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REPORT

OCTOBER 2018

WILDLIFE TRADE IN BELGIUM

An analysis of CITES trade and seizure data

Louisa Musing, Magdalena Norwisz, Jane Kloda and Katalin Kecse-Nagy

TRAFFIC AND WWF REPORT

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Flaming Poison-arrow frog *Oophaga pumilio*.
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WILDLIFE TRADE IN BELGIUM

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Flaming Poison-arrow frog *Oophaga pumilio*

TRAFFIC
the wildlife trade monitoring network

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OUR FINDINGS AT A GLANCE: LEGAL TRADE

Unless otherwise stated these figures concern the survey period of 2007–2016.

83%

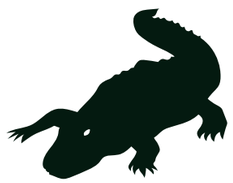
of all re-exