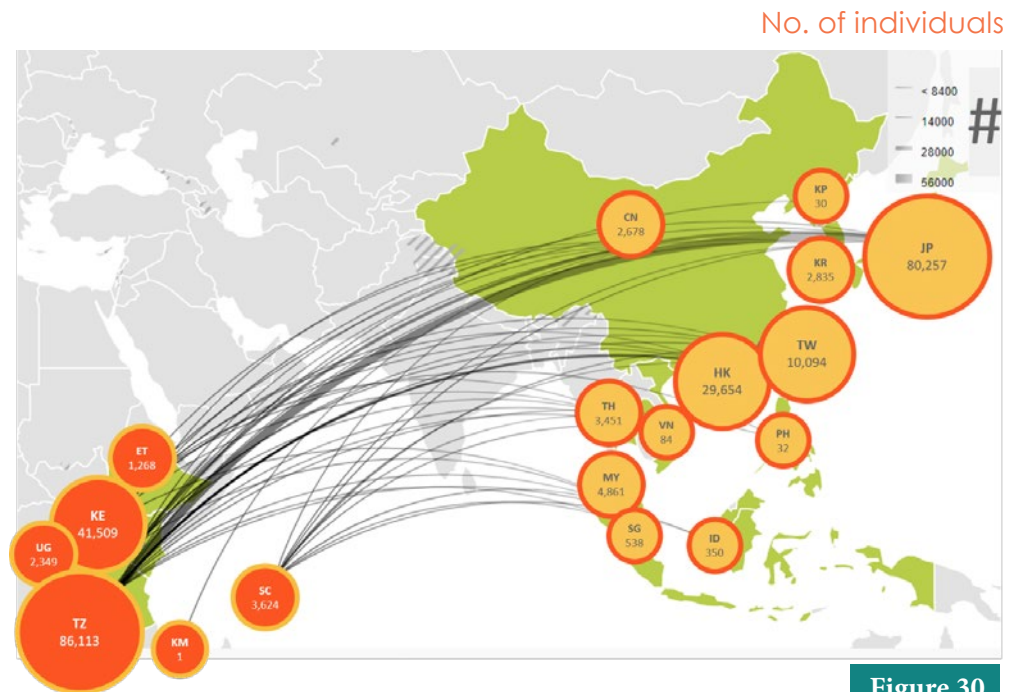


Figure 30

East African exporters and Asian importers of live species reported as number of individuals



Ranched Nile Crocodiles *Crocodylus niloticus* in Ethiopia

No. of individuals



Figure 31

East African exporters and Asian importers of skins reported as number of individuals

Kilogrammes

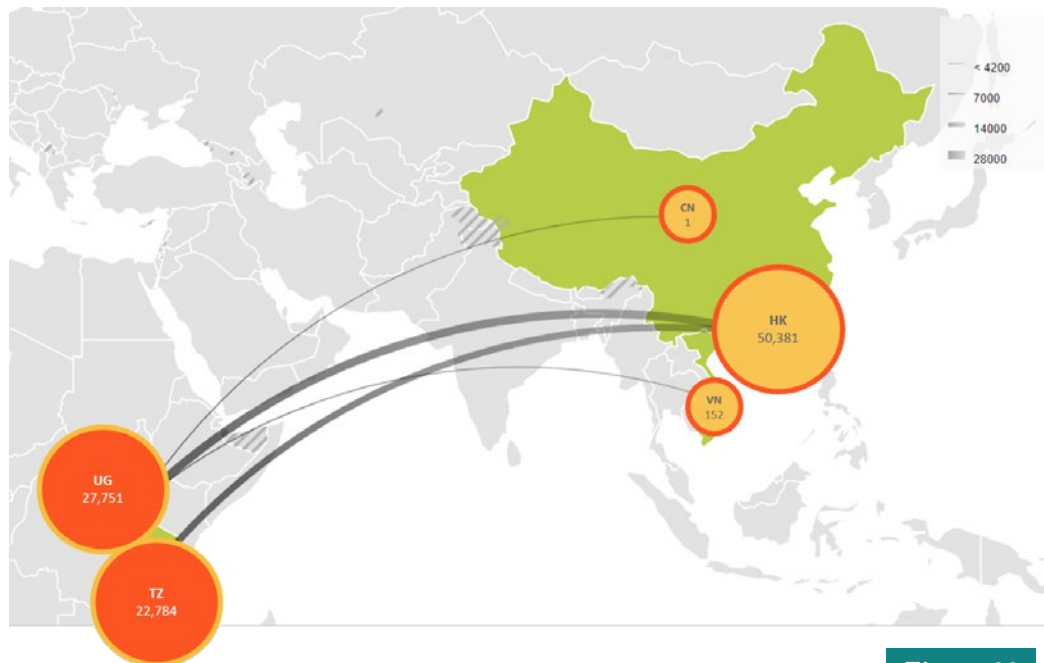


Figure 32

East African exporters and Asian importers of teeth reported as kilogrammes



COUNTRY PROFILE:

ETHIOPIA

Leopard tortoise *Stigmochelys pardalis*

COUNTRY TRADE PROFILE: ETHIOPIA

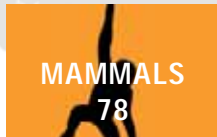
A summary of exports of CITES-listed species from Ethiopia to East and Southeast Asia between 2006–2015

Ethiopia was a relatively small exporter of CITES-listed specimens to Asia and only exported two commodity types: live and skins. The most commonly exported live animal was the Leopard Tortoise and all skins were sourced from ranched Nile Crocodiles.

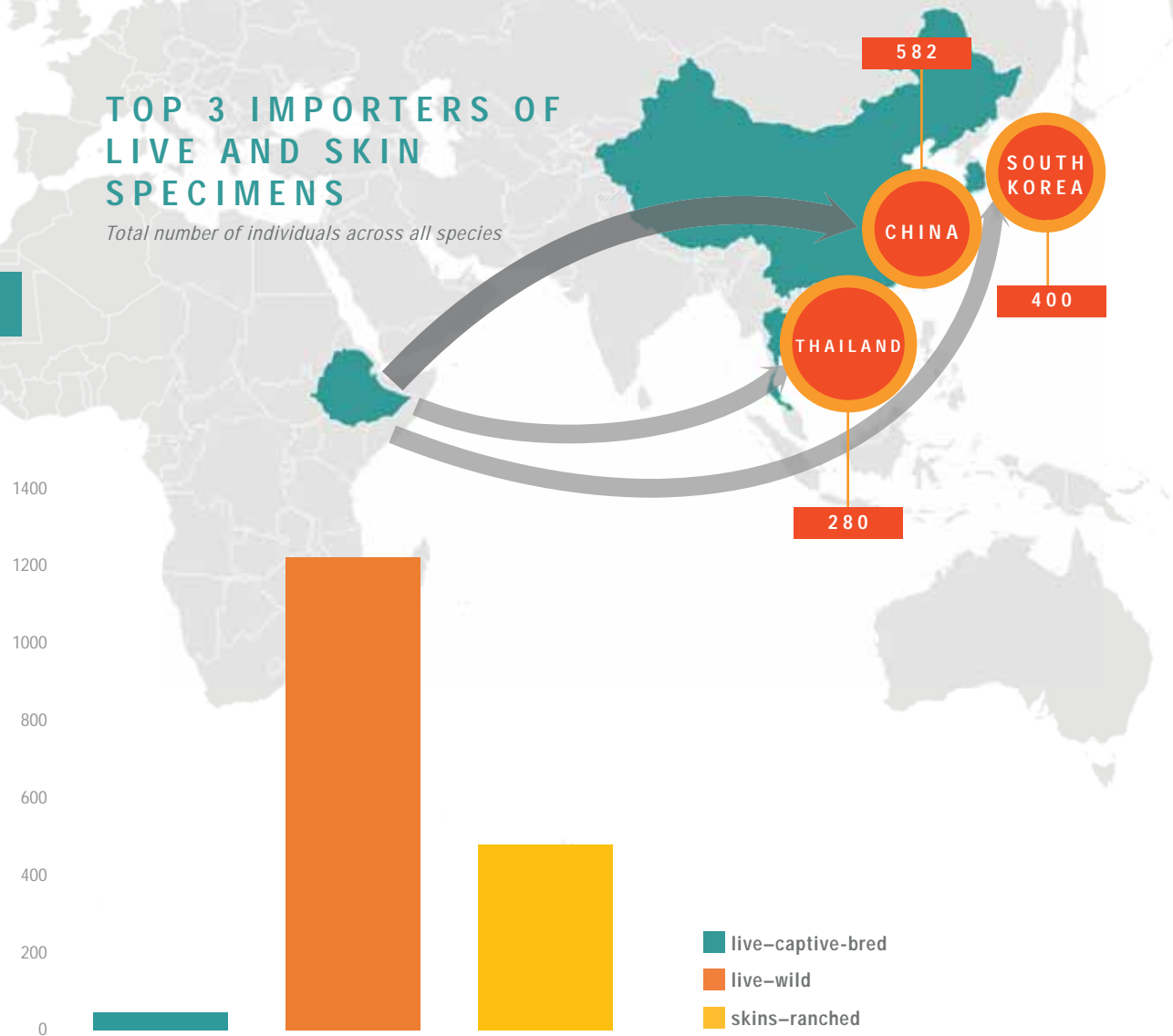
TOP 3 IMPORTERS OF LIVE AND SKIN SPECIMENS

Total number of individuals across all species

LIVE SPECIMENS



OTHER SPECIMENS



SOURCE OF LIVE AND SKIN SPECIMENS 2006–2015



Cheetah *Acinonyx jubatus*

Trade from Ethiopia to Asia

Ethiopia joined CITES in 1989. Between 2006 and 2015 a total of 1,747 individual CITES-listed specimens were exported from Ethiopia to Asia: most of which were live animals (1,268) and the remainder of exports were skins (747). Based on these figures, it appears that Ethiopia is a relatively small exporter of CITES-listed taxa, although it has been identified as a significant transit hub for illegal trade such as ivory, partly due to the excellent transport links it has with other African countries and Asia (Utermohlen & Baine, 2017). Ethiopia has also been highlighted as a source and transit point for live animals, such as Cheetah *Acinonyx jubatus*, leaving the Horn of Africa for the Middle East (Nowell, 2014).

1,268
live specimens were
exported to Asia
between 2006 and 2015

The most common species exported as live was the Leopard Tortoise *Stigmochelys pardalis* (734) followed by the Eyed Dabb Lizard *Uromastyx ocellata*. The only taxa exported as live that was reported as captive-bred was the Leopard Tortoise (45) the remainder of live trade was sourced from the wild. The only export of skins was Nile Crocodile *Crocodylus niloticus* (479) all of which were from ranched sources, and most of which were exported in 2012 (400).

Importers of CITES-listed species from Ethiopia

Trade was reported with seven different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Japan
- Philippines
- Republic of Korea
- Taiwan (PoC)
- Thailand

China was the largest importer of live individuals (582) of which the majority were Leopard Tortoises (504), followed by Thailand (280) of which most were Eyed Dabb Lizards (210). Only two countries were found to import skins from Ethiopia: Republic of Korea (400) and Japan (49).



Live tortoise trade from Ethiopia to Asia

The Leopard Tortoise was first listed in CITES Appendix II in 1975. Leopard Tortoises are large, attractive tortoises that are popular in the international pet trade, as well as having multiple domestic uses within Ethiopia: they are utilised for meat, and their shells are used as cowbells (Baker *et al.* 2015).

There have been reports of population declines in areas of East Africa due to unsustainable harvesting to supply the pet trade (Baker *et al.* 2015).

Exports of Leopard Tortoises remained relatively stable until 2015 when they increased sharply. Most Leopard Tortoises exported from Ethiopia to Asia are from the wild (689) of which most were imported into Asia for the purpose of commercial trade (679). The remainder were imported for the purpose of breeding in captivity (10). The largest importer of Leopard Tortoises from Ethiopia was mainland China (504), followed by Hong Kong SAR (106).

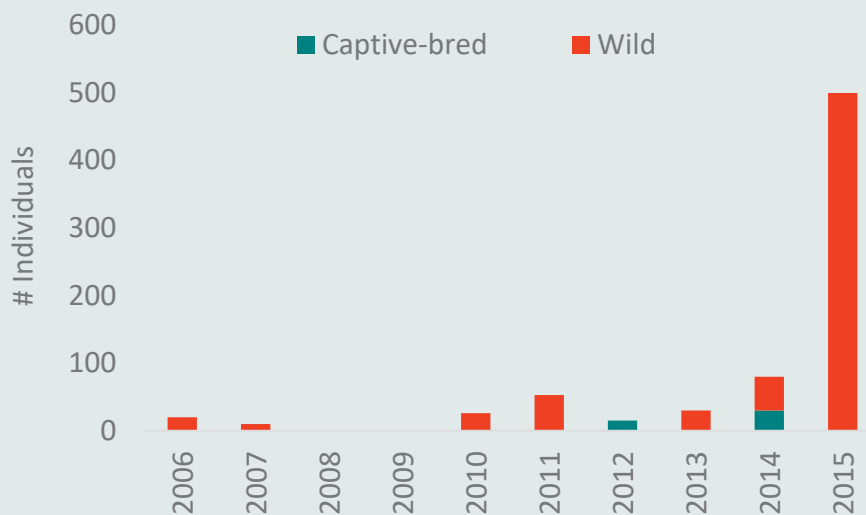


Figure 33

Exports of live Leopard Tortoises from Ethiopia to Asia reported as captive-bred (source code C) or wild (source code W) (reported as number of individuals, 2006–2015)

An aerial photograph of a tropical coastline. The water is a vibrant turquoise color, transitioning to a deeper blue further out. The land is covered in lush green vegetation, with some buildings and roads visible. The sky is a pale, hazy blue with soft, wispy clouds. The overall scene is serene and beautiful.

COUNTRY PROFILE:

TANZANIA

Zanzibar Archipelago, Tanzania

COUNTRY TRADE PROFILE: TANZANIA

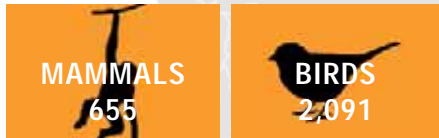
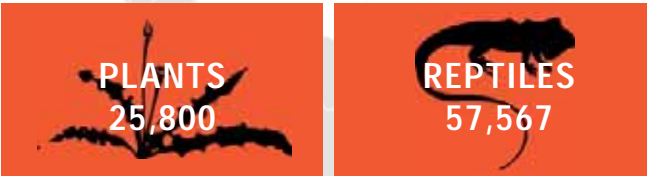
A summary of exports of CITES-listed species from Tanzania to East and Southeast Asia between 2006–2015

Tanzania is a significant exporter of live CITES-listed animals to Asia; a large proportion of which are live reptiles such as the Leopard Tortoise. The country has become an important exporter of live plants, particularly Mistletoe Cactus. Tanzania is also one of Africa's largest exporters of Common Hippopotamus teeth to Asia.

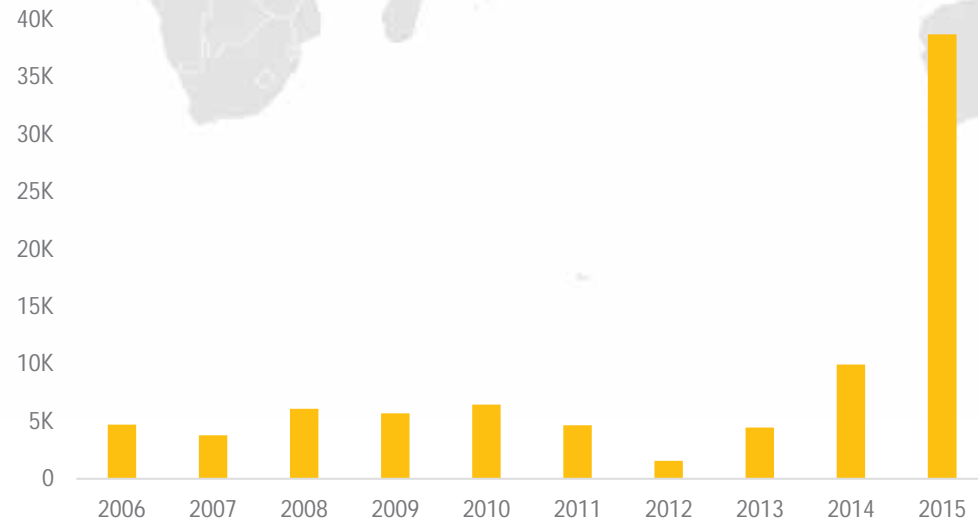
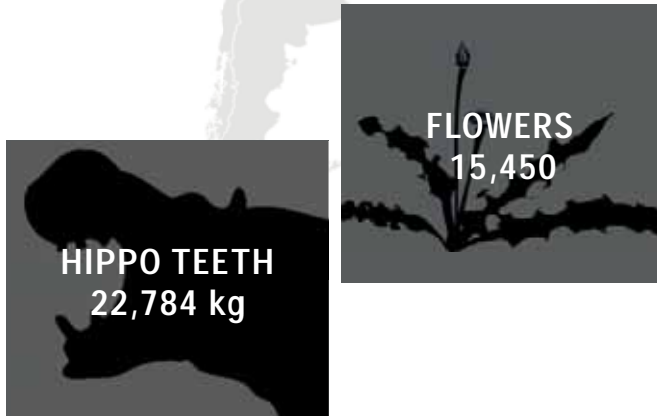
TOP 3 IMPORTERS OF LIVE SPECIMENS

Total number of individuals across all species

LIVE SPECIMENS



OTHER SPECIMENS



EXPORTS OF LIVE SPECIMENS TO ASIA 2006–2015





Mistletoe Cactus *Rhipsalis baccifera*

15,450
flowers were exported
from Tanzania to Asia
between 2006 and 2015

Trade from Tanzania to Asia

Tanzania joined CITES in 1980. Between 2006 and 2015 a total of 121,946 individual CITES-listed specimens were exported from Tanzania to Asia: most of which were live animals (86,113). Exports also included trade in flowers (15,450) and leaves (10,270), in addition to skins (8,215). The most commonly exported commodity in kilogrammes was teeth (22,784 kg) all sourced from Common Hippopotamus *Hippopotamus amphibius*.

The most commonly exported live species was the Leopard Tortoise *Stigmochelys pardalis* (20,089), the majority of which were reported as captive-born (19,689). The second most common species was Mistletoe Cactus *Rhipsalis baccifera* (8,600): all exported in 2015 and reportedly artificially propagated. All exports of skins were from Nile Crocodiles *Crocodylus niloticus* (8,215) of which most were reportedly wild (8,178).

Exports of flowers and leaves from Tanzania occurred in 2014 and 2015, most were sourced from taxa within the cactus genus *Rhipsalis* (15,430), and all of which were reportedly artificially propagated.

Importers of CITES-listed species from Tanzania

Trade was reported with twelve different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Indonesia
- Japan
- Democratic People's Republic of Korea
- Malaysia
- Philippines
- Republic of Korea
- Singapore
- Taiwan (PoC)
- Thailand
- Viet Nam

The largest importer of live individuals from Tanzania was Japan (56,397) followed by Hong Kong SAR (17,806). Only three countries/territories imported skins from Tanzania, the most significant importer being Singapore (8,176). Japan was the only importer of flowers and leaves from Tanzania, and Hong Kong SAR was the only importer of Common Hippopotamus teeth.



Trade of Hippopotamus teeth from Tanzania to Asia

The Common Hippopotamus was listed in CITES Appendix II in 1995. Hippopotamus teeth are traded for ornamental purposes to create ornate carvings: often as a cheaper, legal alternative for elephant ivory (Anderson & Gibson, 2017). An export quota of 10,598 kg of hippopotamus teeth and/or as hunting trophies from 1,200 animals per year is published on the Species+ website⁹ since 2001 and Tanzania does not appear to have exceeded export quotas.

CITES trade data between 2006 and 2015 show Uganda and Tanzania as the dominant suppliers of hippopotamus teeth to Asia (Figure 34). In 2014 Uganda implemented a ban on hippopotamus hunting and teeth could only be extracted from already dead carcasses, which has potentially caused an increase in illegal trade and a shift of legal trade to other source countries such as Tanzania, Malawi, Zambia and Zimbabwe (Fisher, 2016). It does not appear that this is the case for Tanzania, as reported exports to Asia have declined, while Malawi has emerged as a significant exporter in recent years (Figure 34).

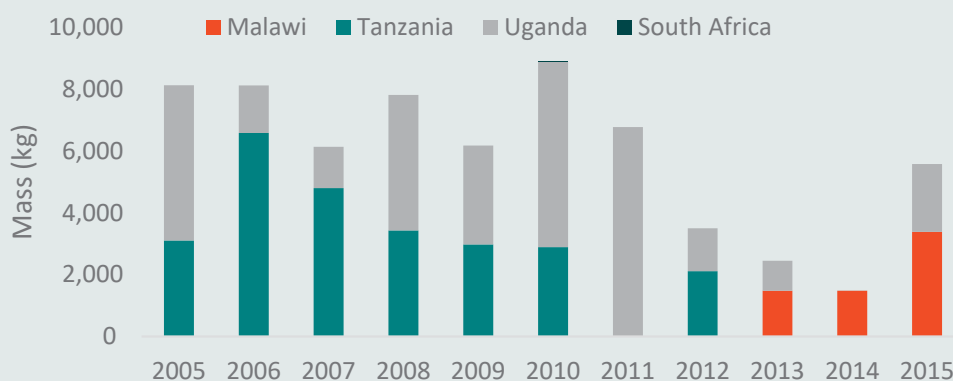


Figure 34

Exports of Common Hippopotamus teeth and tusks from Tanzania and other African countries to Asia (reported as kilogrammes, 2006–2015)

Hong Kong SAR was the only Asian importer of Common Hippopotamus teeth between 2006 and 2015 from Tanzania (22,784 kg plus 1,650 individual teeth), all of which were sourced from the wild. CITES trade data show a decrease in exports reported as kilogrammes from 2006 to 2012 to Asia, and no exports were reported from 2013 to 2015. Exports from Tanzania to non-Asian countries totalled 12 kg plus 4,216 individual teeth, meaning Asia is the largest market.

⁹ Available at https://www.speciesplus.net/#/taxon_concepts/9229/legal

SUB-REGIONAL PROFILE:

WEST AFRICA

Nile Monitor Lizard *Varanus niloticus*



PROFILE ANALYSIS WEST AFRICA

The region includes some of sub-Saharan Africa's fastest growing economies (Côte d'Ivoire, Senegal, Benin) but also some of its slowest (Sierra Leone) (IMF, 2016). It is also home to some of the fastest growing human populations in the world (Niger, Gambia, Mali) (World Bank, 2017).

// *West Africa is home to a diverse range of habitats including the swamps of the Niger Delta, the West Sudanian Savanna and both montane and lowland forests*

According to CITES trade data, between 2006 and 2015, Asia imported a total of 355,993 individual specimens of CITES-listed wildlife plus 35,147 kg and a small amount reported using other units from West Africa. This covered 125 taxa in total.

COUNTRY	MEMBER OF CITES?	YEAR JOINED CITES
Benin	✓	1984
Burkina Faso	✓	1989
Cape Verde	✓	2005
Côte d'Ivoire	✓	1994
Gambia	✓	1977
Ghana	✓	1975
Guinea	✓	1981
Guinea-Bissau	✓	1990
Liberia	✓	1981
Mali	✓	1994
Mauritania	✓	1998
Niger	✓	1975
Nigeria	✓	1974
Senegal	✓	1977
Sierra Leone	✓	1994
Togo	✓	1978

Commodities in trade

Trade was reported predominantly using two units: number of individuals and kilogrammes. Trade reported in number of individuals was predominantly live animals and plants, whereas trade in kilogrammes was mainly logs (Figures 36a and 36b).

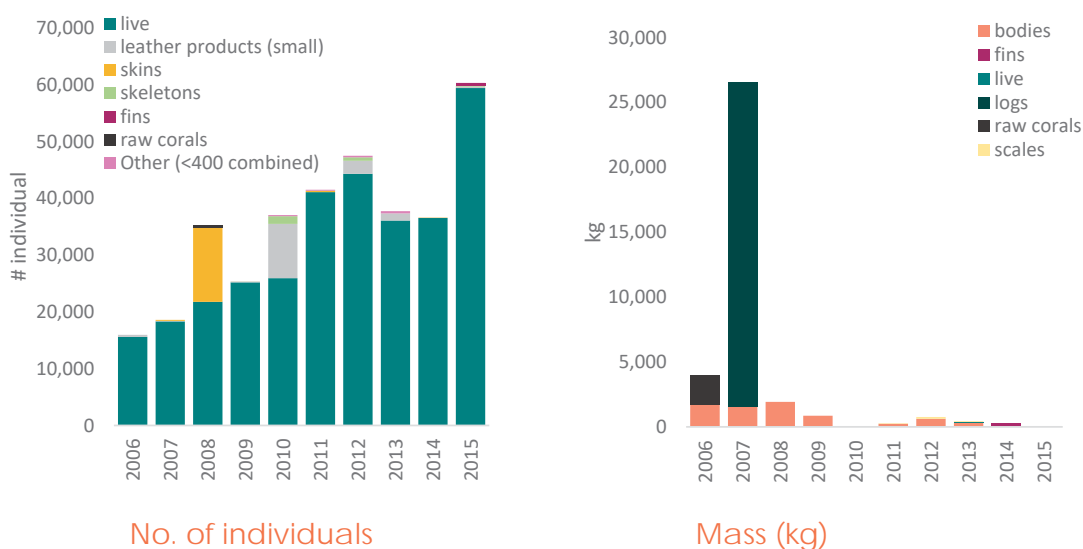


Figure 36a and 26b

Quantity of CITES-listed wildlife reported in number of individuals or kilogrammes (2006 to 2015) divided by trade terms

Exports of individual skins from West Africa were relatively low, except in 2008 when Mali exported 13,000 Nile Monitor *Varanus niloticus* skins to Singapore. There was a peak of exports of small leather products in 2010 which were made from African Rock Python *Python sebae* and exported by Senegal to mainland China, but otherwise exports were fairly low.

7,422 kg
of seahorse bodies were exported from West Africa

Aside from the one-off export of logs, there were several other species with trade reported in kilogrammes that were exported in significant amounts, including coral from the genus *Scleractinia*, (2,250 kg) and Giant Pangolins *Manis gigantea* and White-bellied Pangolins *M. tricuspis* (245 kg). A total of 7,422 kg of seahorse bodies (predominantly of West African Seahorse *Hippocampus algiricus*) were exported from West Africa, most of which were sent from Guinea (3,921 kg) or Senegal (3,471 kg) and imported by Hong Kong SAR (6,527 kg).

Top species in trade

The Ball Python *Python regius* was the most common live species to be exported from West Africa (Figure 37): 139,847 were exported between 2006 and 2015, which accounted for 43% of all live individuals exported during that time.

All exports of logs reported in kilogrammes were of Red Sandalwood *Pterocarpus santalinus* exported from Niger to mainland China in 2007. The logs were reported as being from the wild, although the species is native to India so it is possible there has been some kind of error in reporting.

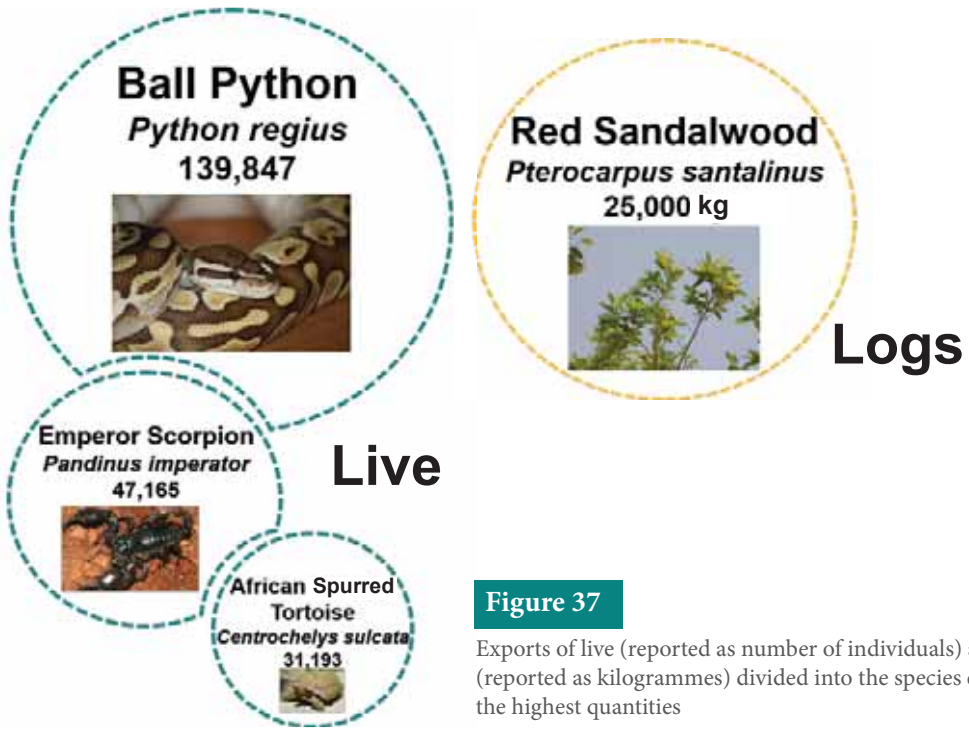


Figure 37
Exports of live (reported as number of individuals) and logs (reported as kilogrammes) divided into the species exported in the highest quantities



Ball Pythons *Python regius*

Live taxa in trade

A variety of countries export live animals across a range of classes. Ghana was the largest exporter of arachnids (33,000) and reptiles (131,047), and the only exporter of Anthozoa (800) (Figure 38). Mali was the largest exporter of birds (15,411) while Guinea exported the most mammals (900). A total of 150 individual live plants were also exported from Ghana to Thailand.

In total, nine countries in West Africa exported live individuals belonging to 109 species/subspecies and six taxa reported only to genus or family level.

Most live trade was reported in number of individuals, although Mauritania also reported 50 kg of live European Eel *Anguilla anguilla* exports to the Republic of Korea.

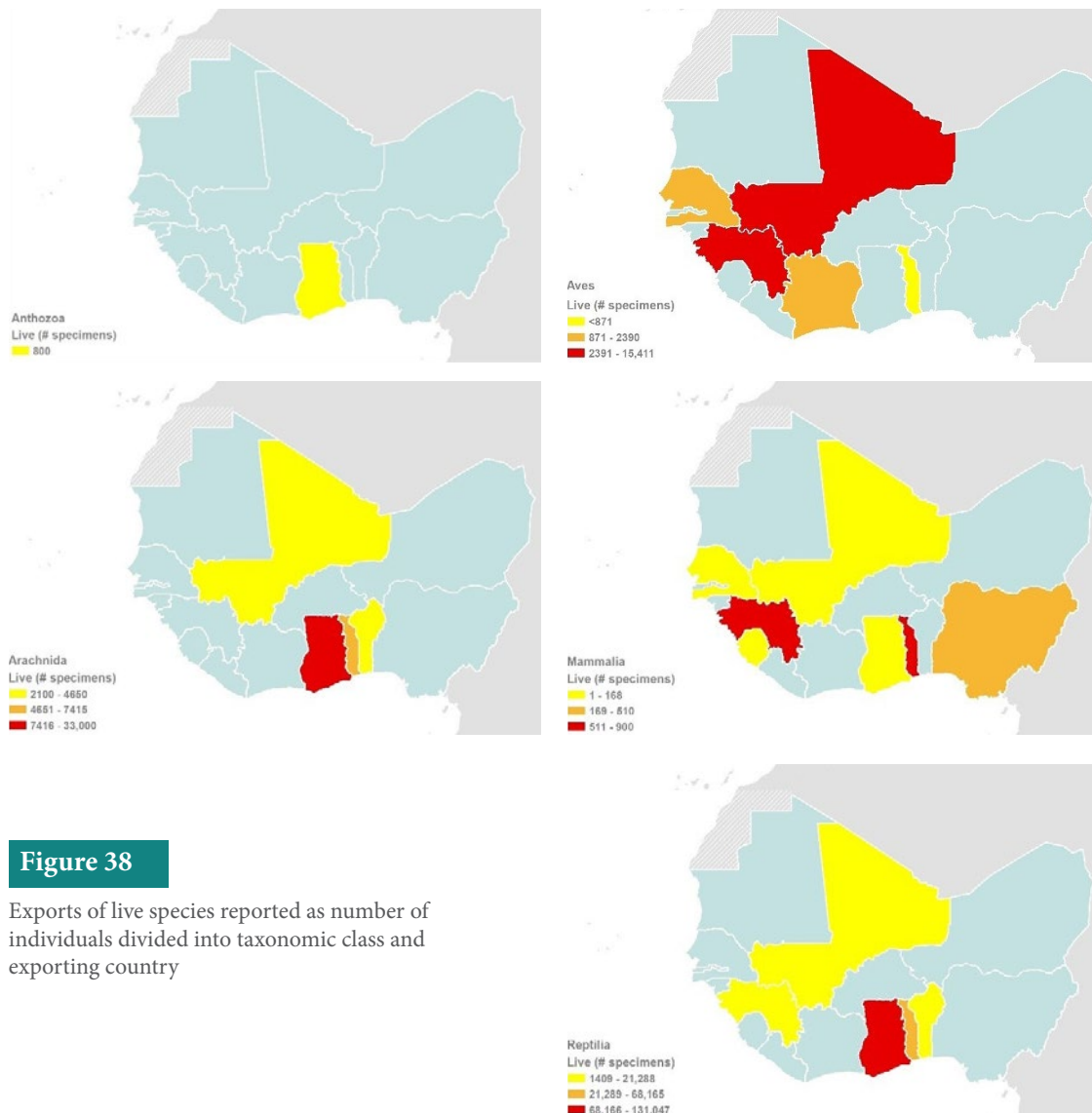


Figure 38

Exports of live species reported as number of individuals divided into taxonomic class and exporting country

Exporters and importers

Nine West African countries exported live individuals to Asia (Figure 39). Ghana exported the greatest quantity: over half (56%) of which were Ball Pythons and 20% of which were Emperor Scorpions *Pandinus imperator*. Togo was the second largest exporter, and exported 50 different taxa (compared with 22 from Ghana), although Ball Python accounted for 49% of all Togolese exports.

Thirteen countries/territories across East and Southeast Asia imported wildlife from West Africa: with Hong Kong SAR being the most important, followed by Japan. Japan imported the largest range of taxa (58), followed by mainland China (42).

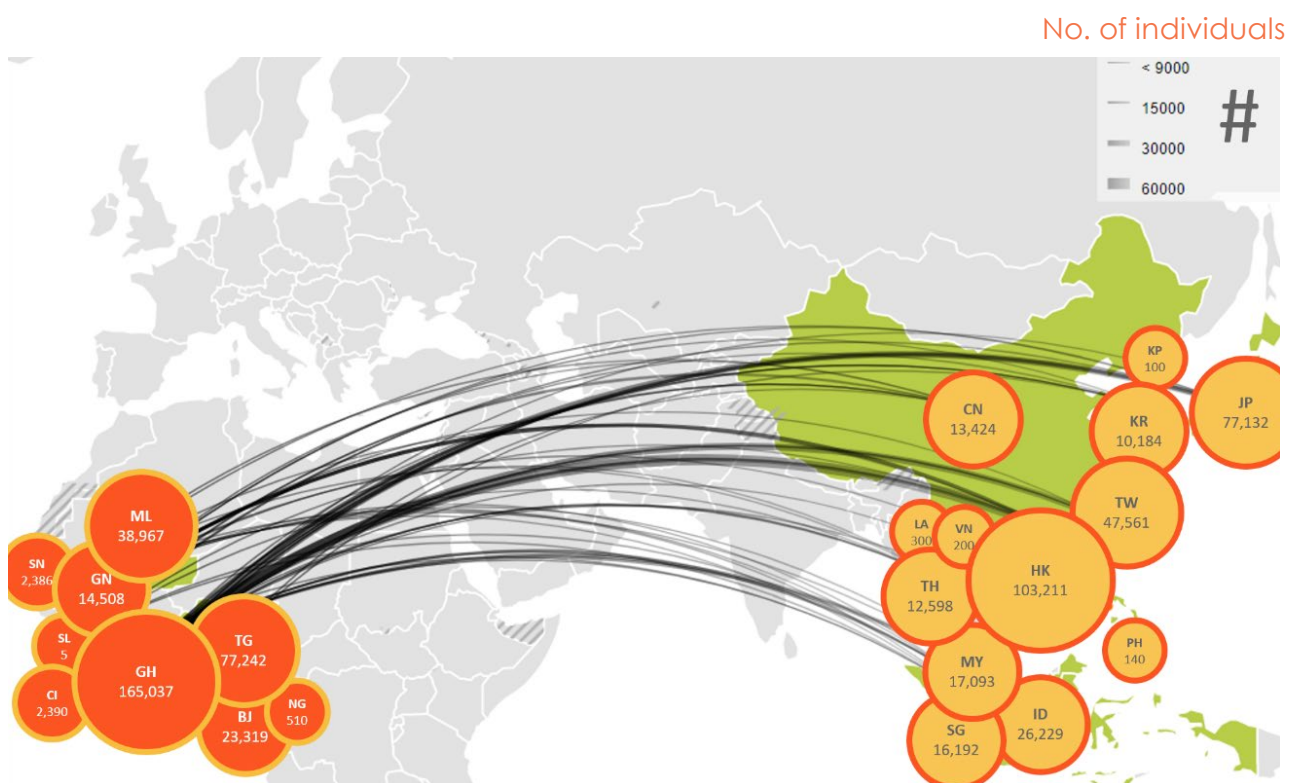


Figure 39

West African exporters and Asian importers of live species reported as number of individuals



COUNTRY PROFILE:

GHANA

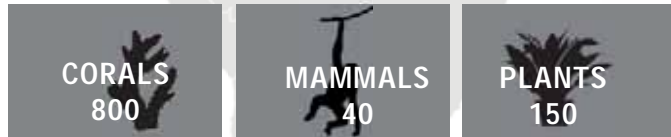
Senegal Chameleon *Chamaeleo senegalensis*

COUNTRY TRADE PROFILE: GHANA

A summary of exports of CITES-listed species from Ghana to East and Southeast Asia between 2006–2015

Ghana was a significant exporter of live CITES-listed specimens to Asia: nearly all of which were Ball Pythons and Emperor Scorpions. Ghana was the largest exporter of live Ball Pythons to Asia: most of which were ranched.

LIVE SPECIMENS

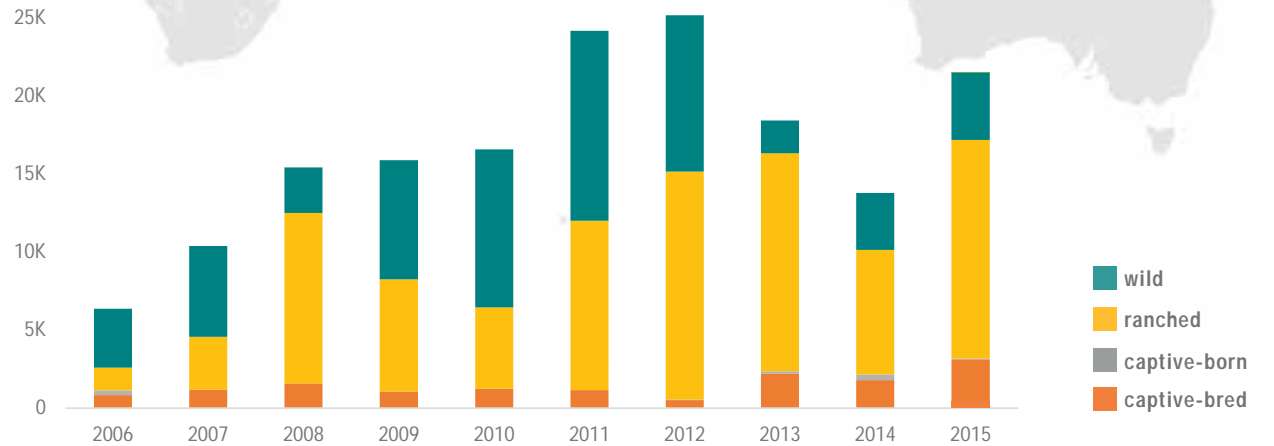


OTHER SPECIMENS



TOP 3 IMPORTERS OF LIVE SPECIMENS

Total number of individuals across all species



SOURCE OF LIVE SPECIMENS 2006–2015



165,493
 CITES-listed individual specimens were exported to Asia

2,250 kg of raw coral was exported

Trade from Ghana to Asia

Ghana joined CITES in 1975. Between 2006 and 2015 a total of 165,493 CITES-listed individual specimens were exported from Ghana to Asia, in addition to a further 2,250 kg of specimens reported in kilogrammes. The commodities exported in the largest quantities were live animals (165,037) followed by raw corals (2,250 kg and 400 individuals).

The species most commonly traded as live individuals was the Ball Python *Python regius* (93,168), followed by the Emperor Scorpion *Pandinus imperator* (33,000). Most exports of live individuals were from ranched sources (89,599), the majority of which were Ball Pythons (86,714). Nearly all Emperor Scorpions were reported as wild (31,800), no exports took place after 2012, and a trade suspension has been in place for Ghana since 2014 following the species's inclusion in the Review of Significant Trade (RST) process. Suspensions are also in place since 2016 for two chameleon species (*Chamaeleo gracilis* and *C. senegalensis*) currently in RST.

Exports in raw corals were from *Scleractinia* spp. only and all exports were from the wild. Exports in skins were relatively small and only occurred in 2008 when 20 Ball Python skins were imported by Thailand.

Importers of live CITES-listed species from Ghana

Trade was reported with nine different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Indonesia
- Japan
- Malaysia
- Republic of Korea
- Singapore
- Taiwan (PoC)
- Thailand

A significant proportion of live individuals were imported by Hong Kong SAR (59,669), the majority of which were reptiles (49,769). Only three countries/territories imported corals from Ghana, of which the Republic of Korea was the largest importer of live individuals (400). However, Japan in 2006 imported 2,250 kg and 200 live individuals from Ghana. Taiwan (PoC) was the largest importer of Emperor Scorpions (11,600) followed by Hong Kong SAR (9,900).



Ball Python trade from Ghana to Asia

The Ball Python is the CITES-listed Appendix II snake species exported from Africa in the largest quantity, with almost 100% of global trade coming from Ghana, Benin and Togo to supply the international pet trade market (Toudonou, 2015). Similarly, nearly 100% of imports into Asia specifically are exported from those same three African countries.

Between 1991 and 1997 Ghana began development of their Ball Python ranching program, harvesting 3,500 female pythons per year (Gorzula *et al.* 1997). Subsequently, in 1997 an export quota of 28,500 ranched specimens was established, and since then the ranching production appears to have increased with quotas rising to 60,000 specimens per year in 2017. However, in 2013/2014 the EU Scientific Review Group formed a negative opinion on exports of wild-sourced and ranched specimens from Ghana due to uncertainty over the sustainability of these sources, consequently prohibiting the import of such specimens into the EU (EU - SRG 2014).

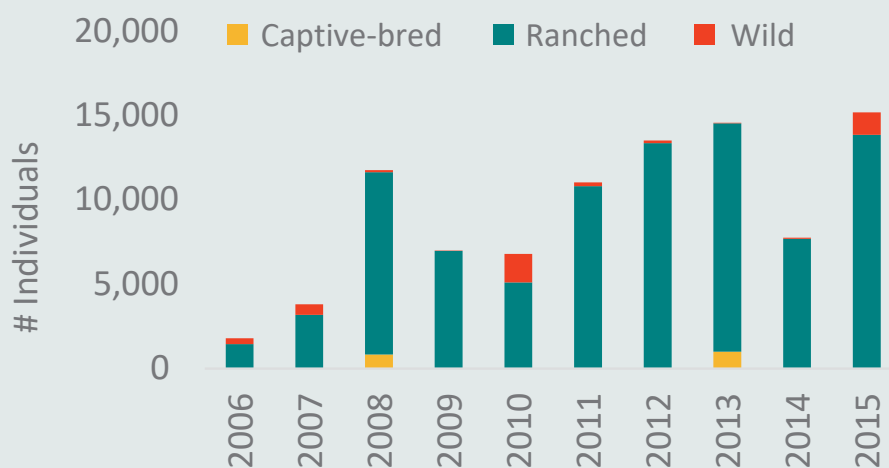


Figure 40

Exports of Ball Pythons from Ghana to Asia reported as captive-bred (source code C), ranched (R) or wild (W) (reported as number of individuals, 2006 to 2015)

The majority of Ball Python exports from Ghana were from ranched sources (86,714), with peak exports to Asia in 2015 (13,835) following a general increase since 2006. Hong Kong SAR was the largest importer of live Ball Pythons (42,885) followed by Taiwan (PoC) (19,832). All exports from Ghana to Asia were for the purpose of commercial trade.

A close-up, high-resolution photograph of a Senegal Parrot's face. The bird's eye is prominent, showing a dark pupil and a light-colored iris. The feathers are a rich, warm brown color with fine, radiating patterns. The lighting is soft and directional, highlighting the texture of the feathers and the shape of the beak, which is partially visible in the lower right corner.

COUNTRY PROFILE:

MALI

Senegal Parrot *Poicephalus senegalus*

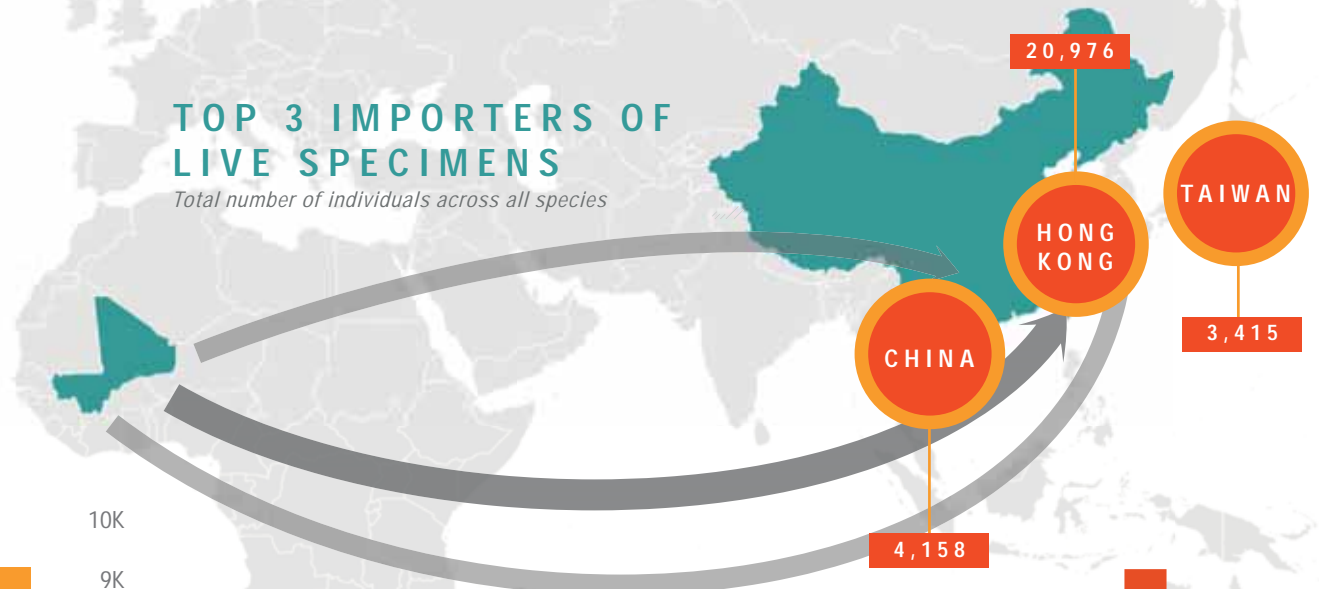
COUNTRY TRADE PROFILE: MALI

A summary of exports of CITES-listed species from Mali to East and Southeast Asia between 2006–2015

Mali mostly exported live CITES-listed specimens and skins, all exports of skins occurred in 2008 and were from Nile Monitors. Mali was the largest African exporter of spiny-tailed lizards to Asia.

TOP 3 IMPORTERS OF LIVE SPECIMENS

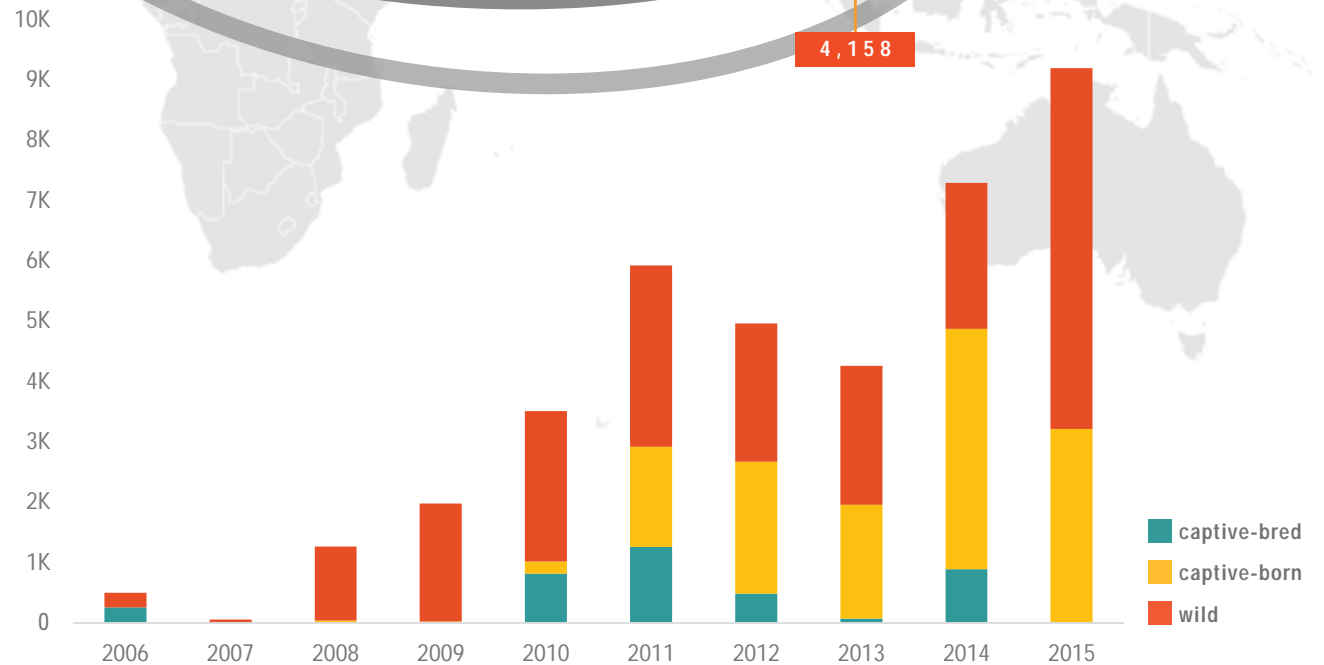
Total number of individuals across all species



LIVE SPECIMENS



OTHER SPECIMENS



SOURCE OF LIVE SPECIMENS 2006–2015



52,165
CITES-listed individual specimens were exported to Asia

Mona monkey *Cercopithecus mona*

Trade from Mali to Asia

Mali joined CITES in 1994. Between 2006 and 2015, a total of 52,165 individual specimens of CITES-listed species were exported from Mali to Asia: most of which were live animals (38,967) or skins (13,000). Trade in live animals included 36 different taxa, whereas trade in skins only included Nile Monitor *Varanus niloticus* (13,000) all of which were wild (source code W) and exported in 2008. Exports of live individuals were mainly wild (21,978) followed by captive-born individuals (source code F) (13,195).

The most common species exported as live was African Spurred Tortoise *Centrochelys sulcata* (12,951) followed by Senegal Parrot *Poicephalus senegalus* (10,100). A suspension has been in place for Cape Parrot *Poicephalus robustus* since 2001. All exports of African Spurred Tortoise were of reportedly captive-born (12,514) and captive-bred (source code C) (437) animals, while all exports of Senegal Parrot were wild.

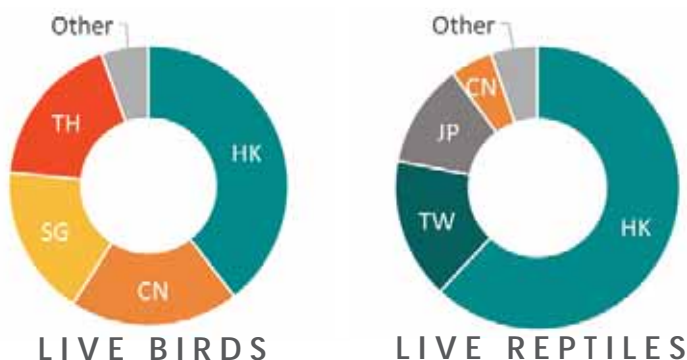
Importers of live CITES-listed species from Mali

Trade was reported with ten different East and Southeast Asian importers:

- **mainland China**
- **Hong Kong SAR**
- **Indonesia**
- **Japan**
- **Malaysia**
- **Philippines**
- **Republic of Korea**
- **Singapore**
- **Taiwan (PoC)**
- **Thailand**

The largest importer of live individuals was Hong Kong SAR (20,976), while Singapore was the only importer of skins (13,000).

Hong Kong SAR was the largest importer of live birds (6,080) and reptiles (13,196). Hong Kong SAR was found to be the largest market for live Arachnida the majority of which were Emperor Scorpions *Pandinus imperator* (1,700). Mainland China was found to be the largest importer of mammals (106) of which the most commonly imported was Mona Monkey *Cercopithecus mona* (40).



Trade of spiny-tailed Lizards from Mali to Asia

Mali was found to be the largest African exporter of spiny-tailed lizards (genus *Uromastyx*) to Asia (6,233). Only two species of spiny-tailed lizards are thought to be native to Mali: the Saharan Spiny-tailed Lizard *U. geyri* and the Sudan Mastigure *U. dispar* (Sindaco *et al.* 2012). Mali exported a total of eight different *Uromastyx* taxa to Asia. The most commonly exported *Uromastyx* species was the Saharan Spiny-tailed Lizard (3,120).

A suspension is currently in place for exports of Sudan Mastigure from Mali. This suspension has been in place since 2008, resulting from the species's inclusion in the Review of Significant Trade (RST) process, due to a lack of population monitoring for ensuring robust NDFs. At the time Mali was the primary exporter for the species (125,362 between 1994 and 2003) (CITESb, 2006). Exports of pre-suspension Sudan Mastigure were of wild individuals, but in 2010 Mali exported 250 reportedly captive-bred animals, and all individuals after 2010 were declared as captive-bred.

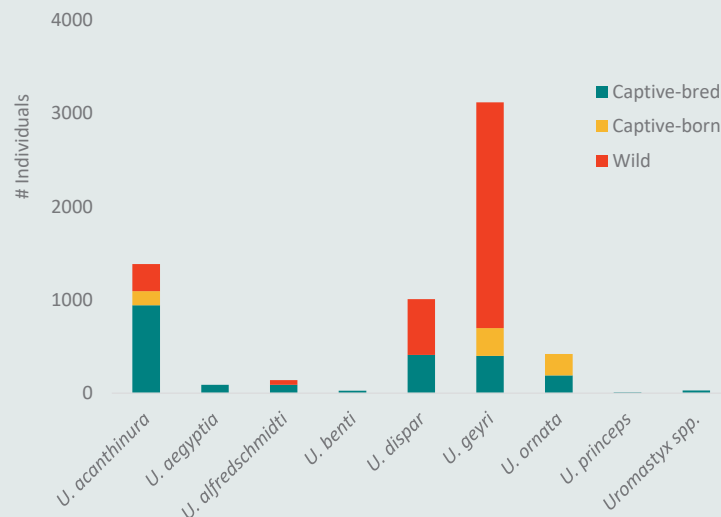


Figure 41

Exports of live *Uromastyx* spp. from Mali to Asia reported as captive-bred (source code C), captive born (F) and wild (W) (reported as individuals, 2006–2015)

Hong Kong SAR was found to be the largest importer of *Uromastyx* (2,846) followed by Japan (2,188). The majority of *Uromastyx* exports were of wild animals (3,359) followed by captive-bred (2,193). The Saharan spiny-tailed Lizard was the species reported from the wild in the highest quantity (2,420) and the North African Spiny-tailed Lizard *U. acanthinura* was the most commonly exported captive-bred species (945). Total exports fluctuated between 2006 and 2015 with peak exports in 2015 (1,581). Mali exported wild individuals of two non-native species: Black-tailed Spiny Lizard (290) and Schmidt's Spiny-tailed Lizard (*U. alfredschmidti*) (50).

A close-up photograph of an Emperor Scorpion (Pandinus imperator) on a wooden surface. The scorpion's body is a vibrant, iridescent blue-green color, with fine hairs and spines visible. The background is a warm, brownish-orange wood grain, slightly out of focus. The text 'COUNTRY PROFILE: TOGO' is overlaid on the left side of the image.

COUNTRY PROFILE:

TOGO

Emperor Scorpion *Pandinus imperator*

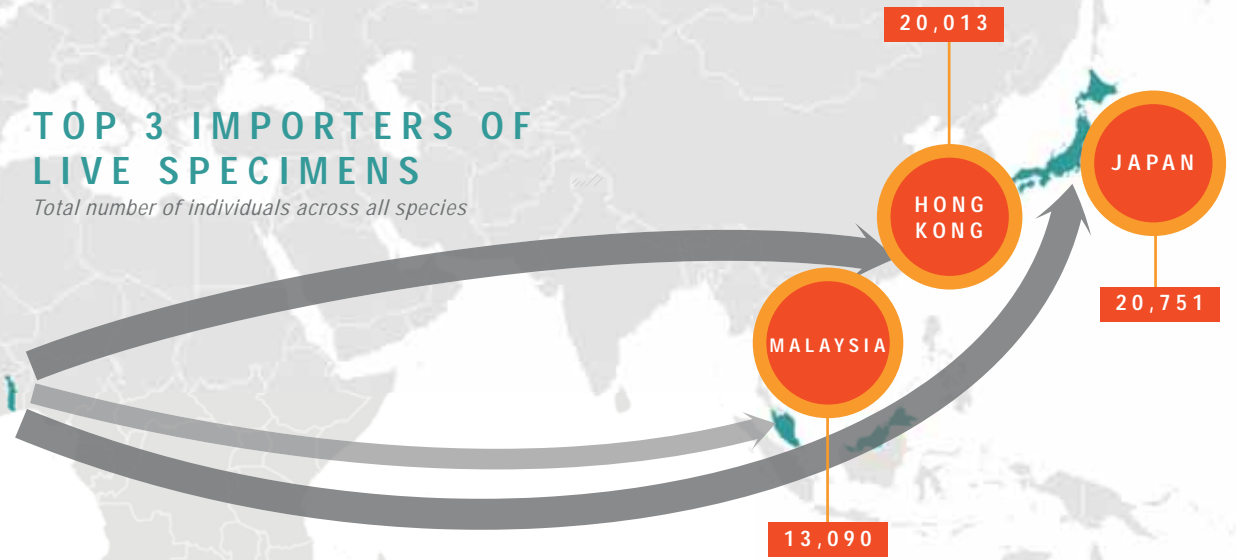
COUNTRY TRADE PROFILE: TOGO

A summary of exports of CITES-listed species from Togo to East and Southeast Asia between 2006–2015

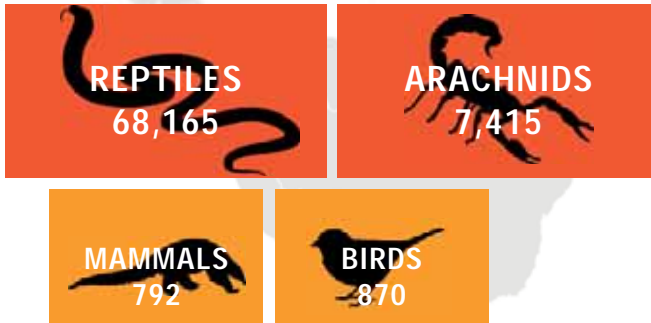
Togo predominately exported live specimens, the most commonly exported being the Ball Python. Togo was the second largest exporter of live Emperor Scorpions to Asia: most of which were imported by Hong Kong SAR.

TOP 3 IMPORTERS OF LIVE SPECIMENS

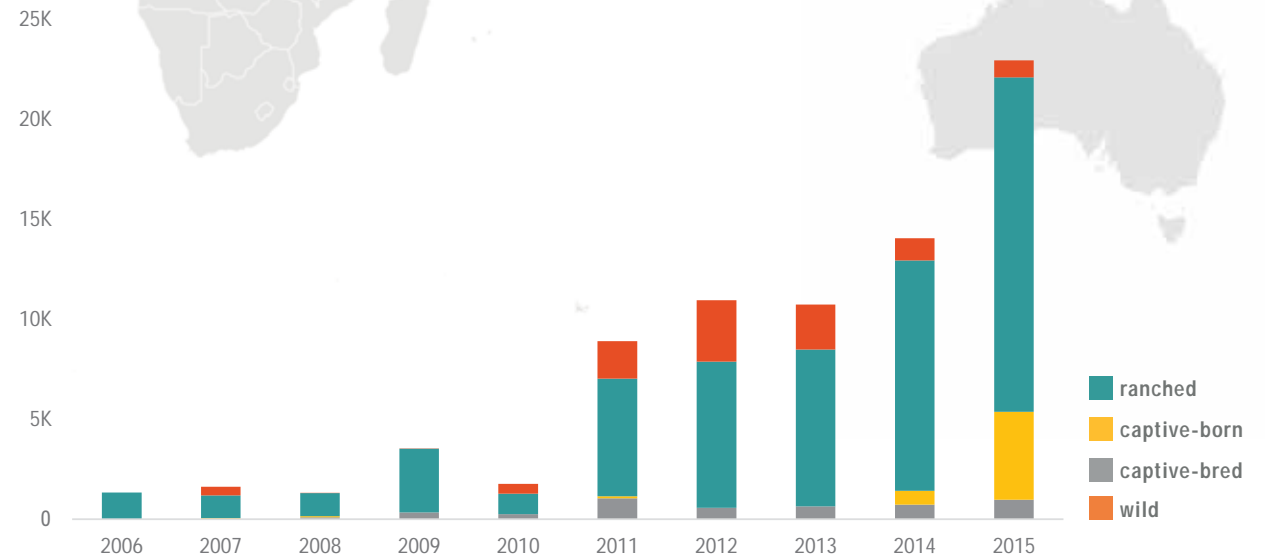
Total number of individuals across all species



LIVE SPECIMENS



OTHER SPECIMENS



SOURCE OF LIVE SPECIMENS 2006–2015



Northern White-faced Owl *Ptilopsis leucotis*

78,081
CITES-listed individual specimens were exported to Asia

Trade from Togo to Asia

Togo joined CITES in 1978. Between 2006 and 2015 a total of 78,081 CITES-listed individual specimens were exported from Togo to Asia, in addition to a further 275 kg of wildlife reported in kilogrammes. The commodity exported in the greatest amount was live animals (77,242). Most individuals exported as live were reptiles (68,165), followed by arachnids: all of which were Emperor Scorpion *Pandinus imperator* (9,120). The most commonly exported live species was the Ball Python *Python regius* (37,661) followed by the African Savanna Monitor *Varanus exanthematicus* (9,120).

All other commodities were exported in relatively small amounts, including small leather products (360) predominantly from non-native American Alligators *Alligator mississippiensis* of which most were reportedly ranched (300). Other commodities included exports of wild eggs from two owl species: Northern White-faced Owl *Ptilopsis leucotis* (175) and Common Barn Owl *Tyto alba* (150). Togo exported scales sourced from White-bellied Pangolin *Manis tricuspis* (60 kg) to Hong Kong SAR and Giant Pangolin *Manis gigantea* (185 kg) to Thailand. Commercial trade in pangolins is now prohibited as all species were uplisted to Appendix I at CoP17. Togo exported 30 kg of wild seahorse bodies *Hippocampus* spp. to Hong Kong SAR in 2011.

Importers of CITES-listed species from Togo

Trade was reported with eleven different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Indonesia
- Japan
- Democratic People's Republic of Korea
- Republic of Korea
- Lao People's Democratic Republic
- Malaysia
- Republic of Korea
- Taiwan (PoC)
- Thailand
- Viet Nam

Overall Japan was the largest importer of live individuals from Togo (20,751), and the largest importer of live scorpions, birds, mammals and owl eggs. Hong Kong SAR was the largest importer of live reptiles (18,643). The most commonly exported live mammal was White-bellied Pangolin, which were mainly imported by Lao People's Democratic Republic (250 individuals) or Viet Nam (200).



LIVE REPTILES



LIVE SCORPIONS



LIVE BIRDS AND MAMMALS

Emperor Scorpion trade from Togo to Asia

The Emperor Scorpion was listed in CITES Appendix II in 1995. The Emperor Scorpion is the only scorpion found in this region of Africa that can be effectively produced in captive-breeding facilities (Segniagbeto, 2016). In 1997 an export quota of 2,000 wild-sourced specimens and 10,000 ranched specimens per year from Togo was established. In 2012 the Emperor Scorpion was selected for the Review of Significant Trade (RST) and following this, in 2013 exports from Togo were suspended for this species.

Most live individuals exported from Togo were of ranched animals (6,865) and the only exports of wild scorpions occurred in 2012 (500) and 2013 (50). All exports of Emperor Scorpions to Asia were exported for the purpose of commercial trade: most of which were imported by Japan (3,300), Hong Kong SAR (1,370) and Malaysia (1,320). Exports from Togo have experienced a gradual increase with a peak in exports to Asia in 2013 (2,570), then a decline after the trade suspension was imposed.

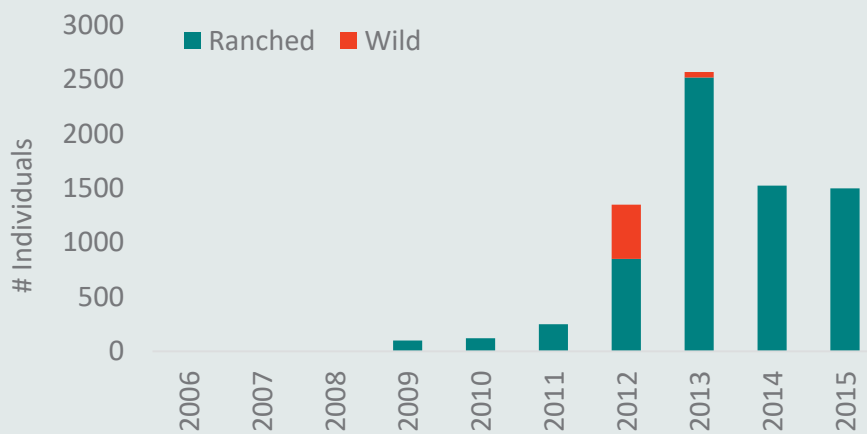


Figure 42

Exports of live Emperor Scorpions from Togo to Asia reported as ranched (source code R) and wild (W) (reported as individuals, 2006–2015)

SUB-REGIONAL PROFILE:

CENTRAL AFRICA

Virunga National Park, DRC

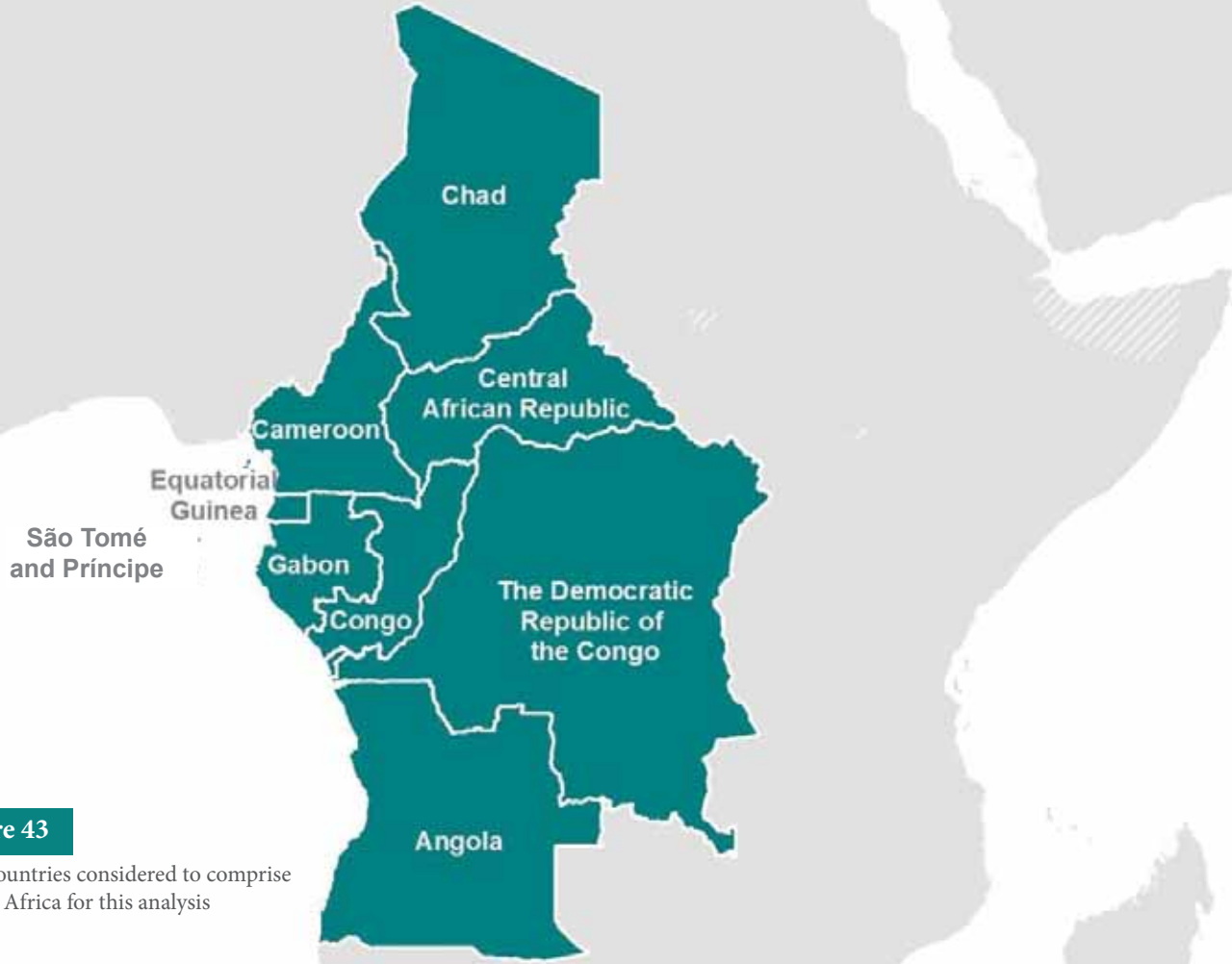


Figure 43

The 9 countries considered to comprise Central Africa for this analysis

PROFILE ANALYSIS CENTRAL AFRICA

Some of the countries in the region have some of the fastest growing economies in Africa (CAR, Cameroon, DRC), while others are much slower (Chad, Congo) or even shrinking (Equatorial Guinea) (IMF, 2016). It is also home to some of the fastest growing human populations in the world (Equatorial Guinea, Angola) (World Bank, 2017).

// Central Africa is dominated by the Congo Basin: a huge mosaic of rivers, forests, savannas and swamps that spans Cameroon, CAR, DRC, Congo, Equatorial Guinea, and Gabon, and contains the second largest block of rainforest in the world

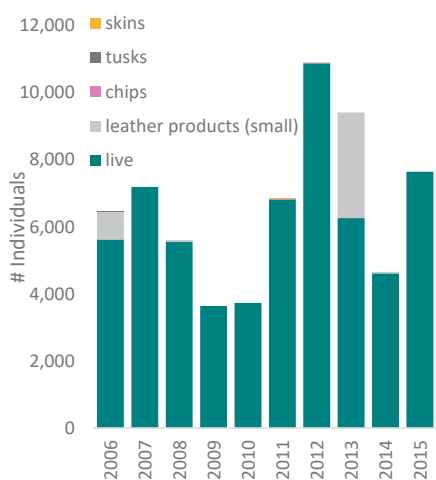
All countries are members of CITES:

COUNTRY	MEMBER OF CITES?	YEAR JOINED CITES
Angola	✓	2013
Cameroon	✓	1981
CAR	✓	1980
Chad	✓	1989
DRC	✓	1976
Congo	✓	1983
Equatorial Guinea	✓	1992
Gabon	✓	1989
São Tomé and Príncipe	✓	2001

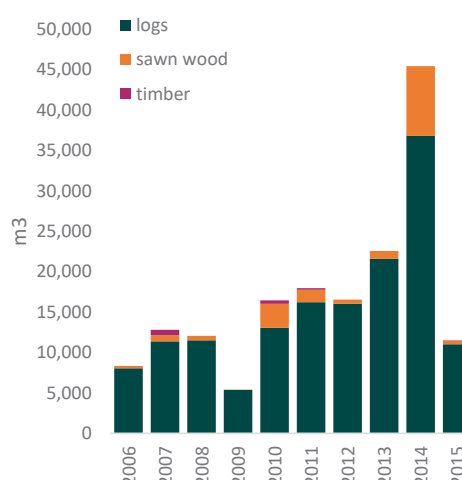
According to CITES trade data, between 2006 and 2015, Asia imported a total of 66,068 individual specimens of CITES-listed wildlife plus 31,700 kg and 169,032 m³ from Central Africa. This covered 67 taxa in total.

Commodities in trade

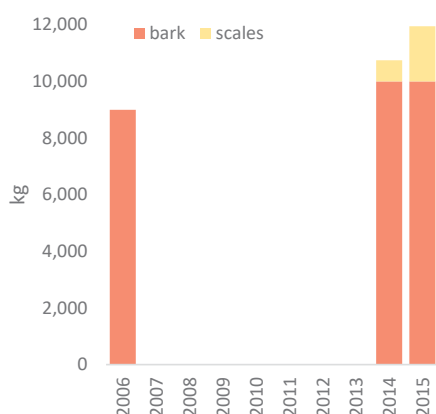
Trade was reported predominantly using three units: number of individuals, cubic metres and kilogrammes. Trade reported using number of individuals was mainly live (Figure 44a), whereas trade reported in cubic metres was mostly logs and sawn wood (Figure 44b), and trade in kilogrammes was largely bark (Figure 44c).



No. of individuals



Volume (m³)



Mass (kg)

Figures 44a, 44b and 44c

Quantity of CITES-listed wildlife reported in number of individuals, cubic metres or kilogrammes (2006 to 2015) divided into trade terms

Exports of live individuals peaked in 2012, partly due to a spike in exports of Grey Parrots *Psittacus erithacus* which made up 79% of all exports of live individuals between 2006 and 2015: the average quantity of Grey Parrots exported during all other years was 4,497 live birds compared with 8,720 in 2012. Most exports were from DRC between 2006 and 2015 (70%).

29,000 kg
African Cherry bark *Prunus africana* was exported in 2006, 2014 and 2015

Exports of small leather products were generally low, except in 2013 when 3,152 products of Nile Monitor *Varanus niloticus* were exported by Chad (3,150) and Cameroon (two) to Thailand. In total, 150,969 m³ of logs were exported from Central Africa to Asia, all of which were African Teak *Pericopsis elata*. Exports of sawn wood were all of African Teak (16,141 m³) or unspecified *Afrormosia* spp. (576 m³).

Exports reported in kilogrammes were nearly all bark of African Cherry *Prunus africana* (29,000 kg): all of which was reported in 2006, 2014 and 2015. The remainder was pangolin scales (2,700 kg): most of which was White-bellied Pangolin *Manis tricuspis* exported from Congo (1,000 kg) or DRC (950 kg) to mainland China.

Top species in trade

The Grey Parrot was the most common live species to be exported from Central Africa (Figure 45): 49,194 were exported between 2006 and 2015. Most were reported as from the wild (41,904).

All exports of logs reported in cubic metres were of African Teak, and most were exported from DRC (132,315 m³), and the remainder from Congo. Most of the logs were imported by mainland China (123,448 m³).

Exports of bark were all from African Cherry. Cameroon (19,000 kg) and DRC (10,000 kg) were the only Central African countries to export African Cherry bark; all was exported to mainland China.

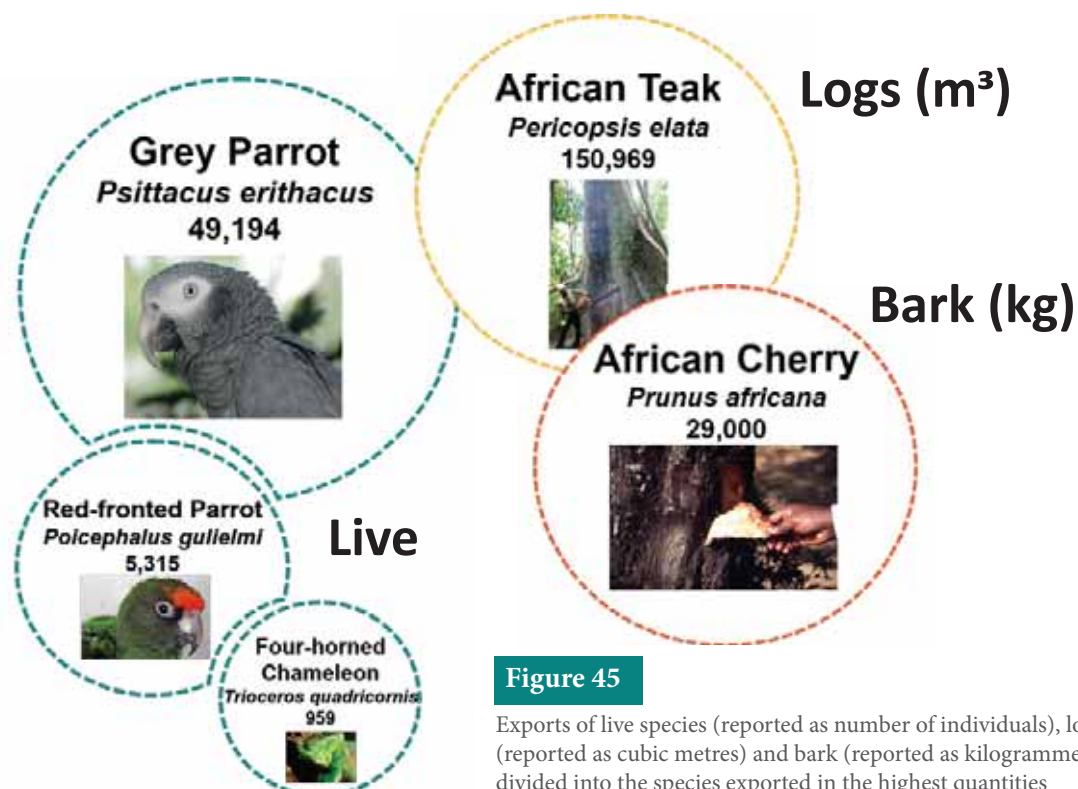


Figure 45

Exports of live species (reported as number of individuals), logs (reported as cubic metres) and bark (reported as kilogrammes) divided into the species exported in the highest quantities



African Teak *Pericopsis elata* being harvested

Live taxa in trade

Six countries from Central Africa exported live individuals to Asia, which covered a range of different taxa and included 52 species and six taxa reported only to genus level.

DRC was the largest exporter of birds (39,611) and mammals (482) in the region, whereas Cameroon exported the most reptiles (3,105) and Congo the most plants (620) (Figure 46).

Of the countries that exported live individuals, DRC exported the greatest diversity of taxa (20) compared with Equatorial Guinea which exported the least (nine). There was not much overlap of the taxa exported by each country, most were only exported by one (44) or two (11) countries.

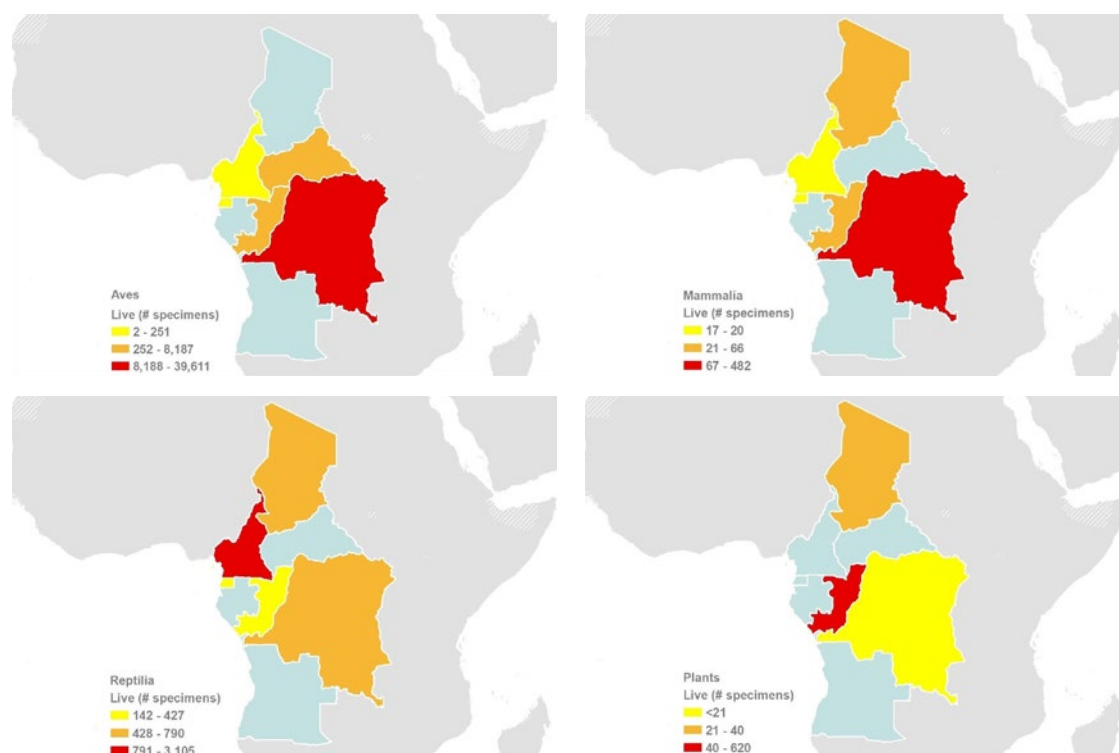


Figure 46

Exports of live species reported as number of individuals divided into taxonomic class and exporting country

Taxa in trade: Logs and bark

All exports of logs were reported in cubic metres, and the only countries to export logs to Asia were DRC (132,315 m³) and Congo (18,654 m³) (Figure 47).

Cameroon was the largest exporter of bark (19,000 kg) followed by DRC (10,000 kg).

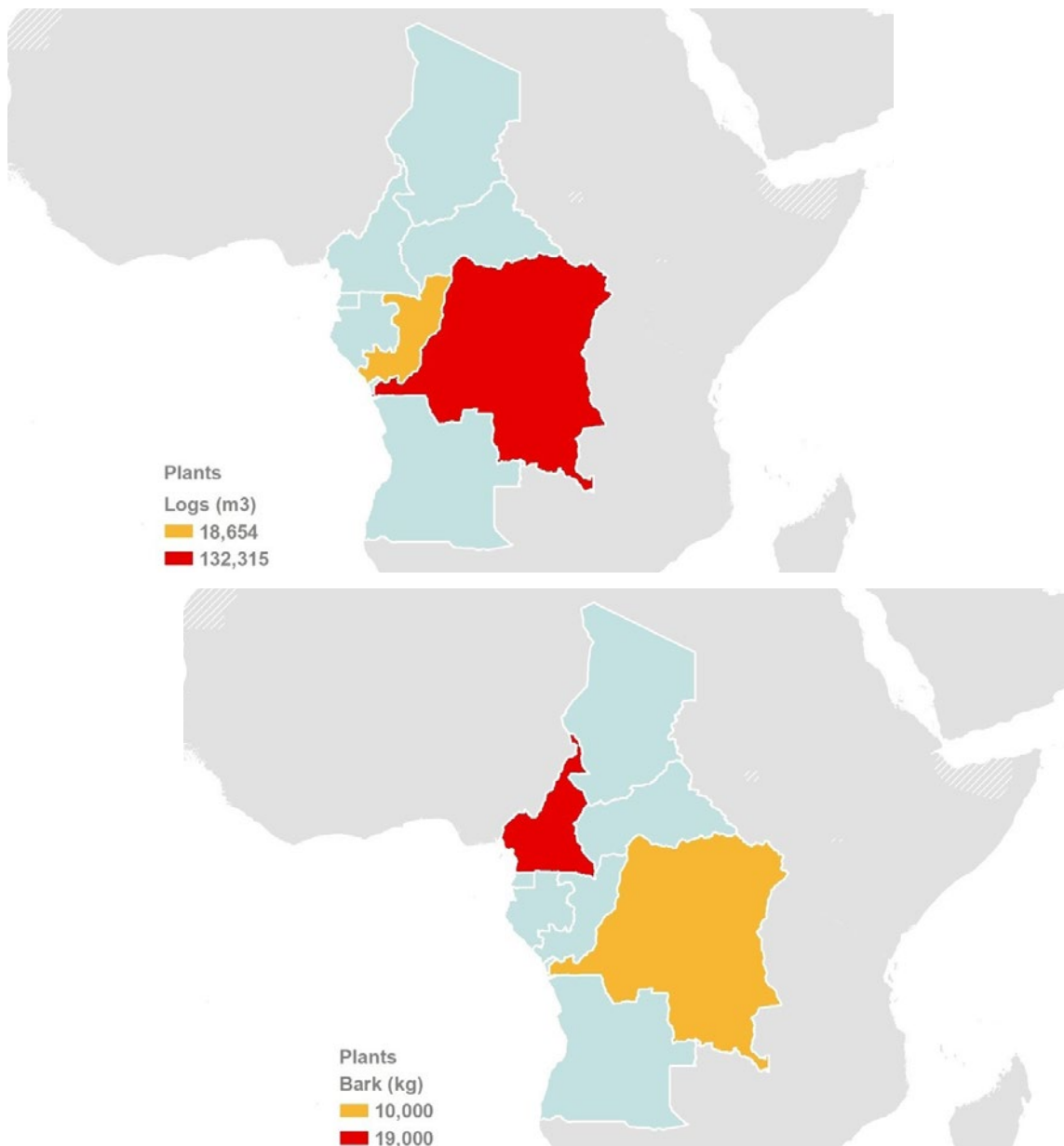


Figure 47

Exports of logs (reported as cubic metres) and bark (reported as kilogrammes) divided into taxonomic class and exporting country

Exporters and importers

Of the six Central African countries exporting live individuals to Asia, DRC was the largest exporter followed by Congo and CAR (Figure 48). DRC was also the largest exporter of logs (m³) (Figure 49) and Cameroon the largest exporter of bark (kg) (Figure 50).

20,791
Grey Parrots were imported to Singapore from the DRC

Nine countries/territories across East and Southeast Asia imported wildlife from Central Africa: with Singapore being the most important. The majority of live imports into Singapore were Grey Parrots (27,811): all of which were reported as wild birds from the DRC (20,791) or captive birds from Central African Republic (7,020). Thailand imported the greatest range of taxa (23) whereas both Myanmar and Malaysia imported only two different taxa each.

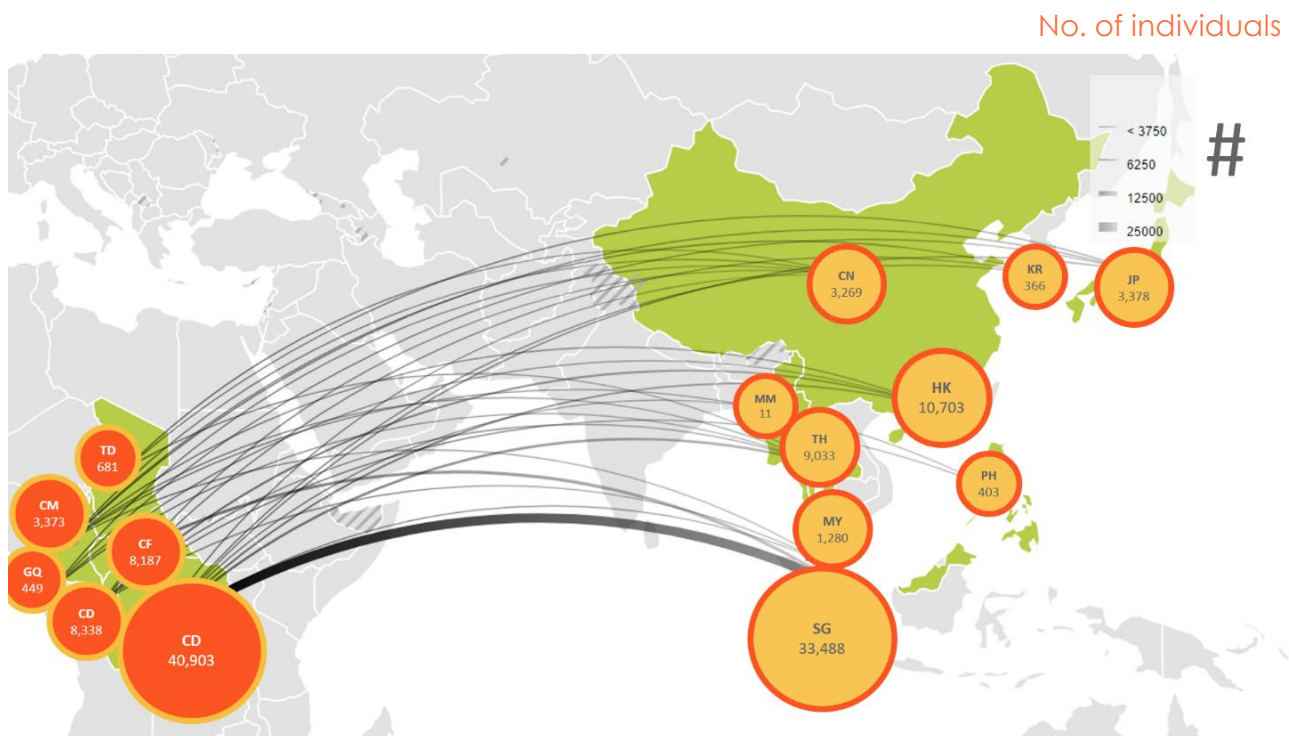


Figure 48

Central African exporters and Asian importers of live species reported as number of individuals



Grey Parrot *Psittacus erithacus*

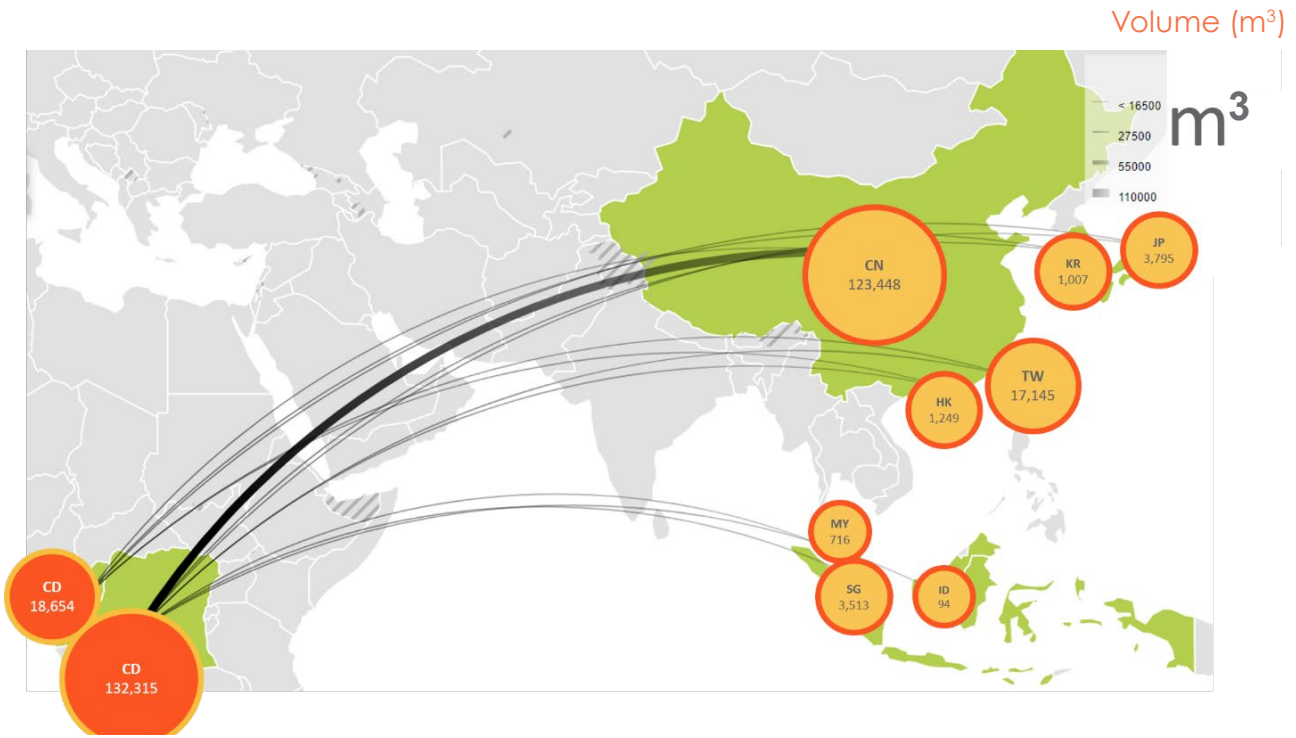


Figure 49

Central African exporters and Asian importers of logs reported as cubic metres

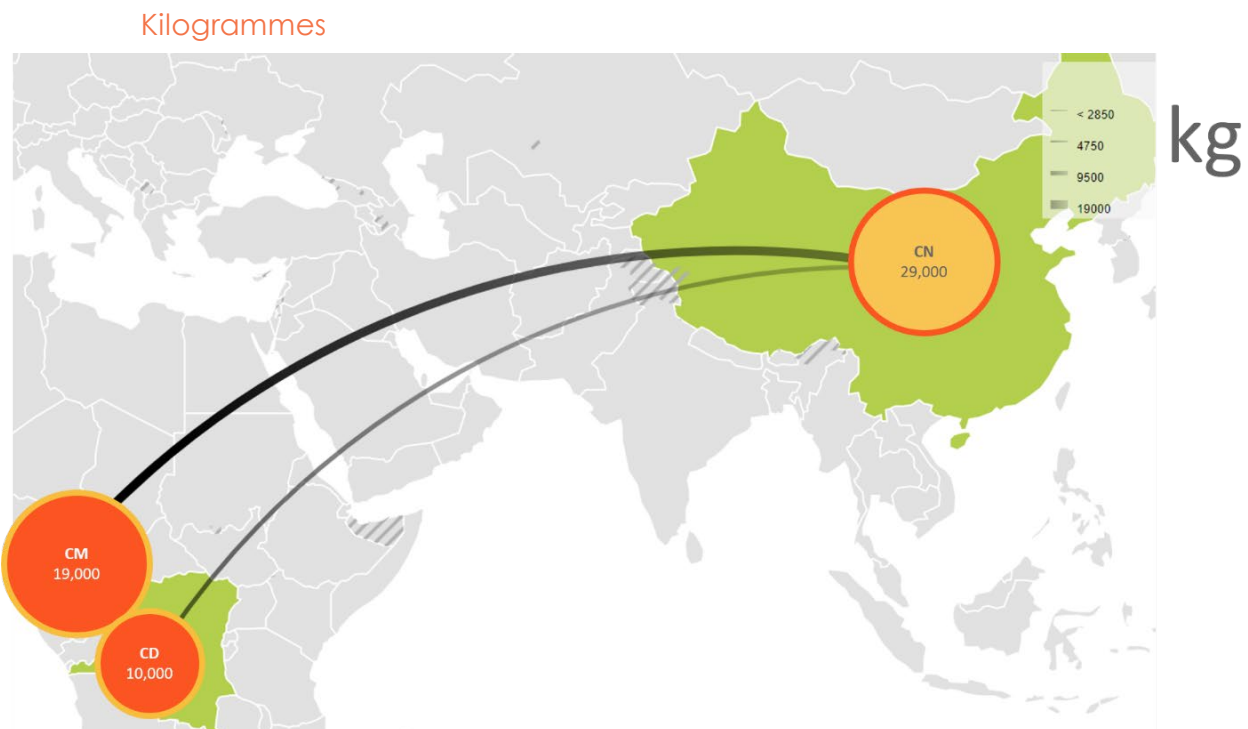


Figure 50

Central African exporters and Asian importers of bark reported as kilogrammes



COUNTRY PROFILE:

CAMEROON

Mount Cameroon

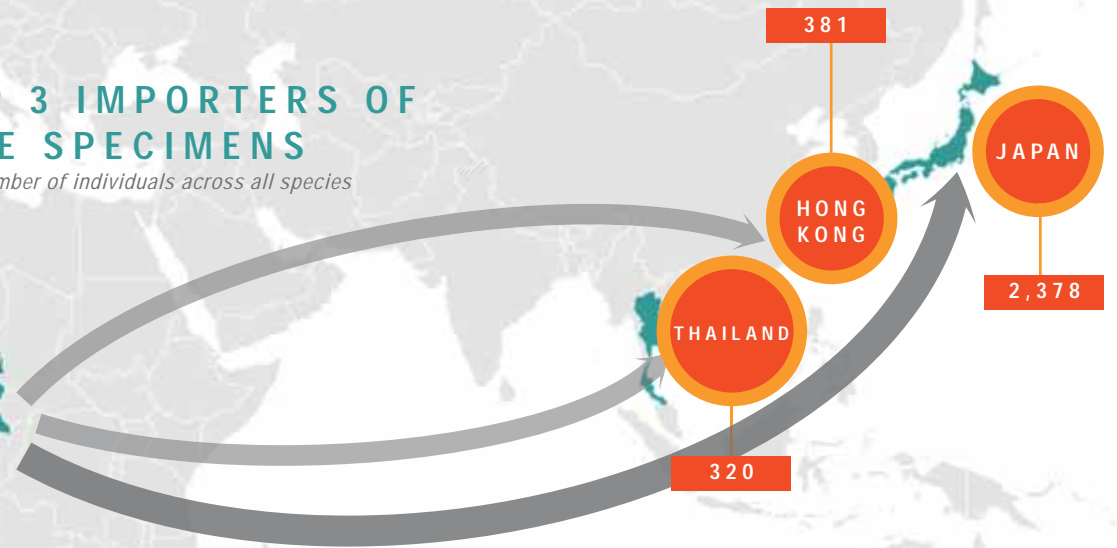
COUNTRY TRADE PROFILE: CAMEROON

A summary of exports of CITES-listed species from Cameroon to East and Southeast Asia between 2006–2015

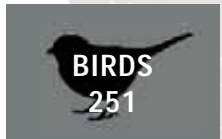
Cameroon was Africa's largest exporter of African Cherry bark to Asia: all of which was imported by mainland China. Cameroon also exported live animals: almost all were chameleons imported by Hong Kong SAR and Japan.

TOP 3 IMPORTERS OF LIVE SPECIMENS

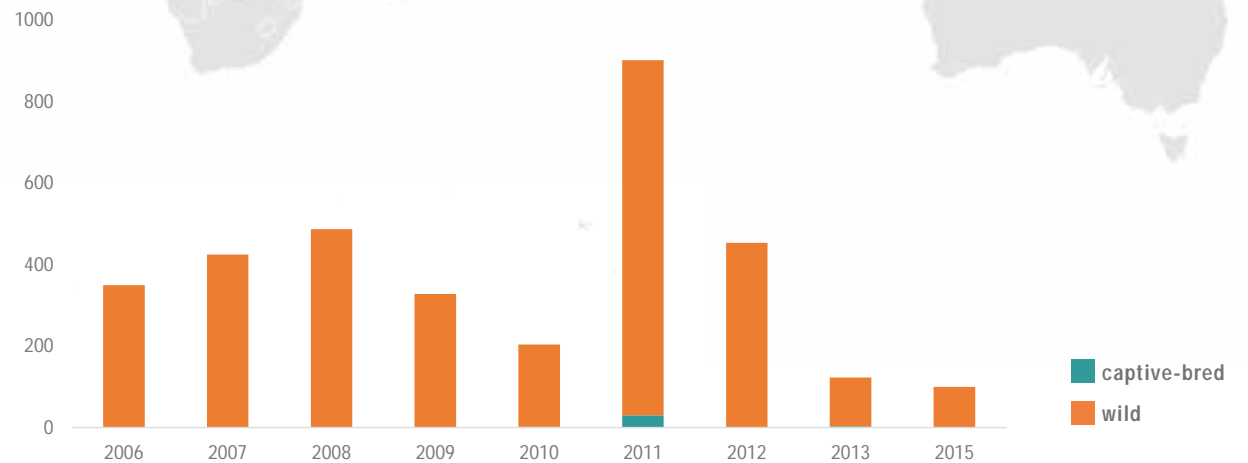
Total number of individuals across all species



LIVE SPECIMENS



OTHER SPECIMENS



SOURCE OF LIVE SPECIMENS 2006–2015



Four-horned Chameleon *Trioceros quadricornis*

4,224
CITES-listed individual specimens were exported to Asia

Trade from Cameroon to Asia

Cameroon joined CITES in 1981. Between 2006 and 2015 a total of 4,224 individual CITES-listed specimens were exported from Cameroon to Asia, in addition to 19,000 reported in kilogrammes and 1,161 reported in cubic metres. The commodity exported in the largest quantities in terms of individuals was live animals (3,373). The most commonly exported live species was the Cameroon Sailfin Chameleon *Trioceros montium* (859) followed by the Four-horned Chameleon *T. quadricornis* (854).

The only commodity exported in kilogrammes was bark from African Cherry *Prunus africana* (19,000 kg). The commodity reported in cubic metres exported in the greatest volume was African Teak *Pericopsis elata* (905 m³), followed by *Afrormosia* spp. (257 m³). All exports of timber species were from wild sources.

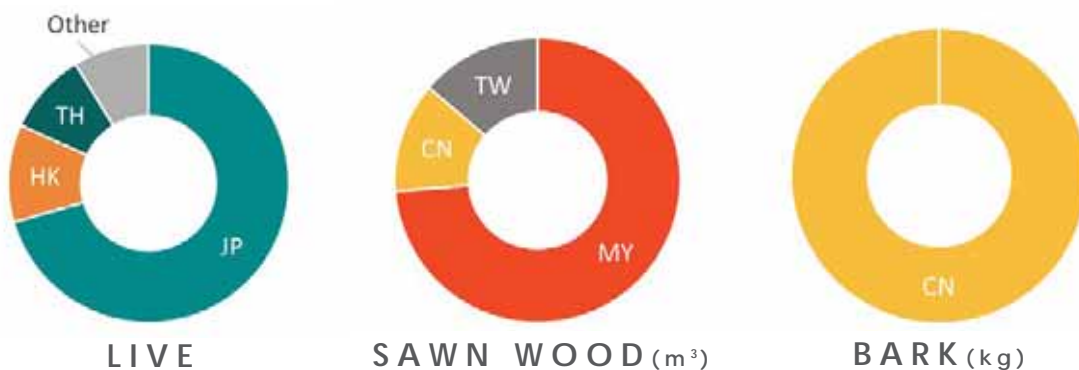
Importers of CITES-listed species from Cameroon

Trade was reported with eight different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Japan
- Malaysia
- Philippines
- Republic of Korea
- Taiwan (PoC)
- Thailand

Most live individuals were imported by Japan (2,378). The majority of exports to Japan were from the family Chamaeleonidae (2,374) and the remainder were White-bellied Pangolins *Manis tricuspis* (4), all from the wild.

Malaysia was the largest importer of sawn wood from Cameroon (856 m³), followed by Taiwan (PoC) (159 m³) and the only importer of bark was China (19,000 kg).



Trade of African Cherry bark from Cameroon to Asia

The African Cherry was first listed in CITES Appendix II in 1995. Since its listing Cameroon has been a dominant supplier of African Cherry bark globally, mainly to supply the pharmaceutical industry in Europe (UNEP-WCMC, 2008). In addition to its importance to the pharmaceutical industry, African Cherry is of economic importance to Cameroon and a major source of income for local communities that rely on trade of this species (Ingram *et al.* 2015).

Analysis of CITES trade data between 2006 and 2015 shows discrepancies between Asian importer and Cameroon's reported trade: Cameroon reported exporting 9000 kg in 2006 that was not reported by China, and in 2014 China reported importing 10,000 kg that was not reported by Cameroon. Global importer reported trade between 2006 and 2015 shows Cameroon to have exported a total of 4,823,953 kg of bark, all of which was sourced from the wild. A total of 98% of African Cherry commodities (including bark) from Cameroon were imported into Europe, imports to Asia (China) accounted for <1% of global trade.

In 2008 a Non-Detriment Finding (NDF) report on African Cherry in Cameroon was presented which highlighted that Cameroon's population was declining and the national population met the criteria of Endangered (Chupezi, 2010). In 2006, a Review of Significant Trade (RST) categorised trade in this species from certain countries, including Cameroon, as of "urgent concern". Cameroon and the DRC received assistance from the International Tropical Timber Organization (ITTO) and the CITES Secretariat to conduct an NDF, and developed a management plan for the sustainable trade of African Cherry. Exports resumed in 2010. Following a second inclusion of the species in a RST in 2014, Cameroon was categorised as a country where "action was needed."



Logs awaiting inspection before export in Douala, Cameroon



COUNTRY PROFILE:

CONGO

Grey Parrot *Psittacus erithacus*

COUNTRY TRADE PROFILE: CONGO

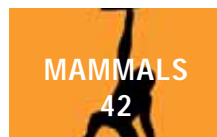
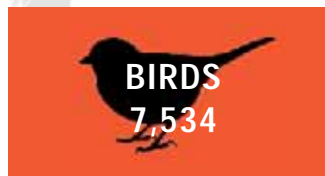
A summary of exports of CITES-listed species from Congo to East and Southeast Asia between 2006–2015

The Republic of Congo was one of three African countries which exported African Teak to Asia. African Teak exports from the Republic of Congo peaked in 2014: all of which were destined to markets in China. The Republic of Congo also exported wild Grey Parrots to Asia: the majority of which were imported by Hong Kong SAR.

WOOD PRODUCTS

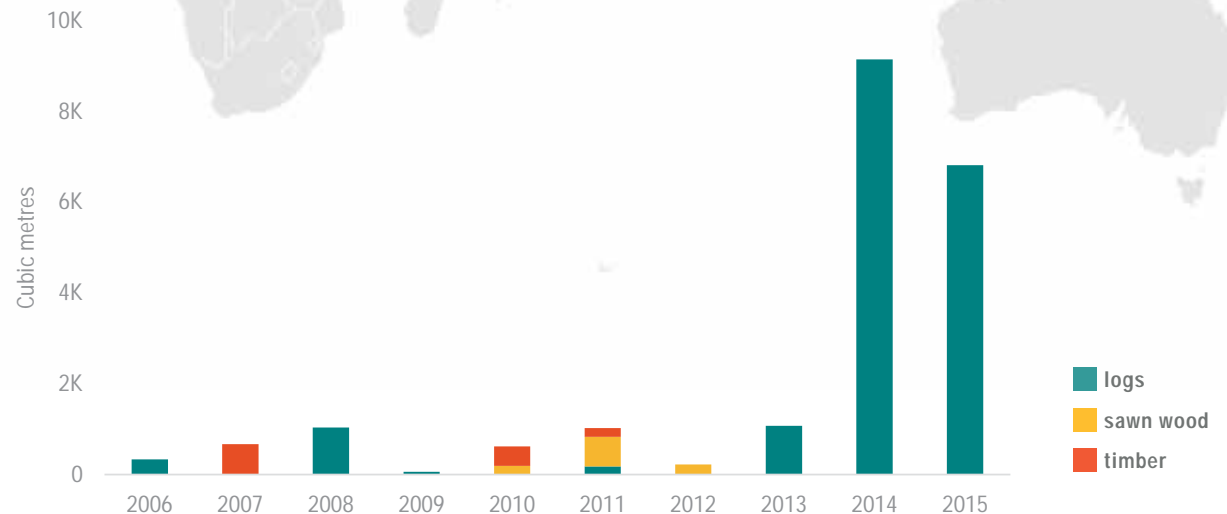


LIVE SPECIMENS



TOP 3 IMPORTERS OF LOGS

Volumes in cubic metres



WOOD PRODUCTS IN TRADE 2006–2015



African Teak *Pericopsis elata*

18,654 m³
of logs from CITES-listed species was exported to Asia from Congo

Trade from Congo to Asia

The Republic of Congo (Congo) joined CITES in 1983. Between 2006 and 2015 a total of 8,380 CITES-listed individual specimens were exported from Congo to Asia, in addition to 1,000 reported in kilogrammes and 21,010 reported in cubic metres.

The most commonly exported commodity in cubic metres from Congo was logs (18,654 m³) followed by timber (1,290 m³) and sawn wood (1,066 m³), all from wild-sourced African Teak *Pericopsis elata*. The only commodity exported in kilogrammes from Congo were scales from the White-bellied Pangolin *Manis tricuspis* (1,000 kg) all of which were wild-sourced and imported by China in 2015.

The largest export of commodities in individuals was live (8,338): this trade was dominated by exports of the Grey Parrot *Psittacus erithacus* (7,370), all from wild-sources, followed by *Phalaenopsis bastianii* (600) an orchid from artificially propagated sources.

Importers of CITES-listed species from Congo

Trade was reported with eight different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Japan
- Malaysia
- Philippines
- Republic of Korea
- Taiwan (PoC)
- Thailand

Mainland China was found to dominate the Asian market for African Teak logs from the Congo (16,071 m³), the next largest importer for this commodity was Japan (1,213 m³). Hong Kong SAR was the largest importer of live individuals from Congo (5,150) of which the majority were Grey Parrots (5,100). Only three countries were found to import sawn wood from African Teak in cubic metres: China (440 m³), Malaysia (340 m³) and Japan (287 m³).



Trade of African Teak from Congo to Asia

African Teak was first listed in CITES Appendix II in 1992. The Congo had an export quota of 6,309 m³ of logs and sawn wood for 2015. Between 2006 and 2015 the Congo exported a total of 21,010 m³ of African Teak to Asia, of which the majority was reported as wild-sourced (14,087 m³) while the remainder had no source code.

Exports of African Teak were markedly higher in 2014 and 2015 from the Congo, and although the exact reasons for this are unknown it is likely that exports are influenced by changes in supply and demand on the global market. For example, Myanmar was the world's largest exporter of teak, the majority of which was exported to China and India (FAO, 2015). However due to difficulties controlling unregulated and illegal logging, in 2014 Myanmar suspended exports of logs from a variety of timber species including Teak *Tectona grandis*, which consequently caused overall teak prices to increase in Chinese markets (FAO, 2015). The high demand for teak in general is said to have caused a shift from natural forests in Myanmar and Asia to natural forests and plantations in Africa and Latin America (Kollert & Kleine, 2017).

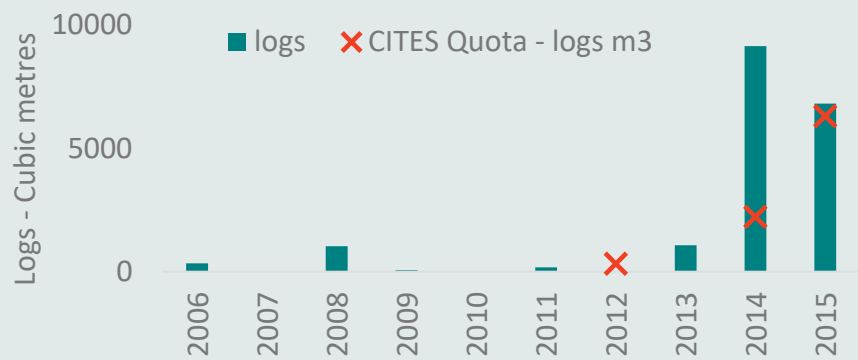


Figure 51

Exports of African Teak logs from Congo to Asia (reported in cubic metres, 2006 to 2015)

In 2014, exports of logs of African Teak from the Congo peaked (9,152 m³), this could represent a potential impact of Myanmar's ban on timber log exports. In both 2014 and 2015 Congo exceeded export quotas for logs. At the 23rd CITES Plants Committee (PC23) in 2017, due to a high volume and sudden increase of exports the species was included in the Review of Significant Trade (RST).



COUNTRY PROFILE:

DEMOCRATIC REPUBLIC OF THE CONGO

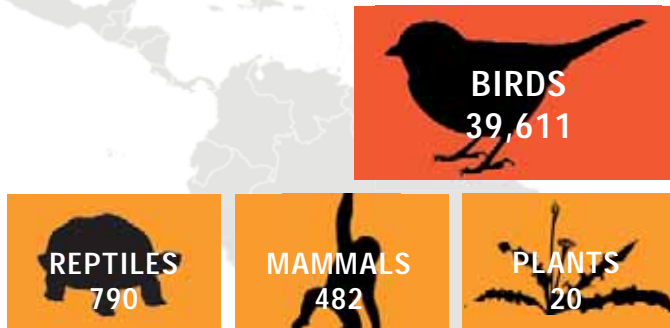
Virunga National Park, Democratic Republic of the Congo

COUNTRY TRADE PROFILE: DEMOCRATIC REPUBLIC OF THE CONGO

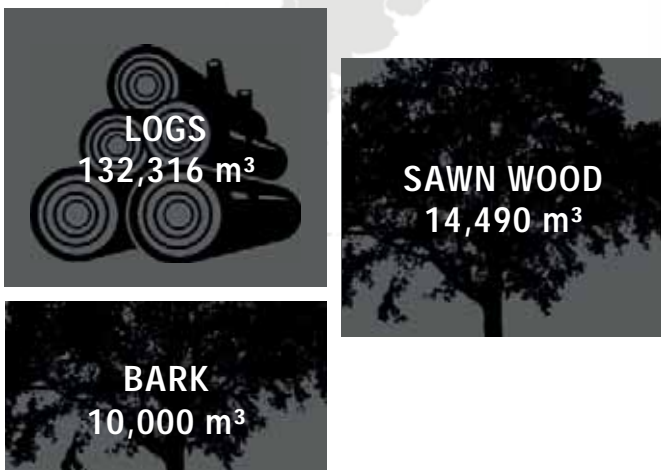
A summary of exports of CITES-listed species from Democratic Republic of the Congo to East and Southeast Asia between 2006–2015

Democratic Republic of the Congo (DRC) was the largest African exporter of wild Grey Parrots to Asia: most of which were destined for Singapore. DRC also exported African Cherry bark and sawn wood from African Teak: almost all of which were imported into China.

LIVE SPECIMENS

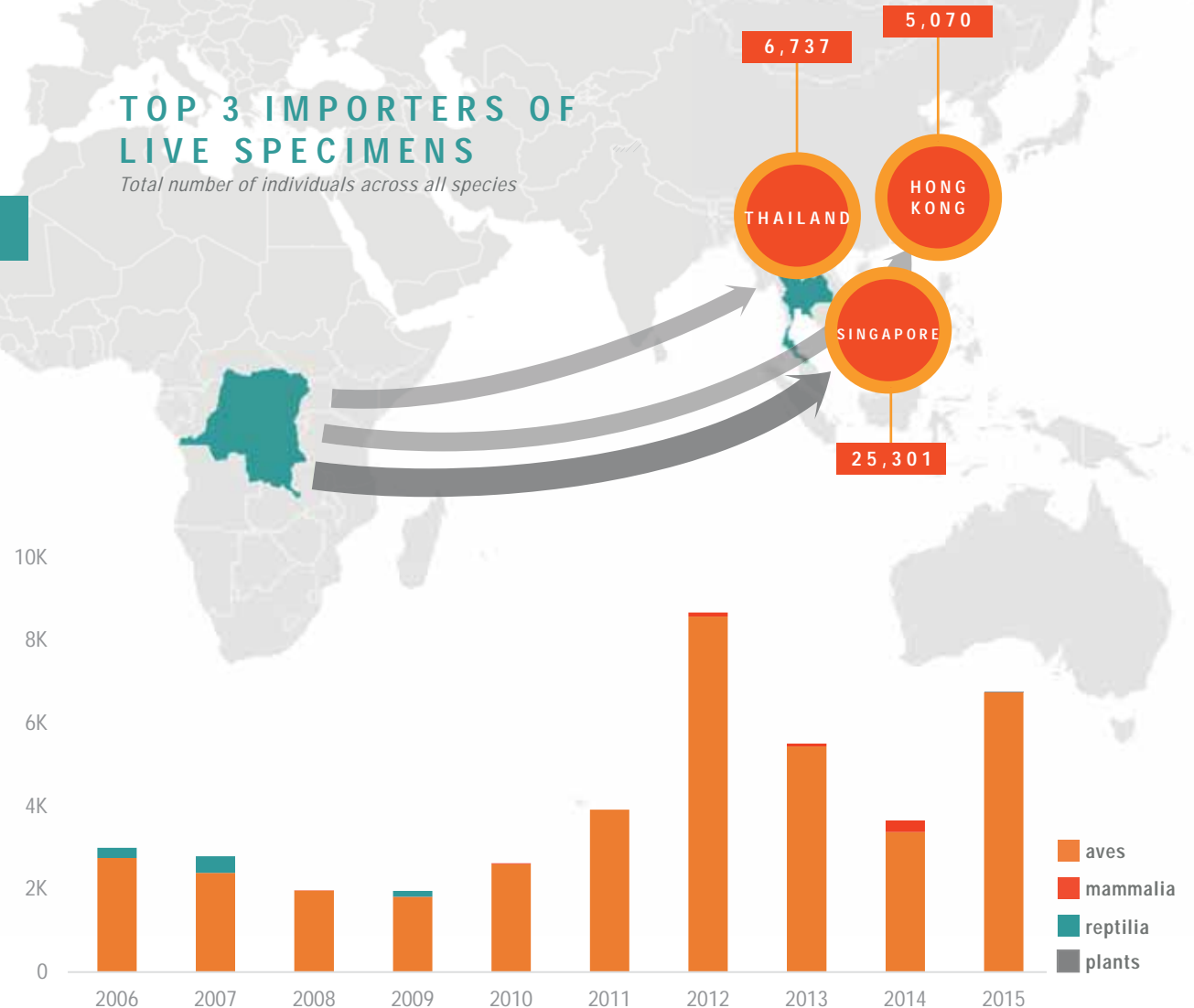


WOOD PRODUCTS



TOP 3 IMPORTERS OF LIVE SPECIMENS

Total number of individuals across all species



EXPORTS OF LIVE SPECIMENS TO ASIA 2006–2015



African Teak *Pericopsis elata*

146,862 m³
of logs from CITES-listed species was exported to Asia from the DRC

Trade from the DRC to Asia

Democratic Republic of the Congo (DRC) joined CITES in 1976. Between 2006 and 2015 a total of 40,903 CITES-listed individual specimens were exported from the Democratic Republic of the Congo to Asia, in addition to 11,700 reported in kilogrammes and 146,862 was reported in cubic metres.

Exports in kilogrammes were of two commodities: bark from African Cherry *Prunus africana* (10,000 kg) and pangolin scales from *Manis* spp. (750 kg) and the White-bellied Pangolin *Manis tricuspis* (950 kg). The largest export of commodities in cubic metres was logs from African Teak *Pericopsis elata* (132,316 m³) followed by sawn wood, most of which was also African Teak (14,171 m³). Exports of all commodities reported in kilogrammes or cubic metres were from the wild.

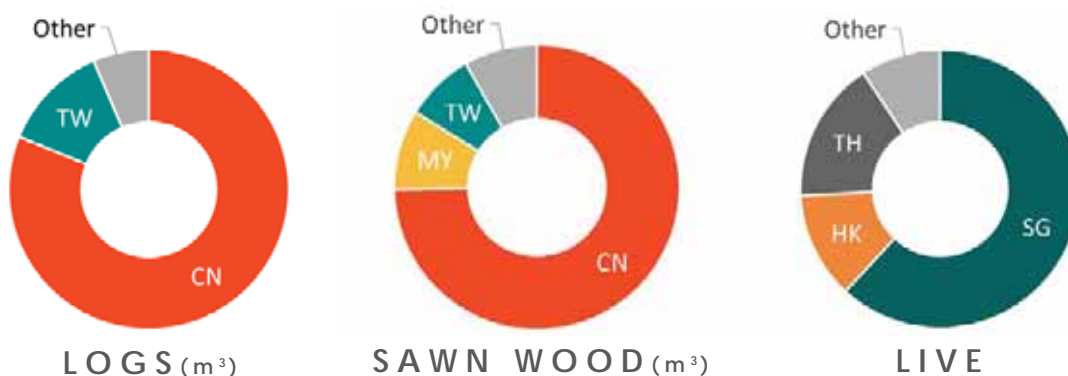
The only exports reported as number of individuals were live (40,903): the most commonly exported species being the Grey Parrot *Psittacus erithacus* (34,553), followed by Red-fronted Parrot *Poicephalus gulielmi* (4,915). Almost all exports of live individuals were from the wild (40,613), this included all mammals and reptiles.

Importers of live CITES-listed species from the DRC

Trade was reported with eleven different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Indonesia
- Japan
- Myanmar
- Malaysia
- Republic of Korea
- Singapore
- Taiwan (PoC)
- Thailand
- Viet Nam

All exports of bark and pangolin scales were imported by mainland China. Mainland China was also the largest importer of logs (107,378 m³) and sawn wood (10,803 m³). Singapore was the largest importer of live individuals.



Trade of Grey Parrots from the DRC to Asia

The Grey Parrot is currently Endangered and was first listed in CITES Appendix II in 1981. At CoP17 in 2016 a proposal to up-list the species to Appendix I was accepted, however DRC entered a Reservation, along with two non-range States: Saudi Arabia and United Arab Emirates. Therefore, theoretically these three can still trade the species as if it is in Appendix II. However, the Standing Committee recommendation from SC66 (2016) that all Parties suspend commercial trade of Grey Parrots from DRC remains in place, leading to confusion as to whether Parties that have taken out a Reservation are still requested to suspend trade.

The species has been included in the Review of Significant Trade (RST) process multiple times, including the DRC population. When selected at the 20th CITES Animals Committee (AC20) in 2004, the subsequent report identified concerns with illegal trade and the scientific rigour of quotas and NDFs in DRC (CITES, 2006). In addition, it has been reported that the DRC continually exceeds export quotas set in place for this species; between 2005 and 2014 the country exceeded quotas for seven out of the ten years (Poole & Shepherd, 2017).

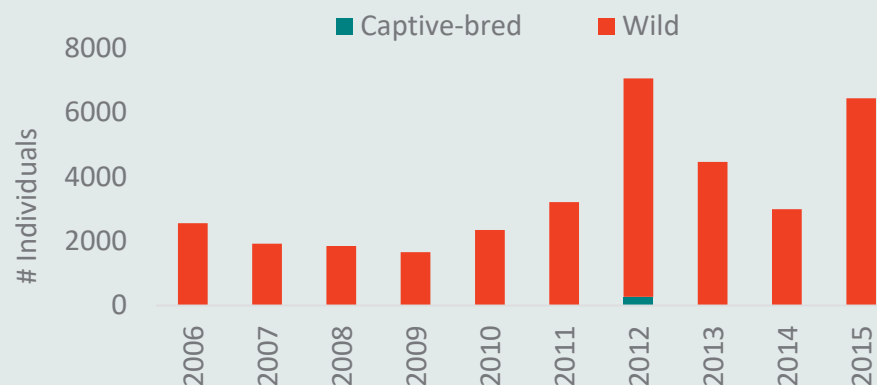


Figure 52

Exports of live Grey Parrot individuals from DRC to Asia reported as captive-bred (source code C) and wild (W) (reported as individuals, 2006–2015)

Analysis of CITES trade data between 2006 and 2015 shows that the DRC was the second largest exporter of live Grey Parrots (34,553) from Africa to Asia after South Africa (40,635). Almost all exports of this species from DRC were reported to be sourced from the wild and only a small quantity exported in 2012 were reported as captive-bred (270).

A herd of African elephants is shown in a lush green savanna. The elephants are of various sizes, including several young calves. They are scattered across the frame, some facing left and some right. The background is a dense field of tall green grass with a few small, leafless trees in the distance. The overall scene is bright and natural.

SUB-REGIONAL PROFILE:

SOUTHERN AFRICA

Herd of African Elephants *Loxodonta africana*



Figure 53

The 11 countries considered to comprise Southern Africa for this analysis

PROFILE ANALYSIS SOUTHERN AFRICA

Some of the national economies in the region are growing quickly (Mozambique, Namibia) compared with others than are increasing at a slower pace (Zimbabwe, South Africa, Swaziland) (IMF, 2016). Some of the nations are also home to human populations that are increasing at a fast pace (Zambia, Malawi, Mozambique) (World Bank, 2017).

// *The wildlife of Southern Africa is incredibly diverse, from some of Africa’s most famous animals: elephants, rhinos, zebra and African Lions Panthera leo of the grasslands and the savanna, to the incredible endemic species of Madagascar and those that are able to survive the harsh Namib desert.*

According to CITES trade data, between 2006 and 2015, Asia imported a total of 3,416,389 individual specimens of CITES-listed wildlife plus 2,376,056 kg, 90,726 belly skins, 71,515 back skins and a range of other units from Southern Africa. This covered 820 taxa in total.

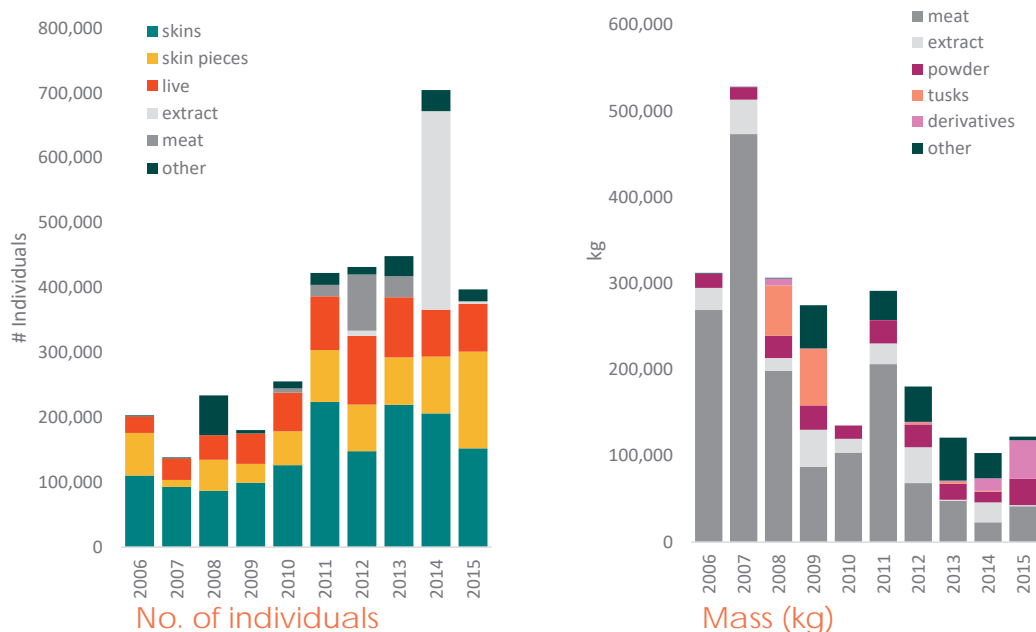
All countries are members of CITES:

COUNTRY	MEMBER OF CITES?	YEAR JOINED CITES
Botswana	✓	1977
Lesotho	✓	2003
Madagascar	✓	1975
Malawi	✓	1982
Mauritius	✓	1975
Mozambique	✓	1981
Namibia	✓	1990
South Africa	✓	1975
Swaziland	✓	1997
Zambia	✓	1980
Zimbabwe	✓	1981

Commodities in trade

A total of 44 different commodities were exported from Southern Africa to Asia using 14 different units: an indicator of the range of wildlife exported from the sub-region. The units used most commonly were number of specimens and kilogrammes, although there were significant exports using the units belly skins (90,726) and back skins (71,515), nearly all of which were from Nile Crocodiles *Crocodylus niloticus*.

Trade reported using number of individuals was predominantly skins, skin pieces, live and extract (Figure 54a). This compares with trade reported in kilogrammes which was dominated by meat (Figure 54b).



Figures 54a and 54b

Quantity of CITES-listed wildlife reported in number of individuals or kilogrammes (2006 to 2015) divided into trade terms

Exports of individuals of wildlife generally increased over the time period, with a particularly large spike in 2014 which was caused by an export from Namibia of 302,012 extracts from Cape Fur Seal *Arctocephalus pusillus*.

Skins made up the greatest proportion of exports of individuals: a total of 1,465,289 were exported between 2006 and 2015: most of which were from Nile Crocodile (1,339,895). The majority of Nile Crocodile skins were from captive-bred (738,173) or ranched (557,464) crocodiles.

Live exports increased to a peak of 105,929 in 2012 before declining in subsequent years. Part of 2012's peak can be explained by an above average export of Leopard Tortoises *Stigmochelys pardalis* (40,015 compared with an annual average of 16,565 for the other nine years), most of which were exported by Zambia (39,020). Many other species also showed an export increase for 2012.

In contrast, exports reported in kilogrammes showed a general decline from 2007 onwards. Most wildlife reported in kilogrammes was meat: 99% of which was from Nile Crocodile, all of which was from captive-bred (1,232,506 kg) or ranched (286,095) animals.

There was also a significant export of African Elephant *Loxodonta africana* tusks in 2008 and 2009 following the agreed "one-off" sale of ivory. The CITES Trade Database contains two records which refer to the same transaction of an export from Namibia to Japan of 3,753 kg, which was reported by Namibia in 2008 as tusks and by Japan in 2009 as ivory pieces, but it is known to be the same transaction as the permit used was confirmed as being the same (UNEP-WCMC, pers. comm. 29th September 2017). Another possible replicate involving 3,751 kg tusks reported by Namibia in 2008 and by its trading partner, mainland China, in 2009 has yet to be confirmed so has not been removed from the graph.

In 2015 there was a large spike in the export of derivatives (44,746 kg): this was caused by an export of 24,000 kg of *Euphorbia ferox* and 20,746 kg of *Aloe ferox* exported from South Africa.



Euphorbia ferox

Top species in trade

The Leopard Tortoise was the most common live species to be exported from Southern Africa (Figure 55): 189,102 were exported between 2006 and 2015. Most were reported as captive-bred (171,800). A significant number of Grey Parrots were also exported (41,531), and again most were reportedly captive-bred (35,471).

Exports of skins were dominated by Nile Crocodile skins (1,339,895): nearly all of which were reported as being from captive-bred (738,173) or ranched (557,464) animals.

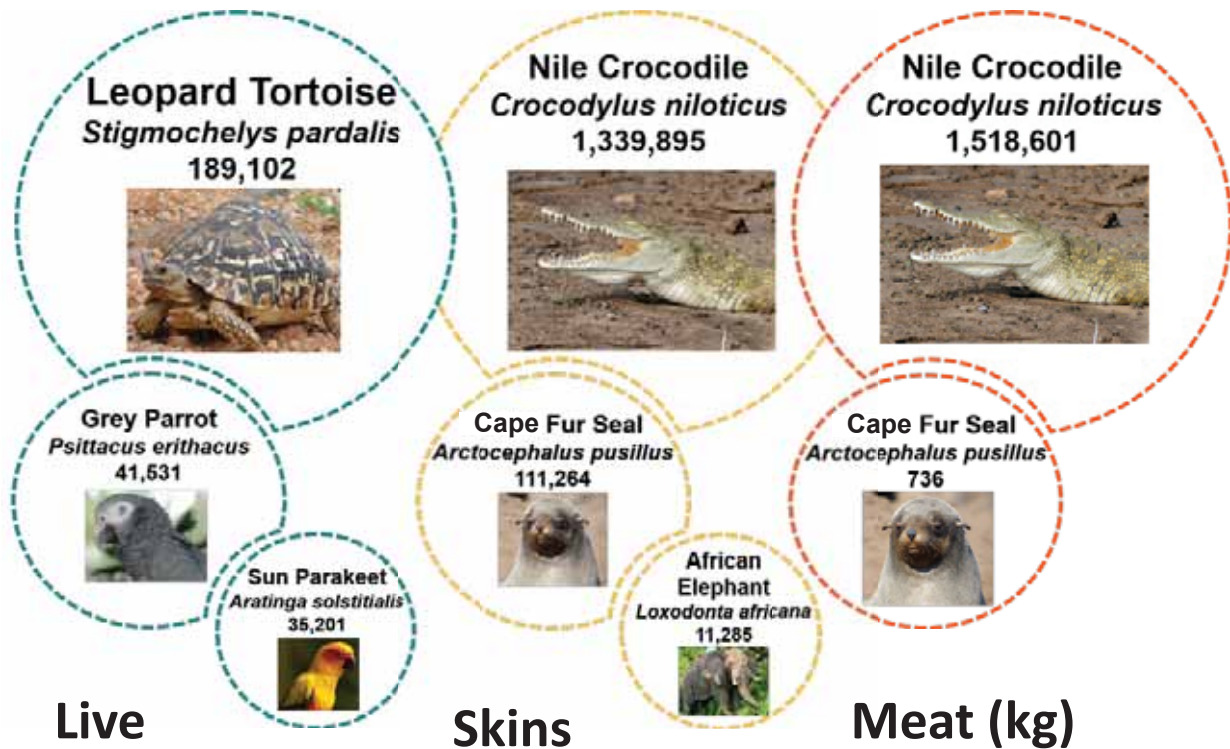


Figure 55

Exports of live species and skins (both reported as number of individuals) and meat (reported as kilogrammes) divided into the species exported in the highest quantities

Live taxa in trade

Nine countries from Southern Africa exported a total of 630,625 live individuals to Asia, which covered 711 different taxa in total. There was not much overlap between the species exported by different countries: 36 taxa were exported by two or three different countries, but the remaining 675 were only exported by one country.

South Africa was the largest exporter of birds (231,413), mammals (8,111) and plants (54,575) (Figure 56), and also the exporter of the greatest diversity of live individuals: 480 in total. This compares with Botswana and Swaziland that only exported one taxa as live each (Nile Crocodile and Grey Parrot respectively). Zambia was by far the largest exporter of live reptiles (205,453): nearly all of which were Leopard Tortoises (183,328). Madagascar was the only exporter of live amphibians (22,888): nearly all of which were wild frogs in the *Mantella* genus (21,386).



Golden Mantella *Mantella aurantiaca*

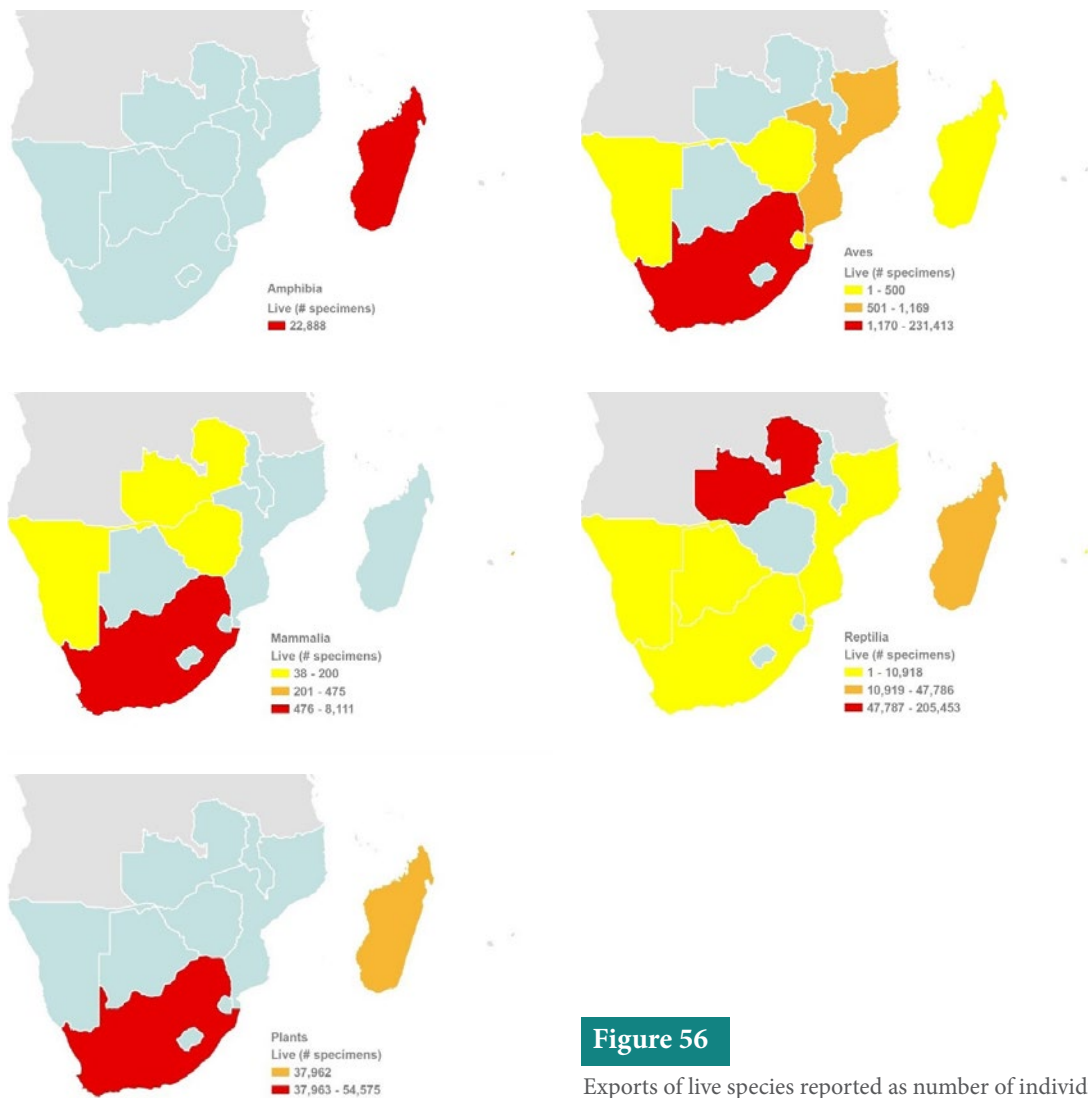


Figure 56

Exports of live species reported as number of individuals divided into taxonomic class and exporting country

Taxa in trade: Skins

A total of 1,465,289 individual skins were exported from Southern Africa: most of which were Nile Crocodile (1,339,895) or Cape Fur Seal (111,264) skins, although skins from a total of 28 taxa were reported. Exports of Nile Crocodile skins were dominated by three countries: Zimbabwe (465,366), Zambia (410,477) and South Africa (379,169), although an additional five countries exported lower quantities (Figure 57). This contrasts with exports of Cape Fur Seal which were only exported by Namibia (108,272) and South Africa (2,992).

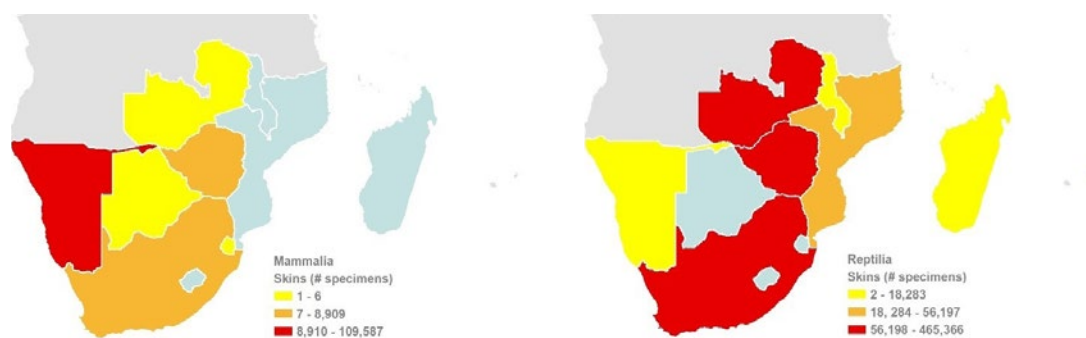


Figure 57

Exports of skins reported as number of individuals divided into taxonomic class and exporting country

Taxa in trade: Meat

Between 2006 and 2015, a total of 1,519,337 kg of meat was exported from Southern Africa to Asia: the vast majority of which were Nile Crocodile (1,518,601 kg) although Namibia also exported 736 kg of Cape Fur Seal meat to Viet Nam (440 kg) and mainland China (296 kg). Zimbabwe was by far the largest exporter of Nile Crocodile meat (826,960 kg) (Figure 58), which aligns with their status as the largest exporter of Nile Crocodile skins.



Figure 58

Exports of meat reported as kilogrammes divided into taxonomic class and exporting country

Exporters and importers

Of the nine Southern African countries exporting live individuals to Asia, South Africa was the largest exporter followed by Zambia (Figure 59). Seventeen countries/territories across East and Southeast Asia imported live individuals from Southern Africa with Hong Kong SAR importing the most (180,262). Most imports into Hong Kong SAR were of Leopard Tortoises (138,361). Although Hong Kong SAR imported the most by quantity, the diversity of taxa (170) was much lower compared with Thailand (396), Japan (340) and Indonesia (249) who imported a far greater range of taxa.

180,262
live individuals were imported by Hong Kong SAR

Ten Southern African countries exported individual skins to Asia, Zimbabwe being the largest (474,275) (Figure 60), nearly all of which were from captive-bred (355,288) or ranched (107,010) Nile Crocodiles. Of the 16 Asian countries/territories that imported skins, Singapore dominated trade (853,601), the skins were likely imported there for the purpose of tanning and re-exporting for the international leather trade (UNCTAD, 2012).

Four Southern African countries exported meat reported in kilogrammes (Figure 61), nearly all of which was Nile Crocodile meat (1,518,601 kg). Six Asian countries/territories imported meat: the greatest quantity went to Hong Kong SAR (1,336,471 kg) followed by China (108,306 kg).

No. of individuals

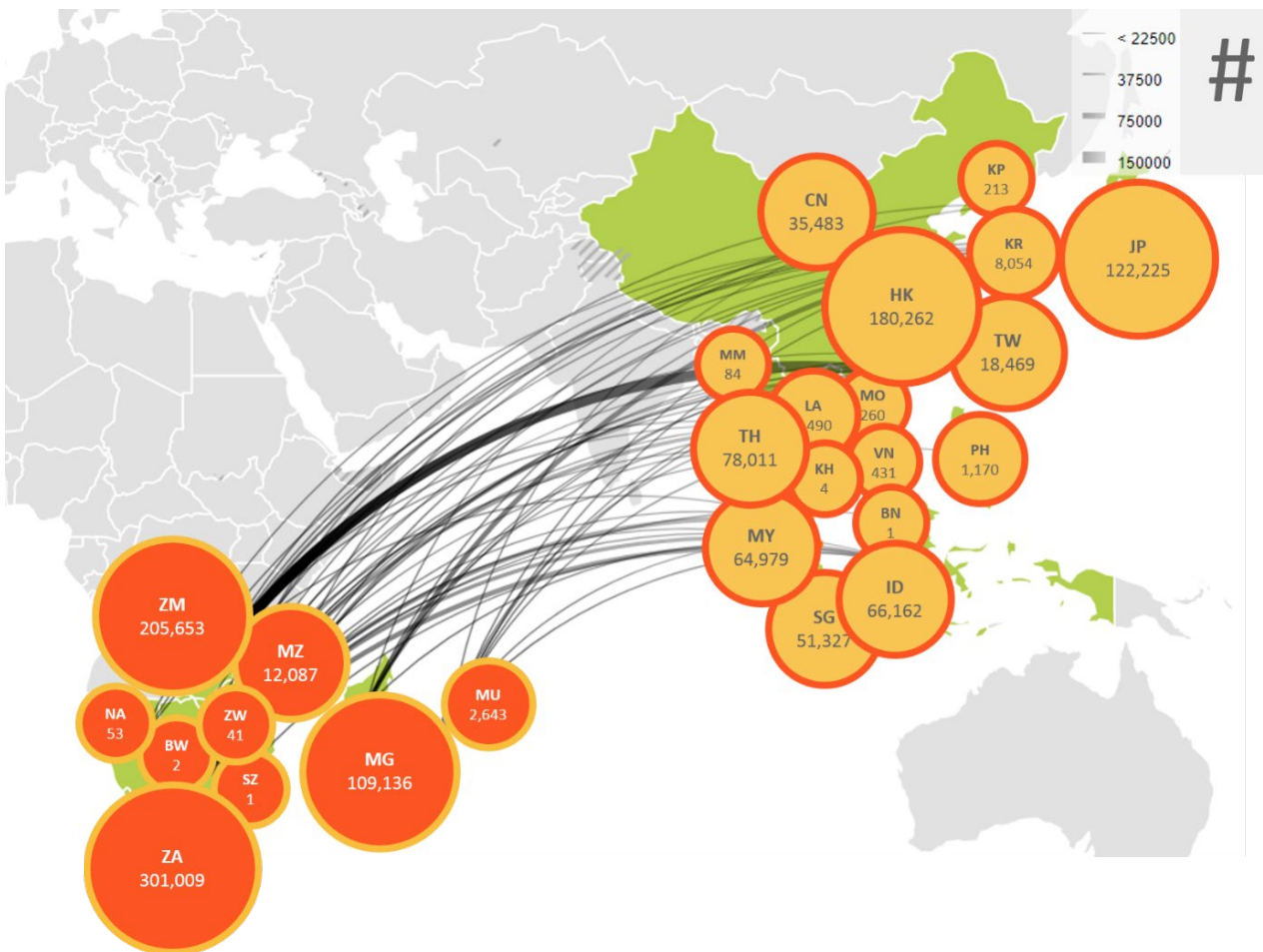


Figure 59

Southern African exporters and Asian importers of live species reported as number of individuals

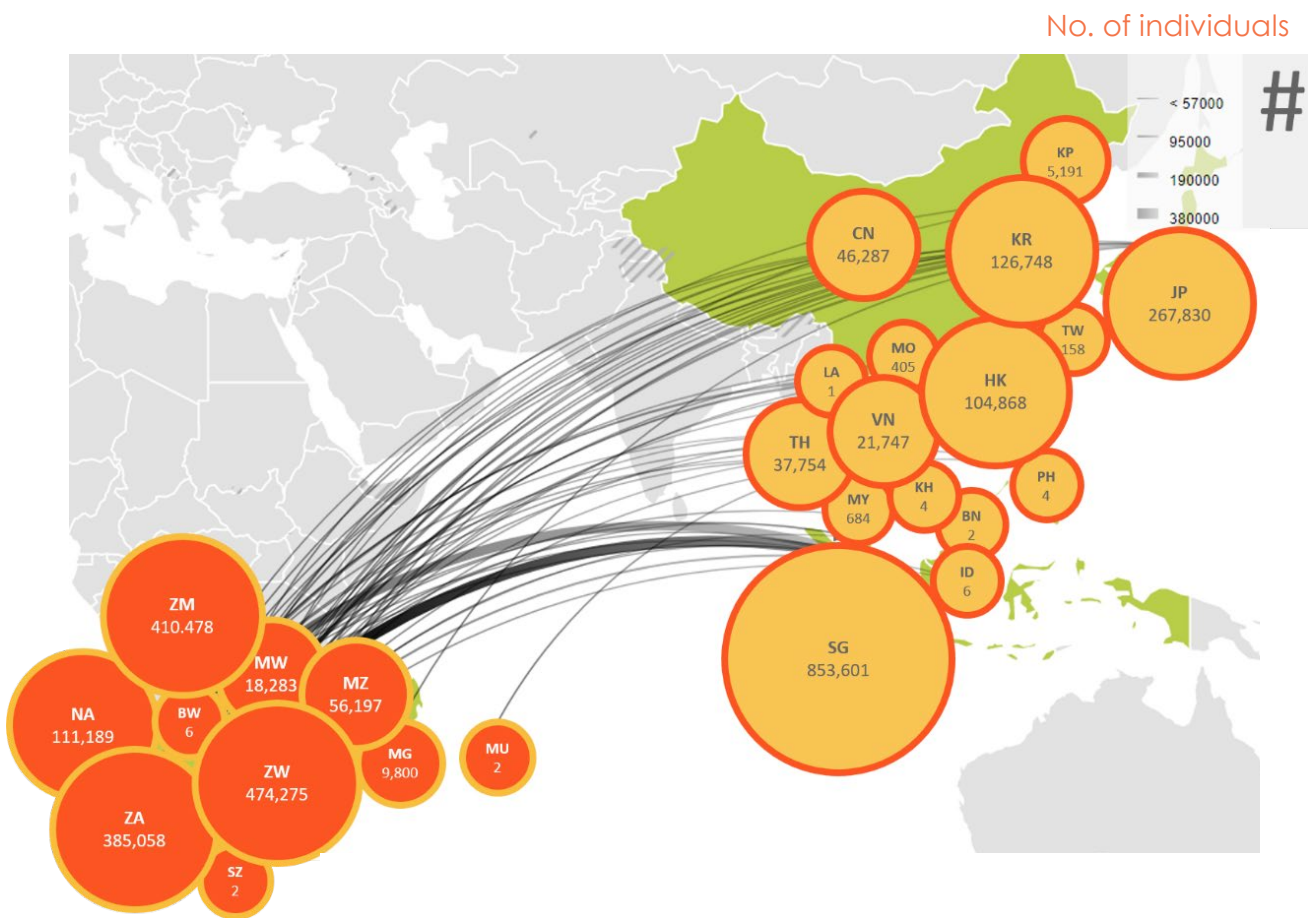


Figure 60

Southern African exporters and Asian importers of skins reported as number of individuals



Nile Crocodile *Crocodylus niloticus*

Kilogrammes

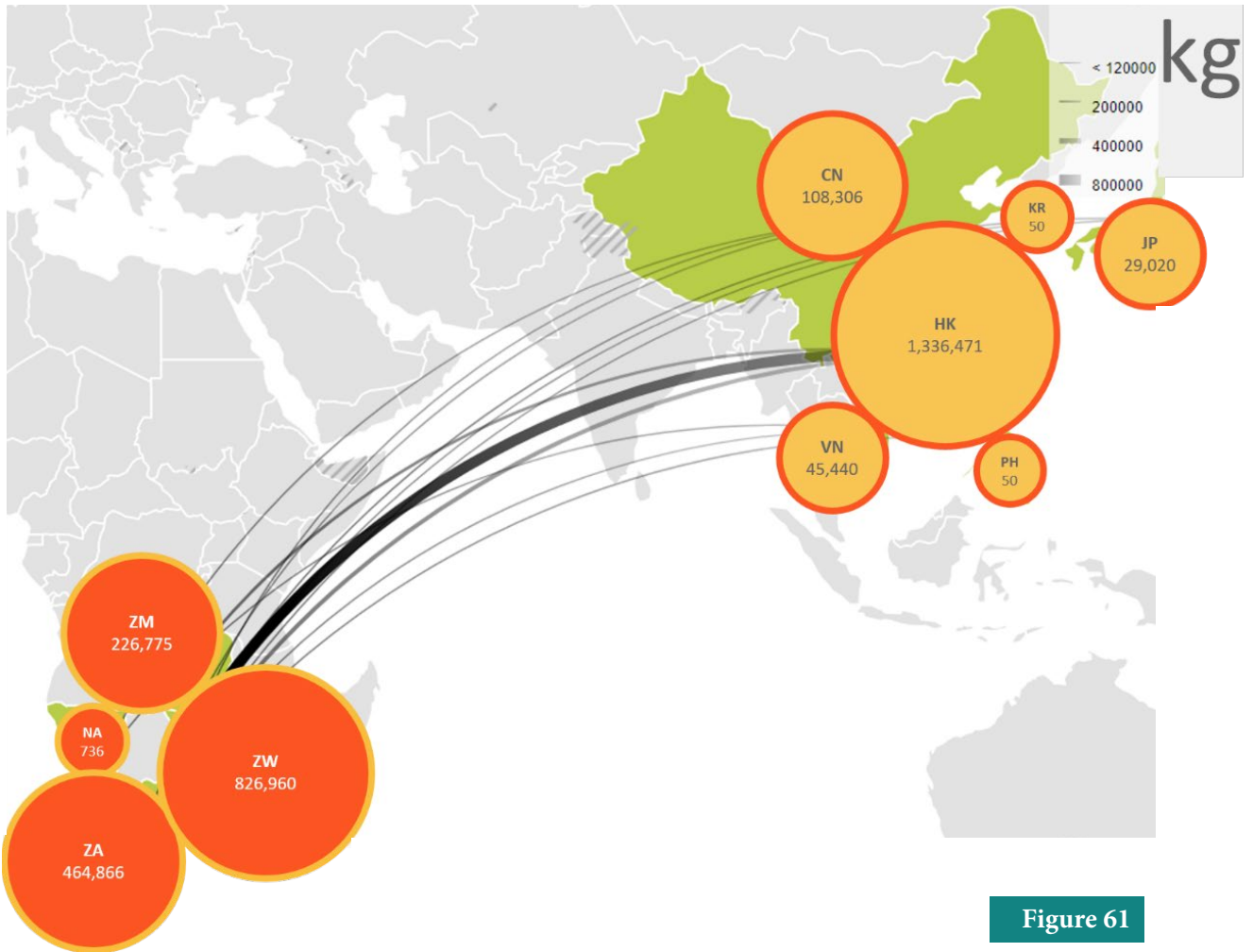


Figure 61

Southern African exporters and Asian importers of meat reported as kilogrammes





COUNTRY PROFILE:

BOTSWANA

Central wilderness in the Okavango Delta, Botswana

COUNTRY TRADE PROFILE: BOTSWANA

A summary of exports of CITES-listed species from Botswana to East and Southeast Asia between 2006–2015

Botswana only exported commodities from four species: African Elephant, African Lion, Leopard and Nile Crocodile. Botswana was a significant exporter of elephant tusks and ivory pieces to Asia: almost all were destined to China and Japan, and nearly all of which occurred following the "one-off" sale.

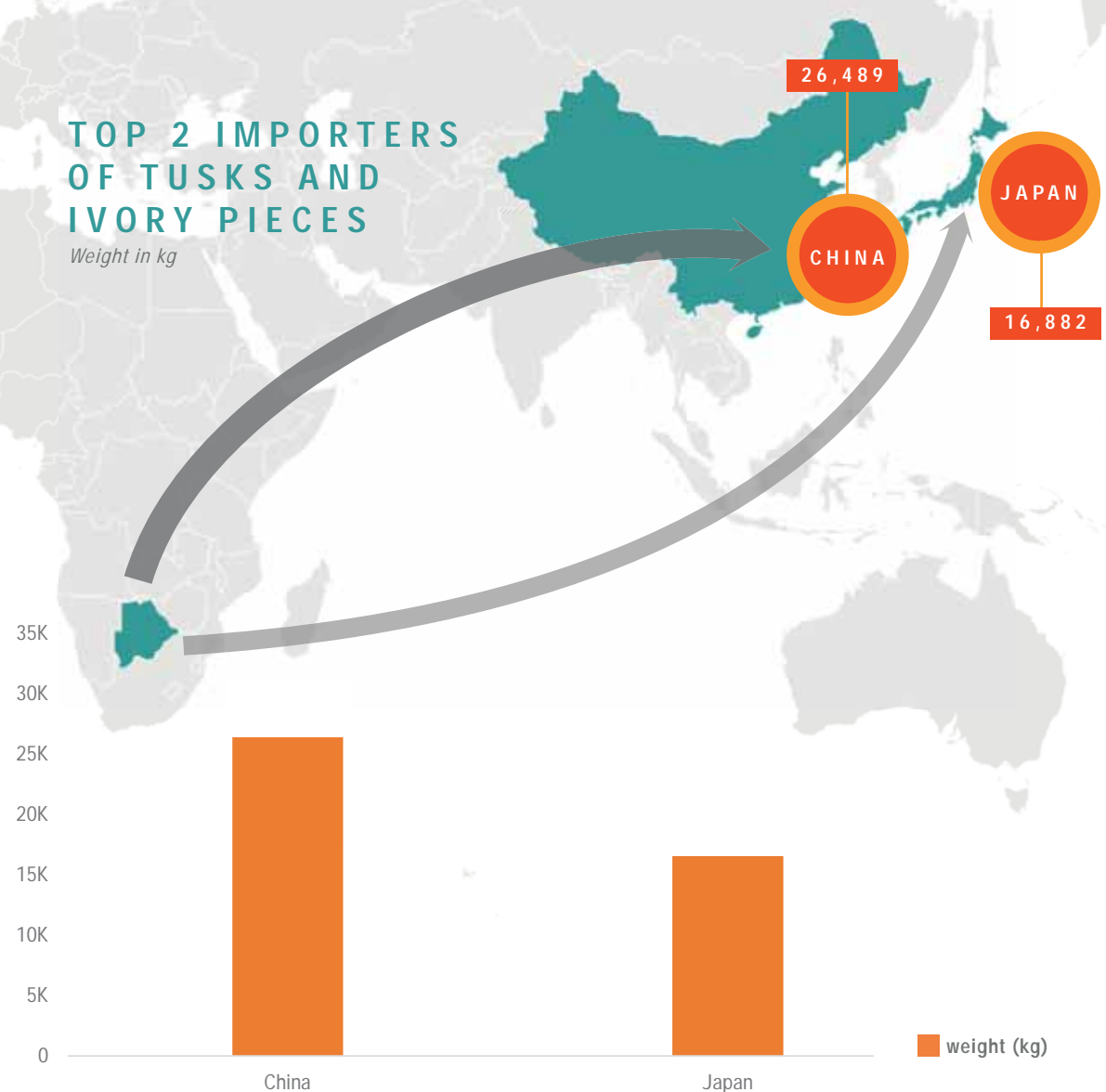
TOP 2 IMPORTERS OF TUSKS AND IVORY PIECES

Weight in kg

ELEPHANT TUSKS AND IVORY



OTHER SPECIMENS



EXPORTS OF WILD SPECIMENS 2006–2015



African Lions *Panthera Leo*

6,578
live specimens of CITES-listed species were exported to Asia

Trade from Botswana to Asia

Botswana joined CITES in 1977. Between 2006 and 2015, a total of 6,578 individual specimens of CITES-listed species were exported from Botswana, in addition to 43,171 of wildlife reported in kilogrammes. The commodity exported in the largest quantities in terms of individual specimens was tusks (6,252) all from the African Elephant *Loxodonta africana* followed by claws (126) all from the African Lion *Panthera leo*, all tusks and claws were from wild-sources. The largest commodity type exported in kilogrammes was tusks (26,489 kg) followed by ivory pieces (16,682 kg), all from wild African Elephant.

Between 2006 and 2015 Botswana was found only to export commodities from four species: African Elephant, African Lion, Leopard *Panthera pardus* and Nile Crocodile *Crocodylus niloticus*. Exports of trophies included one African Lion and two Leopards, all from wild-sources and for the purpose of “personal” use. Only two live individuals were exported from Botswana, both of which were Nile Crocodiles, imported by the Republic of Korea for the purpose of commercial trade.

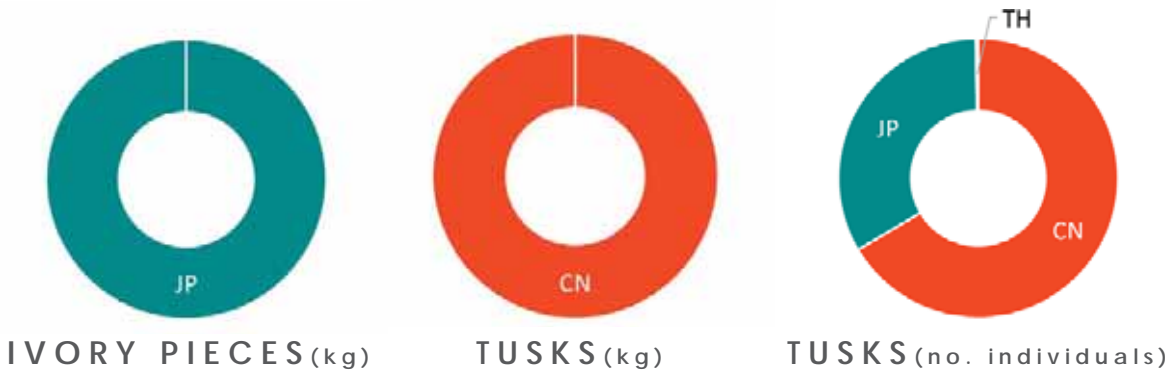
Importers of CITES-listed species from Botswana

Trade was reported with five different East and Southeast Asian importers:

- mainland China
- Philippines
- Thailand
- Japan
- Republic of Korea

All ivory pieces reported in kilogrammes were imported by Japan (16,683 kg) and all tusks reported in kilogrammes were imported by China (26,489 kg): all trade in kilogrammes occurred in 2009. China imported the largest number of tusks (4,156) followed by Japan (2,078) whereas Thailand imported a relatively small number of tusks (18).

The only commodities imported by the Philippines from Botswana were bones from the African Elephant (88) and one skull from the African Elephant, all of which were from wild-sources. All exports of African Lion claws (126) were imported by mainland China in 2013.





ivory products

Ivory trade from Botswana to Asia

The African Elephant is listed in CITES Appendix I, except for populations present in four Southern African countries: Botswana, South Africa, Zimbabwe and Namibia which are included in Appendix II. Botswana contains the largest African Elephant population in the world, with recent estimates of around 130,451 animals (Chase *et al.* 2016).

In 2008, CITES gave permission to each of these four countries to sell their stockpiles of ivory in a “one-off” sale to generate money for conservation and sustainable development within their countries (CITES, 2008). A total of 102,000 kg of ivory was sold from all four countries combined and generated an estimated USD15 million (CITES, 2008). It is estimated that ivory sold from Botswana alone generated a total of USD7,093,550 (CITES, 2008).

102,000 kg
of ivory was sold from all
four countries during the
“one off” sale

Botswana has in the past been an advocate for the sustainable use and trade of elephant ivory. However, at CoP17 Botswana announced that they believed that a global ban on ivory trade should be implemented as this would be the only course of action to conserve the African Elephant effectively (Daley, 2016). The proposal to amend the listing of African Elephant to include all populations in Appendix I was supported by Botswana but ultimately rejected by the Parties at CoP17.



African Elephants *Loxodonta Africana* in Botswana

A low-angle photograph of a tree trunk covered in moss and epiphytic plants in a lush forest. The tree trunk is the central focus, covered in a thick layer of green moss. Several large, broad, green leaves are growing from the trunk, some showing signs of being eaten. The background is filled with dense green foliage and branches, creating a sense of a deep, vibrant forest. The lighting is bright, suggesting a sunny day, with some light filtering through the leaves.

COUNTRY PROFILE:

MADAGASCAR

Dalbergia madagascariensis tree in Masoala National Park, Madagascar

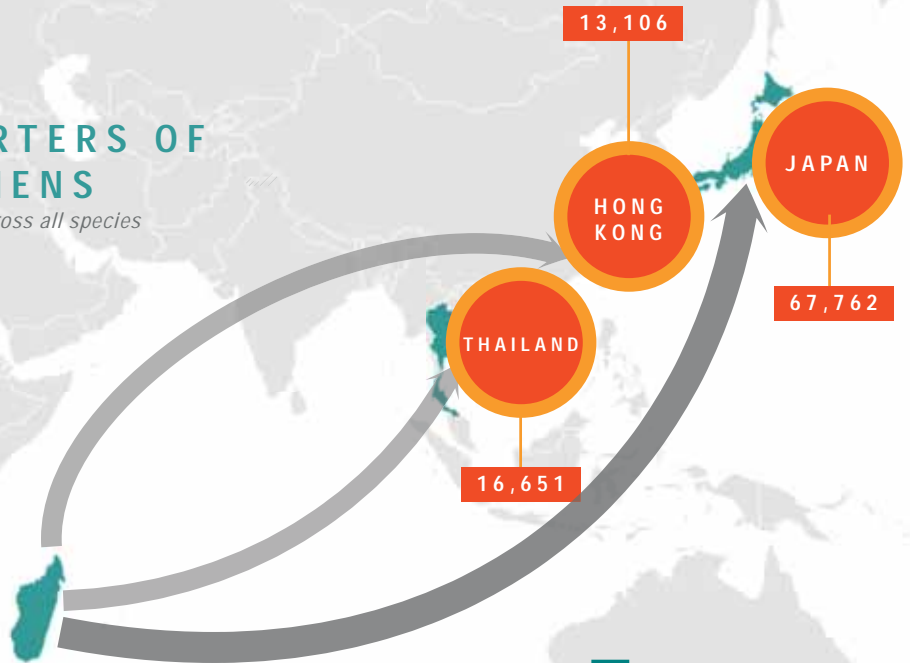
COUNTRY TRADE PROFILE: MADAGASCAR

A summary of exports of CITES-listed species from Madagascar to East and Southeast Asia between 2006–2015

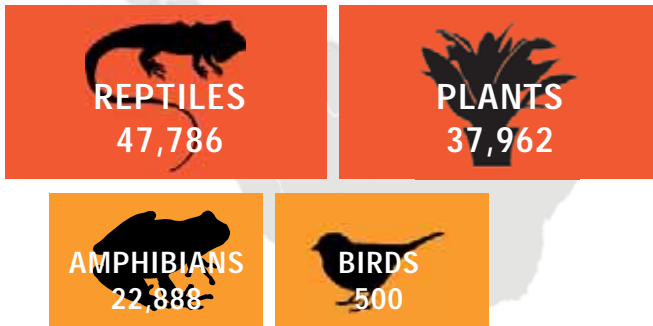
Madagascar was a significant exporter of live CITES-listed specimens: most were plants, reptiles or amphibians. Madagascar was the only exporter of live amphibians to Asia: a significant proportion of these were destined for Japan.

TOP 3 IMPORTERS OF LIVE SPECIMENS

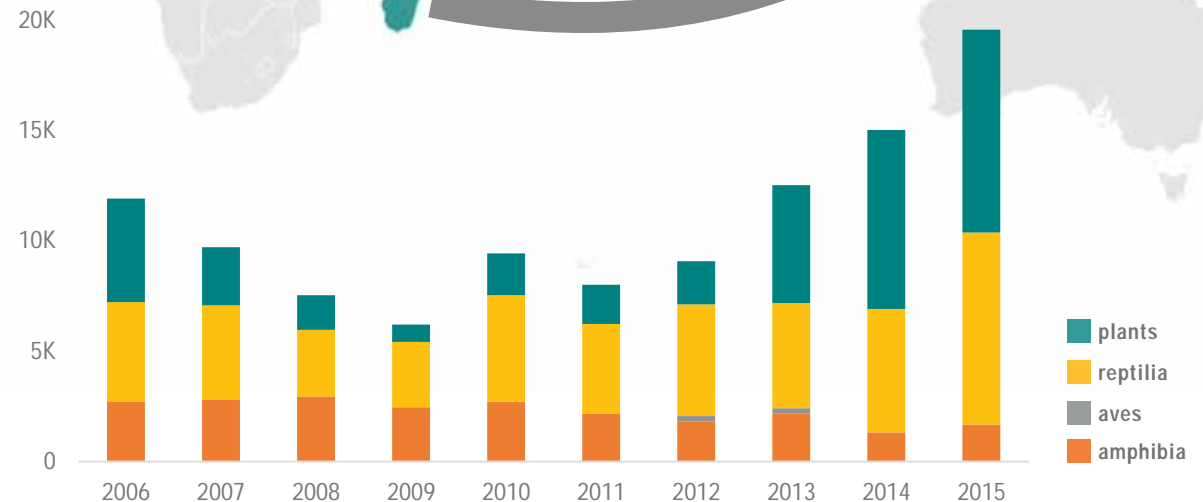
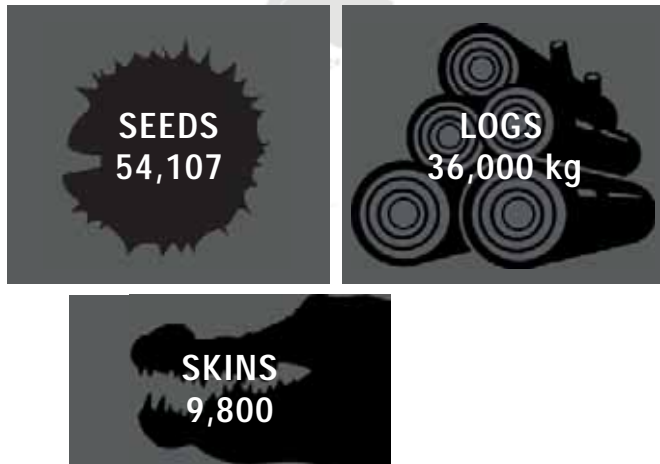
Total number of individuals across all species



LIVE SPECIMENS



OTHER SPECIMENS



EXPORTS OF LIVE SPECIMENS TO ASIA 2006–2015

Panther Chameleon *Furcifer pardalis*

173,928

CITES-listed species specimens were exported to Asia

Trade from Madagascar to Asia

Madagascar joined CITES in 1975. Between 2006 and 2015 a total of 173,928 CITES-listed individual specimens were exported from Madagascar to Asia, in addition to a further 37,100 kg of wildlife reported in kilogrammes and a small amount reported in other units. The commodities exported in the greatest amounts were live animals (109,136 individuals) followed by seeds (54,107) and logs (36,000 kg).

Plants were frequently traded, and the most commonly exported live species across all classes was *Pachypodium brevicaule* (6,482) followed by the Panther Chameleon *Furcifer pardalis* (6,003).

Madagascar exported a significant number of live reptiles (47,786): exports of geckos Gekkonidae were the highest (25,838), encompassing 16 different species (some exports were only detailed to the genus level), closely followed by chameleons Chamaeleonidae (21,829) from 29 different species (again, some were only identified to genus level). All exports of geckos and chameleons were from wild-sources. Exports of live reptiles remained relatively stable between 2006 and 2014 (annual average 4,343) but rose to 8,699 in 2015.

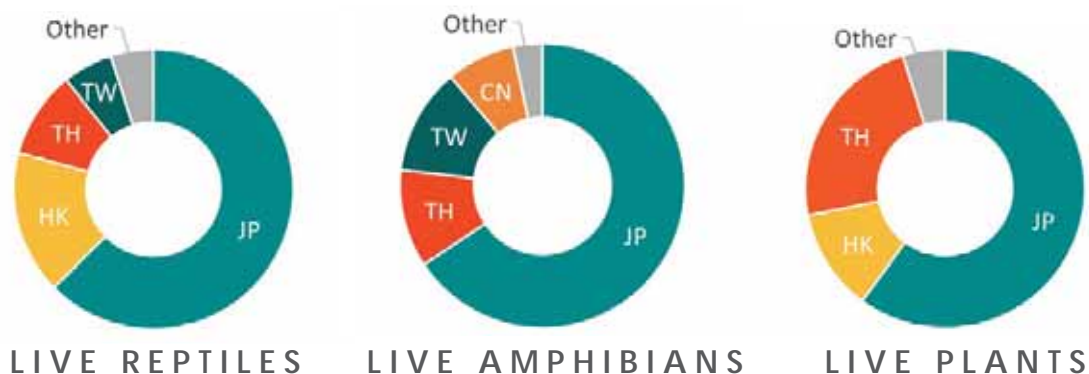
All exports of live amphibians (22,888) from Madagascar were also from wild-sources and all species belonged to two endemic genera: *Mantella* and *Scaphiophryne* of which the Madagascan Poison Frog *M. baroni* was the most commonly exported (5,211). The largest importer of amphibians was Japan (15,030).

Importers of live CITES-listed species from Madagascar

Trade was reported with seven different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Indonesia
- Japan
- Republic of Korea
- Taiwan (PoC)
- Thailand

Japan was the largest importer of all live individuals (67,762) followed by Thailand (16,651). Many of Japan's imports of live individuals were reptiles (29,915), of which the Panther Chameleon was the most frequent (4,495). Japan was the only importer of skins, of which all were from Nile Crocodile *Crocodylus niloticus*. Exports of Nile Crocodiles were suspended between 2010 and 2014 due to concerns about the management of ranching operations.



Trade in plants from Madagascar to Asia

Exports of plants from Madagascar were mainly of seeds (54,107), live specimens (37,962), and one export of 36,000 kg of Appendix-III listed Violet Rosewood *Dalbergia louvelii* that went to China in 2012. It is not clear how this was permitted as Madagascar had banned the export of rosewoods in 2010, even for pre-Convention specimens such as this one. In 2013 populations of rosewoods *Dalbergia* spp. and ebonies *Diospyros* spp. from Madagascar were listed in Appendix II of CITES. In addition to the listing, Madagascar proposed a zero quota for both genera in 2013 however, due to failure to implement CITES listings a trade suspension was established until Madagascar is able to strengthen control and enforcement measures for both legal and illegal trade of these timber species (CITES, 2017c).

Madagascar was found to be the largest exporter of seeds of all African countries to Asia: all exports of seeds were from wild sources and the most commonly exported were of *Pachypodium* spp. (52,000). Similarly, Madagascar was the biggest exporter of wild-sourced live plants (24,676) from Africa to Asia between 2006 and 2015. Thailand was found to be the largest importer for seeds (54,812) and China was the only importer of logs from Madagascar (36,000 kg).

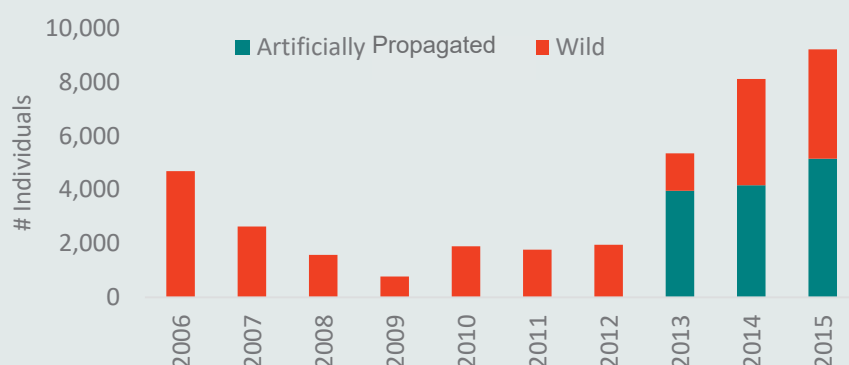


Figure 62

Exports of live plants from Madagascar to Asia reported as artificially propagated (source code A) and wild (W) (reported as number of individuals, 2006–2015)

Exports of artificially propagated plants increased from 14 in 2008 to a peak of 5,151 in 2015. Between 2008 and 2015 a total of 91 different live plant taxa (including some reported at the genus level) were exported from Madagascar from artificially propagated sources. The most commonly exported was *Pachypodium brevicaule* (3,881): the majority of which were imported by Japan (1,667).

An underwater photograph showing a vibrant coral reef in Mozambique. The scene is filled with various species of fish swimming in clear, blue water. The coral reef is visible in the lower half of the image, with diverse structures and colors. The overall atmosphere is serene and natural.

COUNTRY PROFILE:

MOZAMBIQUE

Coral reef in Mozambique

COUNTRY TRADE PROFILE: MOZAMBIQUE

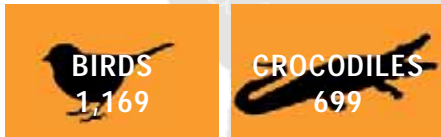
A summary of exports of CITES-listed species from Mozambique to East and Southeast Asia between 2006–2015

Mozambique was a significant exporter of Nile Crocodile skins: most of which were from ranched animals and imported into Singapore. Mozambique only exported live specimens across two classes: reptiles and birds, the most commonly exported live specimens being Leopard Tortoise.

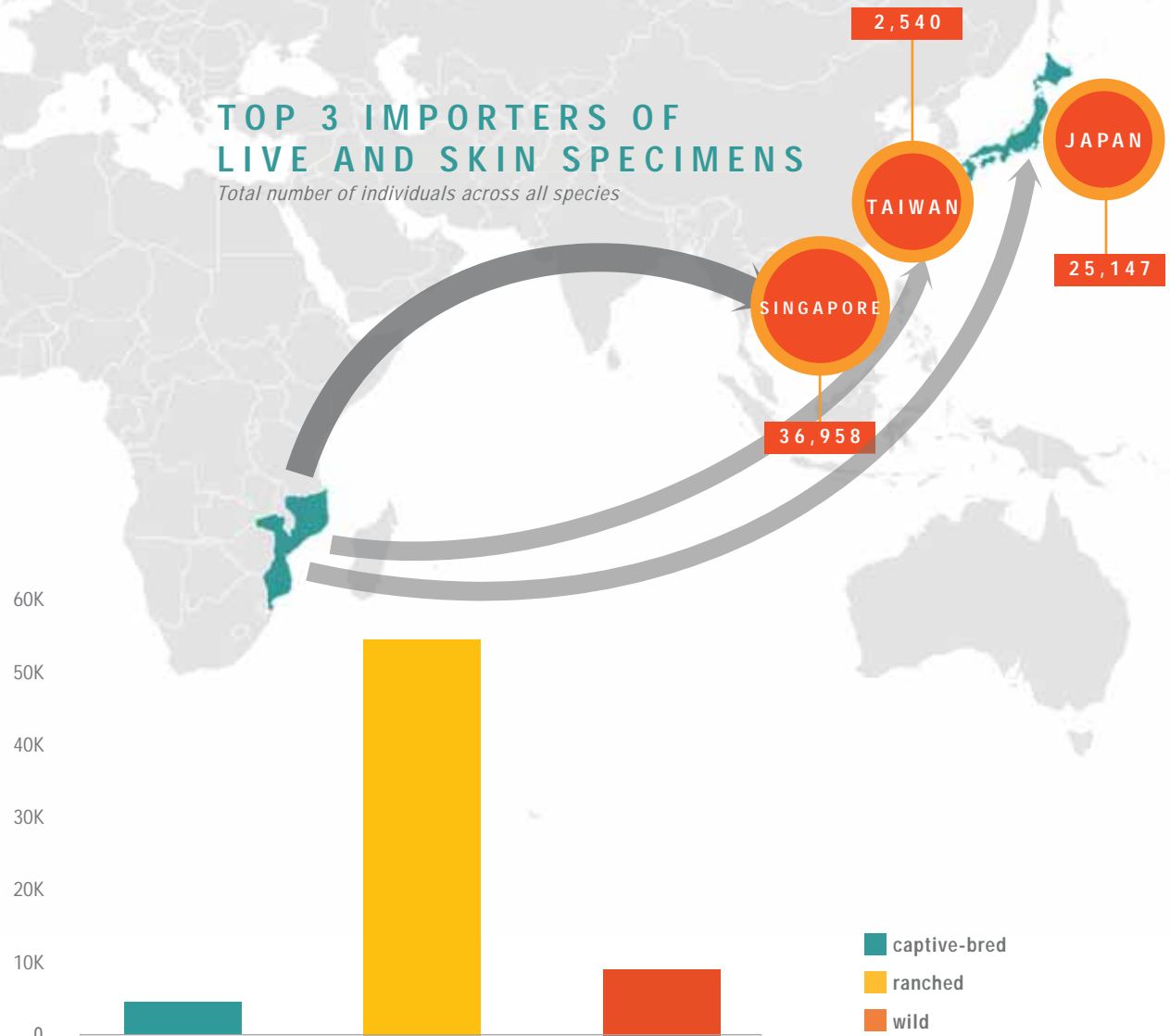
TOP 3 IMPORTERS OF LIVE AND SKIN SPECIMENS

Total number of individuals across all species

LIVE SPECIMENS



OTHER SPECIMENS



SOURCE OF LIVE AND SKIN SPECIMENS 2006–2015



Flap-necked Chameleon *Chamaeleo dilepis*

80,961
individuals of CITES-listed species were exported to Asia from Mozambique

Trade from Mozambique to Asia

Mozambique joined CITES in 1981. Between 2006 and 2015, a **total of 80,691 individuals of CITES-listed species were exported from Mozambique** most of which were skins (56,197), followed by live specimens (12,087). The only skins to be exported from Mozambique were from the Nile Crocodile *Crocodylus niloticus*.

The most commonly exported live species was the Leopard Tortoise *Stigmochelys pardalis* (1,962), followed by the Rock Monitor *Varanus albigularis* (1,722). Live individuals were either reptiles (10,918) or birds, all from the family Psittaciformes (1,169). Most live individuals were from the wild (7,147); the species that was sourced from the wild in the greatest quantity was the Flap-necked Chameleon *Chamaeleo dilepis* (1,195).

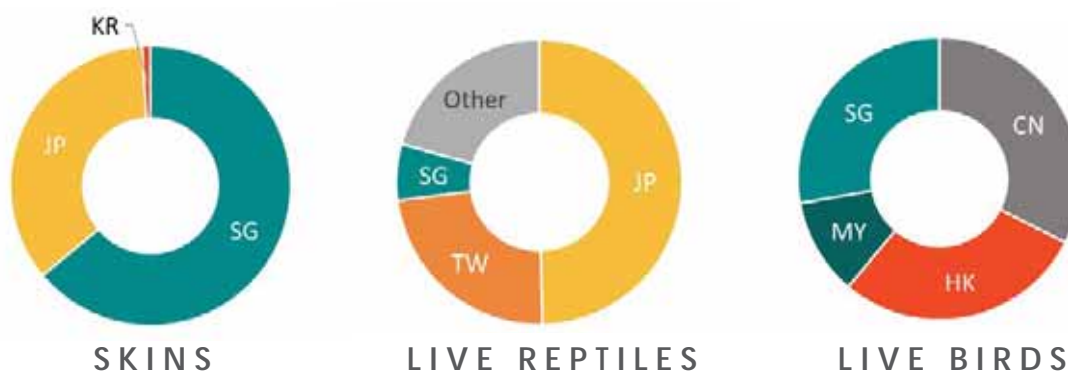
Additional exports from Mozambique included skin pieces, most of which were from the Nile Crocodile (7,250). Exports of raw corals were from three taxa: *Scleractinia* spp. (1,500), *Seriatopora caliendrum* (300) and *Seriatopora hystrix* (100): all were from the wild and imported by Hong Kong SAR. There are currently trade suspensions in place for Mozambique including exports of Common Hippopotamus *Hippopotamus amphibious*, Mozambique Girdled Lizard *Cordylus mossambicus* and the East African Spiny-tailed Lizard *Cordylus tropidosternum*.

Importers of CITES-listed species from Mozambique

Trade was reported with nine different East and Southeast Asian importers:

- mainland China
- Hong Kong SAR
- Indonesia
- Japan
- Malaysia
- Republic of Korea
- Singapore
- Taiwan (PoC)
- Thailand

Three countries imported Nile Crocodile skins from Mozambique: Singapore (35,934), Japan (19,725) and Republic of Korea (538). China was the largest importer of live birds (380), followed by Hong Kong SAR (335). The most commonly imported live bird was the Grey Parrot *Psittacus erithacus* (895), most of which were imported by Singapore (310). Japan was the largest importer of live reptiles (5,422), followed by Taiwan (PoC) (2,540).



Crocodile skins from Mozambique to Asia

The populations of Nile Crocodile present in Mozambique are included in CITES Appendix II and are subject to an export quota of 1,800 wild animals a year. This quota was set in 2008 and has not been exceeded in any year. Analysis of CITES trade data between 2006 and 2015 from Africa to Asia shows that Mozambique was the 5th largest exporter of Nile Crocodile skins (56,197). Most skins were from ranched animals (53,901), followed by wild (1,976).

The largest export of wild Nile Crocodile skins from Mozambique occurred in 2011 when 1,575 skins were imported by Singapore. Most skins exported were for the purpose of commercial trade (47,511), the remainder were collected for hunting trophies (8,686).

Singapore was the only importer of skin pieces from Mozambique (7,520), the majority of which were from ranched crocodiles (7,050).

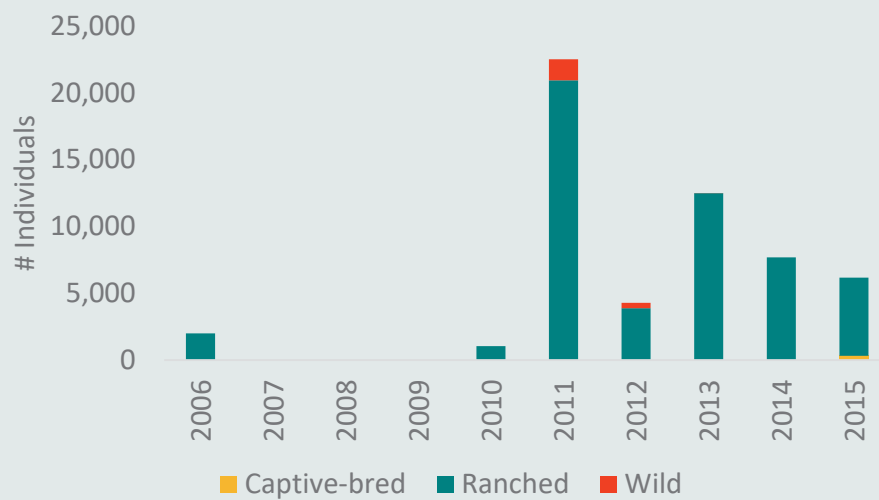


Figure 63

Exports of Nile Crocodile skins from Mozambique to Asia reported as captive-bred (source code C), ranched (R) and wild (W) (reported as number of individuals, 2006–2015)



Nile Crocodiles *Crocodylus niloticus*

A large colony of Cape Fur Seals is gathered on a rocky beach. The seals are of various shades of brown and black, some resting on the sand and others on the rocks. In the background, the ocean is a vibrant blue, with a large, white-capped wave breaking. The scene is bright and sunny, suggesting a clear day.

COUNTRY PROFILE:

NAMIBIA

A colony of Cape Fur Seals *Arctocephalus pusillus* in Namibia

COUNTRY TRADE PROFILE: NAMIBIA

A summary of exports of CITES-listed species from Namibia to East and Southeast Asia between 2006–2015

Namibia was a significant exporter of skins, oil and genitalia sourced from the Cape Fur Seal to Asia. All exports of African Elephant ivory and tusks from Namibia were imported by China and Japan, most of which followed the "one-off" sale.

SKINS



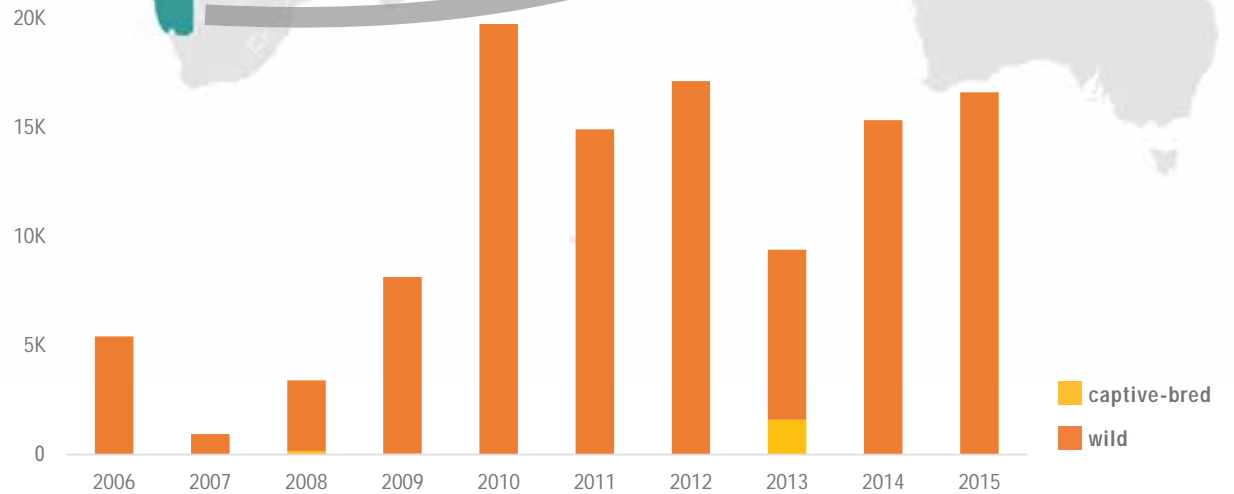
OTHER SPECIMENS

SEAL OIL
23,850 kg
32,142 LITRES

IVORY AND TUSKS
15,008 kg

TOP 3 IMPORTERS OF SKIN SPECIMENS

Total number across all species



SOURCE OF SKIN SPECIMENS 2006–2015



Hartmann's Mountain Zebra *Equus zebra hartmannae*

432,551
individual CITES-listed specimens were exported to Asia from Namibia

Trade from Namibia to Asia

Namibia joined CITES in 1990. Between 2006 and 2015 a total of 432,551 individual CITES-listed specimens were exported from Namibia to Asia, as well an additional 39,910 kg and 32,142 litres. Exports from Namibia encompassed a total of 11 species and two subspecies. Most trade in individuals was in the form of skins (111,189) across seven taxa. Most exports in kilogrammes included oil (23,850 kg), tusks (11,255 kg), ivory pieces (3,753 kg) and genitalia (3,050 kg).

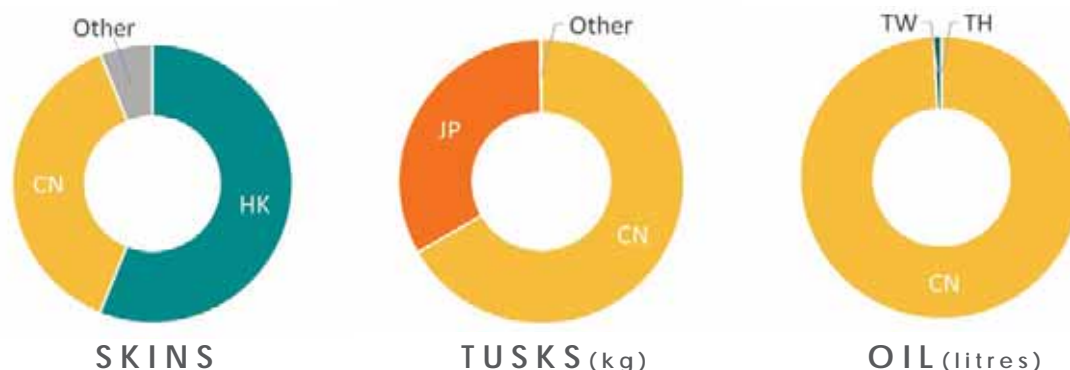
The most common species exported as skins was Cape Fur Seal *Arctocephalus pusillus* (108,272) followed by Nile Crocodile *Crocodylus niloticus* (1,602) and Hartmann's Mountain Zebra *Equus zebra hartmannae* (1,245). All Nile Crocodile skins and 200 Hartmann's Mountain Zebra skins were from captive-bred animals, the remainder of skins were from wild sources.

Exports of elephant ivory from Namibia included tusks (11,255 kg plus 38 tusks) and ivory pieces (3,753 kg): all from wild-sources. Most of the exports took place as a result of the "one-off" sale that permitted Namibia to export 9,210 kg of government-owned raw ivory. Exports in the form of extracts included two species: Cape Fur Seals (302,012) and the Kalahari Cactus *Hoodia gordonii* (60), but as no unit was given it is not known exactly what these refer to.

Importers of CITES-listed species from Namibia

Trade in all commodities was reported with 15 different East and Southeast Asian countries/territories.

Hong Kong SAR was the largest importer of Cape Fur Seal skins (62,417) followed by mainland China (40,843). Only two countries imported Nile Crocodile skins: Republic of Korea (800) and the Democratic Republic of Korea (800). China was the largest importer of tusks exported as kilogrammes (7,502 kg) and individuals (27) and Japan was the only importer of ivory pieces (3,753 kg). Trade in oil derived from Cape Fur Seals was dominated by China importing in both kilogrammes (23,850) and litres (31,640).



Trade in Cape Fur Seals from Namibia to Asia

The Cape Fur Seal was listed in CITES Appendix II in 1977. The commercial harvest of Cape Fur Seals was banned in South Africa from 1990 but the government does grant permits to hunt seals from specific colonies (Seal Conservation Society, 2011). Namibia continues to issue hunting permits under the Marine Resources Act of 2000 (Campbell *et al.*, 2011).

Between 2006 and 2015 the Cape Fur Seal was exported to Asia under 15 different commodity types. The most commonly exported commodity type for Cape Fur Seals was skins (108,272), which were imported by seven East and Southeast Asian countries/territories. Since 2007 exports into Asia increased, peaking in 2010 at 19,726. The most dominant trade is Cape Fur Seal skins, although there is substantial trade in other products derived from seals and it has been reported that the most profitable part of the seal is the genitalia which are supplied to the aphrodisiac market (Kirkman, 2006).

China and Hong Kong SAR dominated the market for Cape Fur Seals and were the only importers of genitalia of which Hong Kong SAR was found to import the most both in terms of kilogrammes (2,470 kg) and individuals (5,001). Only three Asian countries imported oil of which China was the largest, having imported a total of 23,850 kg and 31,640 l of oil between 2008 and 2013 (no oil was reported in 2014 and 2015).

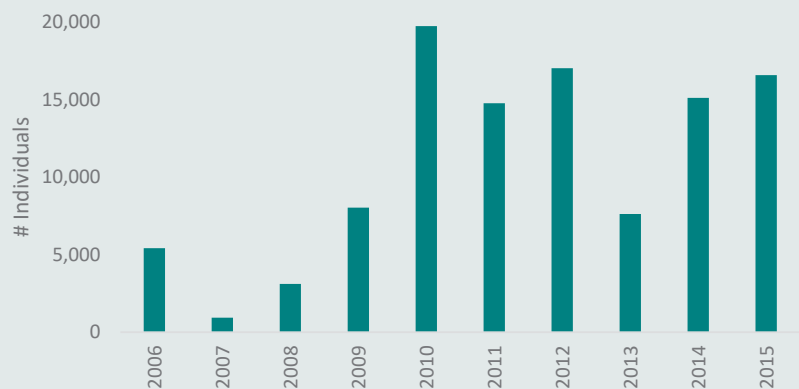


Figure 64

Exports of Cape Fur Seal skins from Namibia to Asia reported as wild (source code W) (reported as number of individuals, 2006–2015)



Cape Fur Seals *Arctocephalus pusillus*



COUNTRY PROFILE:

SOUTH AFRICA

Grey Parrot *Psittacus erithacus* for sale at market

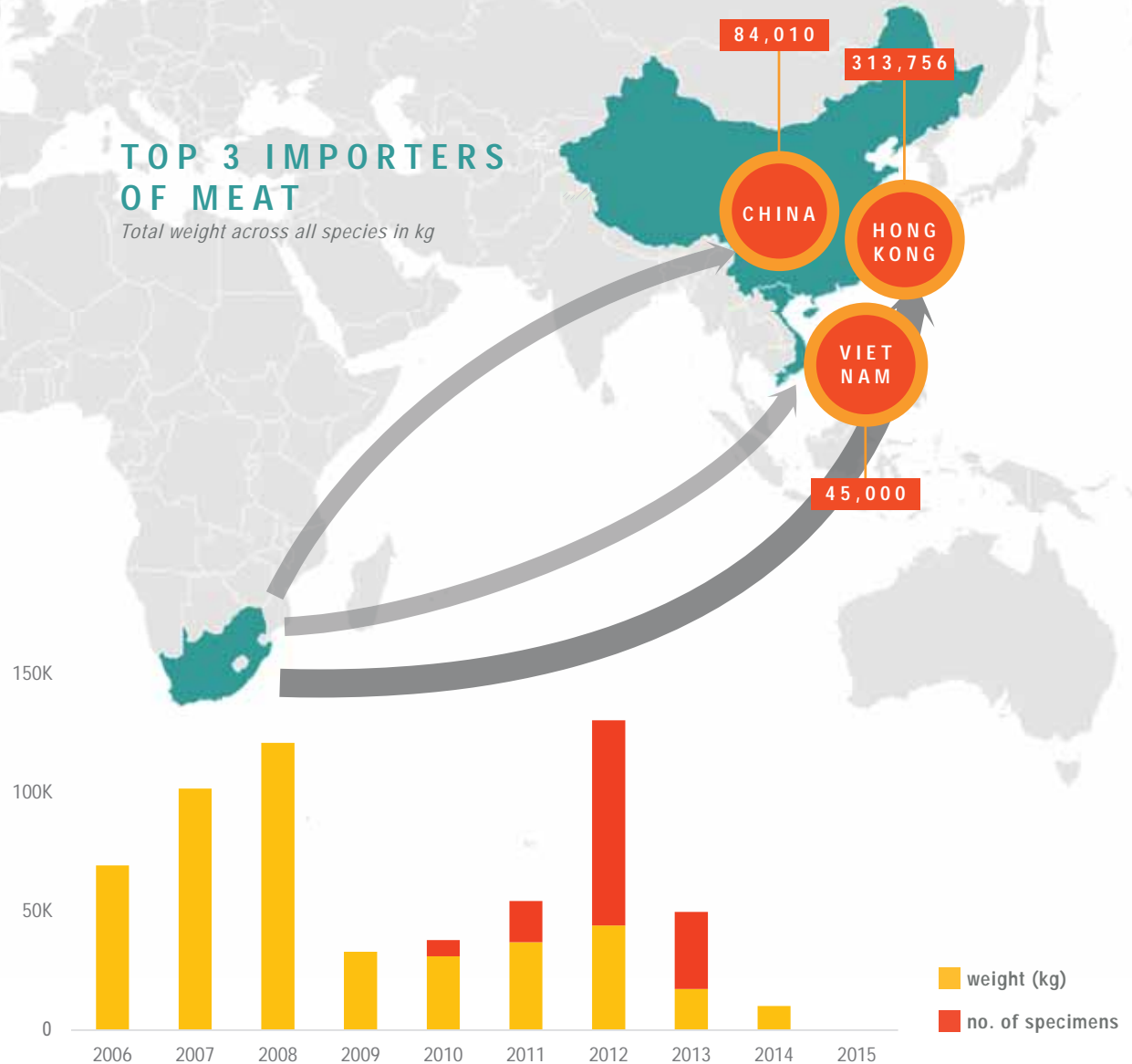
COUNTRY TRADE PROFILE: SOUTH AFRICA

A summary of exports of CITES-listed species from South Africa to East and Southeast Asia between 2006–2015

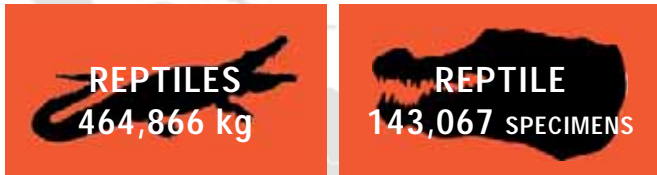
South Africa was the largest African exporter of live CITES-listed specimens to Asia: most of which were live birds from captive-bred sources. South Africa was also a significant exporter of meat from Nile Crocodile, all of which were captive-bred and mainly destined for Hong Kong SAR.

TOP 3 IMPORTERS OF MEAT

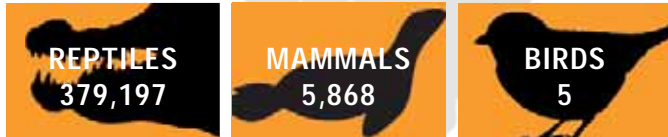
Total weight across all species in kg



MEAT



SKINS



LIVE SPECIMENS



VOLUME OF MEAT EXPORTED 2006–2015



1,121,660
individual CITES-listed specimens were exported to Asia from South Africa

Grey Parrots *Psittacus erithacus* and other birds on display in Singapore

Trade from South Africa to Asia

South Africa joined CITES in 1975. Between 2006 and 2015 a total of **1,121,660 CITES-listed individual specimens were exported from South Africa to Asia, in addition to 1,125,820 reported in kilogrammes and a variety of wildlife reported in other units such as back skins and square feet.** The commodity exported in the greatest amount was meat, which was exported both in kilogrammes (464,866 kg) and individuals (143,067). All meat was from captive-bred Nile Crocodile *Crocodylus niloticus*.

Exports of skins were reported under a variety of different units: the most commonly exported was Nile Crocodile skins reported as individuals (379,169) most of which were from captive-bred crocodiles (366,695). Cape Fur Seal *Arctocephalus pusillus* (2,992) and African Elephant *Loxodonta africana* (2,533) skins were also exported in notable quantities.

Between 2006 and 2015 South Africa was the largest exporter of live individuals to Asia (301,010), the most commonly exported species was the Grey Parrot *Psittacus erithacus* (40,635) followed by the Sun Parakeet *Aratinga solstitialis* (35,201): neither of which are native to South Africa. Most exports of live individuals were captive-bred birds (220,284), followed by artificially propagated plants (35,577).

Importers of CITES-listed species from South Africa

Trade was reported with 16 different East and Southeast Asian countries/territories. Hong Kong SAR was found to dominate the market for meat reported in both kilogrammes (313,756 kg) and individuals (131,012).

The largest importer of skins reported as individuals was the Republic of Korea (118,810), most of which were Nile Crocodile (115,771). Japan was the second largest (98,571), and similarly, most were from Nile Crocodile (98,547). Indonesia was the largest importer of live individuals (64,931) the most commonly imported species being Fischer’s Lovebird *Agapornis fischeri* (22,690). Malaysia (62,270) was the second largest importer of live individuals: Grey Parrot (19,710) was the species imported in the highest quantity.



Captive-breeding of live birds in South Africa

South Africa was the largest exporter of live individuals between 2006 and 2015 to Asia (301,010) most of which were birds (231,413). Between 2006 and 2015 the number of live birds exported from South Africa increased gradually with a peak in 2013 (53,325). Exports of numerous species were much lower in 2014 and 2015 than previous years, causing a decrease in overall exports. Malaysia was the largest importer of birds (60,918), followed by Indonesia (56,522) and Singapore (48,462).

Nearly all exports of birds were reported as captive-bred (220,284). South Africa has a well-established captive-breeding industry that covers a diverse range of species, both native and non-native. The top ten most commonly exported bird species from South Africa were all non-native species (163,560 individuals in total), many originating from South America. These included the Grey Parrot, native to Equatorial Africa, Sun Parakeet, native to north-eastern South America and Fischer's Lovebird, endemic to north-central Tanzania (IUCN Red List, 2017).

Between 2006 and 2015, South Africa was the largest exporter of Grey Parrots to Asia (40,635). This species was uplisted to Appendix I at CoP17, meaning all facilities breeding for export will need to register with CITES in order to continue to export commercial specimens. At the time of writing, 25 had registered, out of over 1,630 (CITES, 2017d).



Between 2006 and 2015, South Africa exported 273 Black-capped Lory *Lorius lory*. Due to concerns about legal acquisition of parental stock and ability to breed in captivity, non-native Black-capped Lory from South Africa were included in the new CITES review of trade in animal specimens reported as produced in captivity.

231,413
CITES-listed birds were exported to Asia from South Africa

220,284
of these exports were captive-bred specimens

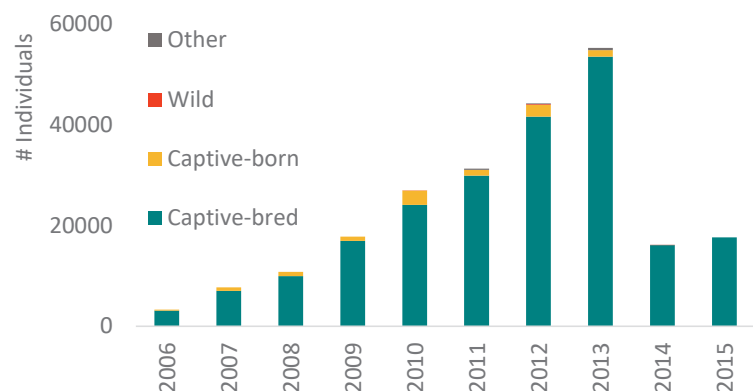


Figure 65

Exports of live birds from South Africa to Asia (reported as number of individuals, 2006–2015)



Common Hippopotamus *Hippopotamus amphibius*

APPENDIX 2 IMPLEMENTATION OF CITES BY PARTIES

2.1 Submission of Annual Reports

Around 80% of African Parties had submitted their annual trade reports for 2010 to 2014 as of October 2017, although this number decreased to 69% for 2015 and 22% for 2016 (the deadline for 2016 was 31st October 2017 and therefore had not yet passed) (Figure 66). A small number of Parties reported no trade for some years, although in certain cases there is importer trade in the CITES Trade Database for those years, which may be a result of exports taking place at the end of a year and therefore not being imported until the following year.

On average, Asian Parties had a higher submission rate between 2010 and 2015 (96%), although this decreased to 13% for 2016 (Figure 67). The full breakdown of submission of annual reports by Parties can be found in Appendix 5.

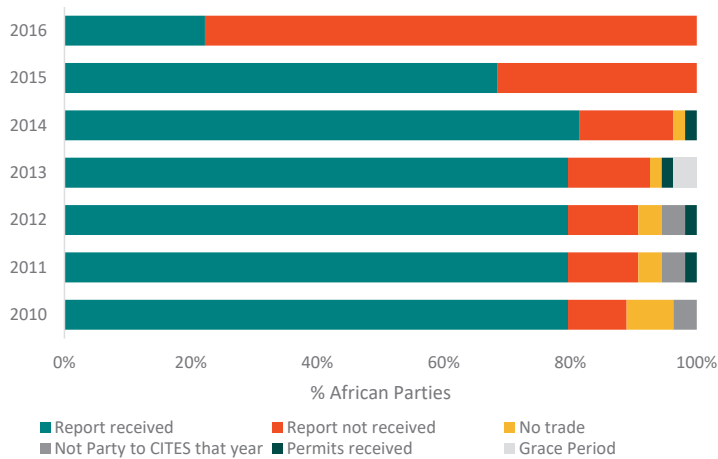


Figure 66

Status of Annual Report submission by African CITES Parties (as of September 2017)

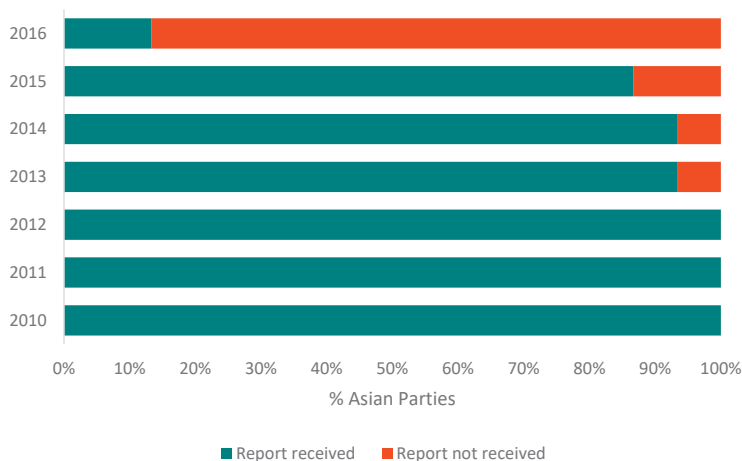


Figure 67

Status of Annual Report submission by Asian CITES Parties (as of September 2017)

2.2 Trade suspensions

Twenty African countries were subject to a recommendation to suspend trade (as of February 2018): five of these are subject to total suspensions of all commercial trade (Appendix 6). Some suspensions have been in place since the early 1990s, although most are from the last decade. Trade suspensions for African countries have resulted through a number of processes, commonly through the Review of Significant Trade (RST), although most of the total suspensions have occurred due to issues surrounding national legislation.

2.3 Examples of species-specific actions through CITES

A wide range of species-specific CITES Resolutions, Decisions and processes affect African Parties, a small selection are given below to illustrate this:

CITES National Ivory Action Plans (NIAPs)

At the 66th Standing Committee (SC66) in 2016, the CITES Secretariat was asked to identify Parties of “primary concern”, “secondary concern” and “importance to watch”, based on an analysis of the Monitoring of Illegal Killing of Elephants (MIKE) and the Elephant Trade Information System (ETIS) reports prepared for CoP17. The table in Appendix 7 includes those Parties that were categorised at CoP17 into the three classes. This represents a change in circumstance for some countries since CoP16 in 2013: DRC, Egypt and Mozambique had all been transferred from “secondary concern” to “importance to watch”, while Malawi, Togo, Singapore and South Africa were not included in any category at CoP16, but were at CoP17. Philippines and Thailand have moved from “primary concern” to “importance to watch”, while Cambodia has been moved up from “importance to watch” to “secondary concern”.

NIAPs are designed to be a practical tool for countries categorised in any of the three classes to strengthen their controls of the trade in ivory and ivory markets and help address illegal trade in ivory. Each NIAP outlines the urgent measures that the country commits to deliver, as well as a timeframe and implementation milestones. These measures can be legislative, or enforcement/public awareness actions in nature.

Regarding countries of primary concern, at SC66, Kenya was commended for substantially achieving its NIAP, while Uganda and Tanzania were requested to enhance their efforts to progress implementation. Countries presented an update on implementation of NIAPs at SC69 in 2017.



Hammerhead Sharks *Sphyrna lewini*

Sharks and rays

Of the approximately 400 species of sharks in the world, 12 are currently listed in Appendix II of CITES along with all manta and devil rays. Since CoP16 in 2013, much work has been done to implement these listings which represent unique challenges regarding ensuring legality and sustainability, particularly through an EU-funded CITES project on “Strengthening capacity in developing countries for sustainable wildlife management and enhanced implementation of CITES wildlife trade regulations, with particular focus on commercially exploited aquatic species.”

As part of this collaborative work, FAO and CITES have been able to identify and prioritise countries to receive assistance from the EU-CITES project for implementing the CITES listings, which included a number of African countries as high priority/focal countries: DRC, Gambia, Ghana, Guinea, Liberia, Mauritania, Namibia, Nigeria, Senegal, South Africa, and South Sudan (CITES, 2017a). These were selected based on criteria related to size of shark harvest and trade, occurrence of listed species in their waters, and their level of socio-economic development. Capacity building activities have subsequently taken place in some of these countries. As mentioned above, there is very little shark or ray data reported from Africa to Asia in the period 2006 to 2015 (fins totalling 180 kg plus 679 presumed individuals, and an additional 87 specimens), as listings from CoP16 only entered into effect in late 2014.



Tortoises

According to CITES trade data, a number of African countries are significant exporters of species of tortoises. A number of Decisions on tortoises were adopted at CoP17 which impact African exporters. For example, the CITES Secretariat is working with Madagascar and other stakeholders to provide urgent assistance to combat illegal collection and trade in the Ploughshare Tortoise *Astrochelys yniphora*, most likely in the form of deploying a Wildlife Incident Support Team to support Madagascar in gathering information and intelligence, and strengthening law enforcement (CITES, 2017b). Madagascar is also a member of the CITES Tortoise and Freshwater Turtles Task Force and attended a meeting, where the development took place of recommendations that include a revision of *Resolution Conference 11.9* on Conservation of and Trade in Tortoises and Freshwater Turtles to clarify its remit to all Parties and species, not just Asian.

APPENDIX 3 SOURCE CODES

3.1 Source codes used for this analysis

A	Plants that are artificially propagated in accordance with <i>Resolution Conference 11.11</i> (Rev. CoP17), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention (specimens of species included in Appendix I that have been propagated artificially for non-commercial purposes and specimens of species included in Appendices II and III).
C	Animals bred in captivity in accordance with <i>Resolution Conference 10.16</i> (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention.
D	Appendix-I animals bred in captivity for commercial purposes in operations included in the Secretariat's Register, in accordance with <i>Resolution Conference 12.10</i> (Rev. CoP15), and Appendix-I plants artificially propagated for commercial purposes, as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 4, of the Convention.
F	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of "bred in captivity" in <i>Resolution Conference 10.16</i> (Rev.), as well as parts and derivatives thereof.
O	Pre-Convention specimens.
R	Ranched specimens: specimens of animals reared in a controlled environment, taken as eggs or juveniles from the wild, where they would otherwise have had a very low probability of surviving to adulthood.
U	Source unknown.
W	Specimens taken from the wild.
Blank	No source code reported.

APPENDIX 4 PURPOSE CODES

4.1 Purpose codes used for this analysis

B	Breeding in captivity or artificial propagation
E	Educational
G	Botanical garden
H	Hunting trophy
L	Law enforcement / judicial / forensic
M	Medical (including biomedical research)
N	Reintroduction or introduction into the wild
Q	Circus or travelling exhibition
S	Scientific
T	Commercial
Z	Zoo

APPENDIX 5 ANNUAL REPORT SUBMISSIONS BY PARTIES

5.1 Submission of Annual Reports to CITES (as of September 2017)

Africa

PARTY	2010	2011	2012	2013	2014	2015	2016
Algeria	Y	Y	Y	Y	Y	Y	
Angola	*	*	*	X			
Benin	Y	Y	Y	Y	Y	Y	
Botswana	Y	Y	Y	Y	Y		
Burkina Faso	Y	Y	Y	Y			
Burundi	N	Y		Y	N	Y	
Cameroon		Y		Y	Y	Y	Y
Cape Verde	Y	Y	Y	Y	Y	Y	Y
Central African Republic	Y	Y	Y	Y	Y	Y	
Chad	Y	Y	Y				
Comoros	Y	Y	Y	Y	Y	Y	
Congo	Y	Y	Y	Y	Y	Y	Y
Côte d'Ivoire		G	G	G	G	Y	Y
Democratic Republic of the Congo	Y	Y	Y	Y	Y	Y	Y
Djibouti	Y	Y	Y				
Egypt	Y	Y	Y	Y	Y		
Equatorial Guinea	N	N	N				
Eritrea	N	N	N				
Ethiopia	Y	Y			Y	Y	Y
Gabon	Y		Y	Y	Y	Y	
Gambia	Y	Y	Y		Y	Y	
Ghana	Y	Y	Y	Y	Y	Y	
Guinea	Y			y	Y		Y
Guinea-Bissau	Y	Y	Y	Y	Y	Y	
Kenya	Y	Y	Y	Y	Y	Y	
Lesotho			Y	Y	Y	Y	Y

Liberia	Y	Y	Y	Y	Y	Y	
Libya	Y	Y	Y	Y	Y	Y	
Madagascar	Y	Y	Y	Y	Y	Y	Y
Malawi	Y	Y	Y	Y	Y	Y	
Mali	Y	Y	Y	Y	Y		
Mauritania	Y			y	Y		
Mauritius	Y	Y	Y	Y	Y		
Morocco	Y	Y	Y	Y		Y	
Mozambique	Y	Y	Y	Y	Y	Y	
Namibia	Y	Y	Y	Y	Y	Y	
Niger	Y	Y	Y	Y	Y	Y	
Nigeria			Y	N	Y	Y	Y
Rwanda	Y	Y	Y	Y	Y		
São Tomé and Príncipe	N	Y	Y	Y	Y	Y	
Senegal	Y		Y	Y	Y	Y	
Seychelles	Y	Y	Y	Y	Y	Y	Y
Sierra Leone	Y	Y	Y	Y	Y	Y	
Somalia	Y	Y	Y	Y	Y		
South Africa	Y	Y	Y	Y	Y	Y	
Sudan	Y	Y	Y	Y	Y		
Swaziland	Y	Y	Y	Y	Y	Y	
Togo	Y	Y	Y	Y	Y	Y	
Tunisia		Y		y	Y	Y	Y
Uganda	Y	Y	Y	Y	Y		
Tanzania	Y	Y	Y	Y	Y	Y	
Zambia	Y	Y	Y		Y	Y	
Zimbabwe	Y	Y	Y	Y	Y	Y	

Asia

PARTY	2010	2011	2012	2013	2014	2015	2016
Brunei Darussalam	Y	Y	Y				
Cambodia	Y	Y	Y	Y	Y		
China	Y	Y	Y	Y	Y	Y	
Hong Kong SAR	Y	Y	Y	Y	Y	Y	
Indonesia	Y	Y	Y	Y	Y	Y	

Japan	Y	Y	Y	Y	Y	Y	
Lao PDR	Y	Y	Y	Y	Y	Y	Y
Macau	Y	Y	Y	Y	Y	Y	
Malaysia	Y	Y	Y	Y	Y	Y	
Myanmar	Y	Y	Y	Y	Y	Y	Y
Philippines	Y	Y	Y	Y	Y	Y	
Rep. Korea	Y	Y	Y	Y	Y	Y	
Singapore	Y	Y	Y	Y	Y	Y	
Thailand	Y	Y	Y	Y	Y	Y	
Viet Nam	Y	Y	Y	Y	Y	Y	

* = State not party to CITES in year indicated

Blank = no report received

G = permits received

N = report received but no trade

Y = report received

X = grace period of the first year in which the Convention entered into force or report not to be expected

APPENDIX 6 CURRENT TRADE SUSPENSIONS FOR PARTIES

6.1 Trade Suspensions Currently in Place (as of February 2018)

Africa

COUNTRY	SCOPE	BASIS	VALID FROM	NOTIFICATION
Benin	<i>Pandinus imperator</i> <i>Chamaeleo gracilis</i> <i>Chamaeleo senegalensis</i> <i>Kinixys homeana</i>	Significant Trade	2nd May 2013 3rd February 2016 3rd February 2016 3rd February 2016	No. 2016/018 (15/03/2016)
Cameroon	<i>Triceros quadricornis</i>	Significant Trade	3rd February 2016	No. 2016/018 (15/03/2016)
Côte d'Ivoire	<i>Pericopsis elata</i>	Significant Trade	7th September 2012	No. 2016/018 (15/03/2016)
Democratic Republic of the Congo	<i>Pocephalus robustus</i> <i>Stigmochelys pardalis</i> <i>Psittacus erithacus</i>	Significant Trade Compliance and enforcement - Article XIII	9th July 2001 15th January 2016	No. 2016/018 (15/03/2016) No. 2016/021 (16/03/2016)
Djibouti	All commercial trade	National legislation	30th April 2004	No. 2011/010 (19/01/2011)

Equatorial Guinea	<i>Prunus africana</i> <i>Trioceros feae</i>	Significant Trade	3 February 2009 7th September 2012	No. 2016/018 (15/03/2016)
Ghana	<i>Pandinus imperator</i> <i>Chamaeleo gracilis</i> <i>Chamaeleo senegalensis</i>	Significant Trade	12th August 2014 3rd February 2016 3rd February 2016	No. 2016/018 (15/03/2016)
Guinea	<i>Balearica pavonina</i>	Significant Trade	2nd May 2013	No. 2016/018 (15/03/2016)
	<i>Hippocampus algiricus</i>	Compliance and enforcement	3rd February 2016	No. 2013/017 (16/05/2013)
Liberia	All commercial trade	National legislation	15th March 2016	No. 2016/030 (23/03/2016)
Madagascar	<i>Coracopsis vasa</i> <i>Furcifer labordi</i> <i>Phelsuma borai</i> , <i>P. breviceps</i> , <i>P. gouldi</i> and <i>P. standingi</i>	Significant Trade	20th January 1995	No. 2016/018 (15/03/2016)
	<i>Dalbergia</i> . spp and <i>Diospyros</i> . spp (Population from Madagascar)	Species action plan	15 January 2016	No. 2017/047 (27/06/2017)
Mali	<i>Poicephalus robustus</i>	Significant Trade	9th July 2001	No. 2016/018 (15/03/2016)
	<i>Uromastix dispar</i>		22nd August 2008	
Mauritania	All commercial trade	National legislation	30th July 2004	No. 2004/055 (30/07/2004)
Mozambique	<i>Cordylus mossambicus</i>	Significant Trade	7th September 2012	No. 2016/018 (15/03/2016)
	<i>Cordylus tropidosternum</i>		10th August 2001	
	Cycadaceae, Stangeriaceae and Zamiaceae		6th December 2006	
Niger	<i>Chamaeleo africanus</i>	Significant Trade	7th September 2012	No. 2016/018 (15/03/2016)
Senegal	<i>Hippocampus algiricus</i>	Significant Trade	3rd February 2016	No. 2016/018 (15/03/2016)
Somalia	All commercial trade	National legislation	30th July 2004	No. 2004/055 (30/07/2004)
South Sudan	<i>Balearica pavonina</i>	Significant Trade	2nd May 2013	No. 2016/018 (15/03/2016)
Sudan	<i>Balearica pavonina</i>	Significant Trade	2nd May 2013	No. 2016/018 (15/03/2016)
Togo	<i>Poicephalus robustus</i>	Significant Trade	9th July 2001	No. 2016/018 (15/03/2016)
	<i>Pandinus imperator</i>		2nd May 2013	
Tanzania	<i>Agapornis fischeri</i> <i>Malacochersus tornieri</i> * <i>Prunus africana</i> <i>Kinyongia fischeri</i> <i>Kinyongia tavetana</i> <i>Balearica regulorum</i>	Significant Trade	20th April 1993 / 30th June 1998* 3rd February 2009 3rd February 2016 3rd February 2016 2nd May 2013	No. 2016/018 (15/03/2016)

* This suspension does not apply to specimens of this species produced from ranching or captive-breeding operations, for which the annual export quota has to be agreed between the Management Authority and the Secretariat.

Asia

COUNTRY	SCOPE	BASIS	VALID FROM	NOTIFICATION
Lao PDR	<i>Macaca fascicularis</i> <i>Ptyas mucosus</i> <i>Python reticulatus</i> <i>Naja spp.</i> (= <i>N. atra</i> , <i>N. kaouthia</i> , <i>N. siamensis</i>) <i>Cuora galbinifrons</i> <i>Heosemys annandalii</i> <i>Heosemys grandis</i> <i>Dendrobium nobile</i>	Significant Trade	3rd February 2016 3rd February 2016 3rd February 2016 30th April 2004 27th July 2009 7th September 2012 7th September 2012 3rd February 2016	No. 2016/018 (15/03/2016)
	<i>Dalbergia cochinchinensis</i>	Compliance and enforcement - Article XIII	23rd September 2016	No. 2017/012 (01/02/2017)
Viet Nam	<i>Hippocampus kuda</i>	Significant trade	3rd February 2016	No. 2016/018 (15/03/2016)

APPENDIX 7 PARTIES INCLUDED IN THE NATIONAL IVORY ACTION PLAN PROCESS

7.1 Parties identified as being of primary¹⁰ or secondary¹¹ concern , or of importance to watch¹³ (at CoP17)

PARTIES OF "PRIMARY CONCERN"	PARTIES OF "SECONDARY CONCERN"	PARTIES OF "IMPORTANCE TO WATCH"
China and Hong Kong SAR	<u>Cambodia</u>	Angola
Kenya	Cameroon	<i>Democratic Republic of the Congo</i>
Malawi	Congo	<i>Egypt</i>
Malaysia	Ethiopia	Japan*
Singapore*	Gabon	Lao PDR
Tanzania	Nigeria	<i>Mozambique</i>
Togo	South Africa*	<i>Philippines</i>
Uganda	<i>Thailand</i>	
Viet Nam		

*not currently participating in National Ivory Action Plan Process

Bold = new country added at COP17.

Italic = Moved to lower category

Underlined = Moved to higher category

¹⁰ The identification as Party of "primary concern" with regard to a country's major role as source, transit or destination country of illegally traded ivory is based on ETIS analyses submitted to each meeting of the Conference of the Parties

¹¹ The identification as Party of "secondary concern" with regard to a country's important role as source, transit or destination country of illegally traded ivory is based on ETIS analyses submitted to each meeting of the Conference of the Parties

¹² The identification as Party of "importance to watch" is based on ETIS analyses submitted to each meeting of the Conference of the Parties and is done in order to raise attention and track existing and emerging developments which could potentially become problematic in terms of sources, trade routes or markets in future iterations of the ETIS analysis.

BIBLIOGRAPHY

- African Union. (2015). *African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa*. http://pfb-cbfp.org/news_en/items/Africa-wildlife.html?file=docs/news/Janv-Fev%202016/African%20Strategy%20Strategy%20Africaine%20AU.pdf. Accessed: 24/01/2018.
- Anderson, A. & Gibson, L. (2017). Missing teeth: Discordances in the trade of Hippo ivory between Africa and Hong Kong. *African Journal of Ecology*. 2017:00:1–9.
- Baker, P. J., Kabigumila, J., Leuteritz, T., Hofmeyr, M. & Ngwava, J. M. (2015). *Stigmochelys pardalis*. The IUCN Red List of Threatened Species 2015. <http://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T163449A1009442.en>.
- Campbell, R., Knowles, T. & O'Connor, S. (2011). *The economics of seal hunting and seal watching in Namibia: a report for Humane Society International, World Society for the Protection of Animals, Bont Voor Dieren (NL) and Respect for Animals (UK)*. Economists at Large, Melbourne, Australia.
- Chase, M. J., Schlossberg, S., Griffin, C. R., Bouche, P. J. C., Djene, S. W., Elkan, P. W., Ferreira, S., Grossman, F., Kohi, E. M., Landen, K., Omondi, P., Peltier, A., Selier, S. A. J & Sutcliffe, R. (2016). Continent-wide survey reveals massive decline in African savannah elephants. *PeerJ*. <https://doi.org/10.7717/peerj.2354>.
- Chupez, T. J. (2010). *Critical study of guidance for national Prunus africana management plan – Cameroon*. International Tropical Timber Organization, Africa.
- CITES. (2006a). *Psittacus erithacus*. AC22 Doc 10.2 Annex 1.
- CITES. (2006b). *Uromastix dispar*. AC22 Doc. 10.2 Annex 6c.
- CITES. (2015). Harvesting and trade in *Prunus africana*. PC22 Doc. 13.
- CITES. (2008). Ivory Auctions raise 15 million USD for elephant conservation. https://cites.org/eng/news/pr/2008/081107_ivory.shtml. Accessed on: 04/10/2017.
- CITES. (2017a). Sharks and manta rays. <https://www.cites.org/eng/prog/shark>.
- CITES. (2017b). Tortoises and Freshwater Turtles (Testudines Spp.): Report of the Secretariat. SC69 Doc. 64.
- CITES. (2017c). Recommendation to suspend commercial trade in specimens of the species *Dalbergia spp.* and *Diospyros spp.* from Madagascar. Notification No. 2017/047.
- CITES. (2017d). Implementation of the Convention Relating to Captive-Bred and Ranched Specimens: Report of the Secretariat. SC69 Doc. 32.
- Cunningham, A., Anoncho, V. F. & Sunderland, T. C. H. (2016). Power, policy and the *Prunus africana* bark trade, 1972–2015. *Journal of Ethnopharmacology* 178:323–333.

- Daley, J. (2016). Botswana unexpectedly reverses course on ivory trade: The southern African nation now supports protection for the animals instead of limited sales of ivory. <https://www.smithsonianmag.com/smart-news/botswana-makes-dramatic-unexpected-urn-ivory-trade-180960684/> Accessed on: 17/10/2017
- FAO. (2015). Global teak trade in the aftermath of Myanmar's log export ban by Kollert, W. & Walotek, P. J. *Planted Forests and Trees Working Paper FP/49/E*. Rome, Italy. Available at: <http://www.fao.org/forestry/plantedforests/67508@170537/en/>
- Fisher, A. (2016). Fighting the Underground Trade in Hippo teeth. <https://news.nationalgeographic.com/2016/12/wildlife-watch-hippo-teeth-trafficking-uganda/> Accessed on: 07/11/2017.
- Gorzula, S., Nsiah, W. O. & Oduro, W. (1997). *Survey of the status and management of the Royal Python (Python regius) in Ghana*. European Commission.
- IMF. (2016). *The Regional Economic Outlook: Sub-Saharan Africa Multispeed Growth*. IMF, Washington.
- Ingram, V., Loo, J., Vinceti, B., Dawson, I., Muchgi, A., Duminil, J., Awono, A., Asaah, E., & Tchoundjeu, Z. (2015). *Ensuring the future of the pygeum tree (Prunus africana): Briefing on Prunus africana cultivation and harvesting*. LEI Wageningen UR. Pp1-8.
- IUCN Red List. (2017). <http://www.iucnredlist.org/> Accessed on: 19/10/2017.
- Kirkman, S.P. (2006). *Warfare to welfare: southern Africa's dynamic seal-human interface*. International Fund for Animal Welfare, Cape Town, South Africa.
- Kollert, W. & Kleine, M. (2017). *The Global Teak Study: Analysis, Evaluation and Future Potential of Teak Resources*. IUFRO World Series, Vienna. 36:1–108.
- Lyons, J.A., Jenkins, R.W.G and Natusch, D.J.D. (2017). *Guidance for Inspection of Captive Breeding and Ranching Facilities*. CITES Secretariat, Gland, Switzerland.
- Martin, E. & Milliken, T. (2005). *No Oasis: the Egyptian Ivory Trade 2005*. TRAFFIC Online Report Series. 10. TRAFFIC International, Cambridge, UK.
- Martin, E. & Vigne, L. (2011). Illegal Ivory Sales in Egypt. *TRAFFIC Bulletin* 23(3):17–122. TRAFFIC International, Cambridge, UK.
- Nijman, V. (2017). *North Africa as a source for European eel following the 2010 EU CITES trade ban*. *Marine Policy* 85:133–137.
- Nowell, K. (2014). An Assessment of Conservation Impacts of Legal and Illegal Trade in Cheetahs *Acinonyx Jubatus*. Report to the 27th Meeting of The Cites Animals Committee. <https://www.cites.org/sites/default/files/eng/com/ac/27/E-AC27-18.pdf>.
- Poole, C. M. & Shepherd, C. R. (2016). Shades of grey: the legal trade in CITES-listed birds in Singapore, notably the globally threatened African grey parrot *Psittacus erithacus*. *Oryx* 51(3):411–417.

- Schmelzer, G.H. & Gurib-Fakim, A. (eds). (2008). *Plant Resources of Tropical Africa 11(1)- Medicinal plants 1*. PROTA Foundation, Wageningen, Netherlands / Backhuys Publishers, Leiden, Netherlands / CTA, Wageningen, Netherlands. 791pp.
- Seal Conservation Society. (2011). South African and Australian Fur Seals. <http://www.pinnipeds.org/seal-information/species-information-pages/sea-lions-and-fur-seals/south-african-fur-seal> Accessed on: 20/10/2017.
- Segniagbeto, G. H. (2016). *Study of four species of fauna subject to international trade in Togo*. Ministry of the Environment and Forest Resources. SC67 Doc. 15 Annex 3.
- Sindaco, R., Wilms, T. M. & Venchi, A. (2012). On the distribution of *Uromastyx alfredschmidti* Wilms and Böhme, 2000 (Squamata: Agamidae: Uromastycinae). *Acta Herpetologica* 7(1):23–28.
- Stiles, D., Redmond, I., Cress, D., Nellermann, C., & Formo, R. (2013). *Stolen Apes – The Illicit Trade in Chimpanzees, Gorillas, Bonobos and Orangutans. A Rapid Response Assessment*. United Nations Environment Programme, GRID-Arendal.
- Toudonou, C. A. S. (2015). *CITES: Species trade and conservation: Snake trade and conservation management (Serpentes spp.). An assessment of the impact of the pet trade on five CITES-Appendix II case studies*. AC28 Doc14.1.
- TRAFFIC. (2013). *Inspection Manual for use in Commercial Reptile Breeding Facilities in Southeast Asia*. Report prepared by TRAFFIC. Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Geneva, Switzerland. 81pp.
- United Nations Environment Programme World Conservation Monitoring Centre. (2008). *Review of Prunus africana from Cameroon*. UNEP World Conservation Monitoring Centre, Cambridge, UK.
- United Nation's Department of Economic and Social Affairs Statistics Division. (2018). *Methodology – Standard country or area codes for statistical use (M49)*. <https://unstats.un.org/unsd/methodology/m49/> Accessed on 24/01/2018.
- Utermohlen, M. & Baine, P. (2017). *Flying Under the Radar – Wildlife Trafficking in the Air Transport Sector*. ROUTES Partnership.
- The World Bank. (2017). *Population growth (annual %)* <https://data.worldbank.org/indicator/SP.POP.GRON>.

IMAGE CREDITS

PAGE

Cover	© Zoe Bowden / WWF
ii	© Martin Harvey / WWF
vi	© Association of Southeast Asian Nations
1	© Josh More / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
2	© Alpha / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
3	© Meredith Kohut / WWF-US
6	© Martin Harvey / WWF
7	© Marco Schmidt - Own work, CC BY-SA 2.5, httpscommons.wikimedia.orgwindex.phpcurid=1843764
8	© Martin Harvey / WWF
9	© Martin Harvey / WWF
10	© Josh More / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
11	© Karine Aigner / WWF-US
12	© Paolo GALLO MODENA / WWF-Italy
14	© Ola Jennersten / WWF-Sweden
18	© Brian Gratwicke / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
21	© TRAFFIC
22	© Salchuiwt / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
23	© Martin Harvey / WWF
24	© D. Coetzee / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
29	© John E. Newby / WWF
31	© Danny Perez / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
35	© A. Walmsley / TRAFFIC
36	© Martin Harvey / WWF
39	© Clockwise from top: © Erling Svensen / WFE, © Rudolf Svenson / WFE, © David Curnick
42	© Dr. Nasser Halaweh / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
44	© WWF / Folke Wulf
45	© Erling Svensen / WWF
48	© Josh More / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
50	© Vicki Crook / TRAFFIC
52	© Brent Stirton / Getty Images / WWF-UK
55	<i>Clockwise from top left:</i> © Bernard Dupont, B. Dupont, B. Dupont, Richard Ross/California Academy of Sciences, Jenny Evans / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
56	© TRAFFIC
58	© David Stanley / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/
60	© Michel Terrettaz / WWF
62	© Martin Harvey / WWF
64	© Monja Lelli / WWF
66	© Jenny Evans / Creative Commons 2.0 https://creativecommons.org/licenses/by-nc-nd/2.0/

- 68 © Richard Mortel / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 71 *Clockwise from top left:* © The Reptilium, Lalithamba, Bernard Dupont, Steve Smith / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 72 © Alex Butler / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 74 © David Lawson / WWF-UK
- 76 © Elias Levy / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 78 © Thaths / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 80 © John Brandauer / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 82 © Josh More / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 84 © Josh More / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 86 © Martin Harvey / WWF
- 89 *Clockwise from top left:* © Parrotplay, Hartmut Jungius / WWF, Sandra Mbanefo Obiagio, Josh More, callocephalon / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 90 © Hartmut Jungius / WWF
- 92 © Rob / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 94 © A. Walmsley / TRAFFIC
- 96 © Carolyn / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 97 © A. Walmsley / TRAFFIC
- 98 © Serene Chng / TRAFFIC
- 100 © FAO/FLEGT / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 102 © Thierry Bodson / WWF
- 104 © FAO/FLEGT / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 106 © WWF / Folke
- 109 © Jardín Botánico Nacional, Viña del Mar, Chile / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 110 *Clockwise from top left:* © Bernard Dupont x3, Heribert Bechen, Rod Waddington, Heribert Bechen, Michelle Bender, Parrotplay
- 111 © R.Isotti, A.Cambone / Homo Ambiens / WWF
- 114 © Martin Harvey / WWF
- 116 © Martin Harvey / WWF
- 118 © Shutterstock / Hedrus / WWF-Sweden
- 119 (top) © Jamie Cotten / IFAW / WWF-US (bottom) © Martin Harvey / WWF
- 120 © Julien Noel Rakotoarisoa / MEEF
- 122 © R.Isotti, A.Cambone / Homo Ambiens WWF
- 124 © WWF-US / James Morgan
- 126 © Bernard DUPONT / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 127 © Martin Harvey / WWF
- 128 © Helen Morf / WWF
- 130 © Heribert Bechen / Creative Commons 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>
- 131 © Martin Harvey / WWF
- 132 © Michel Gunther / WWF
- 134 © James Eaton
- 135 © Jess Lee / WRS
- 136 © Martin Harvey / WWF
- 138 © Daniel Versteeg / WWF
- 139 © Martin Harvey / WWF
- 151 © Martin Harvey / WWF



TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organisation working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

For further information contact:
TRAFFIC International
David Attenborough Building
Pembroke Street
Cambridge CB2 3QZ
UK

Telephone: +44 (0)1223 277427
E-mail: traffic@traffic.org
Website: www.traffic.org

*UK Registered Charity No. 1076722,
Registered Limited Company No. 3785518.*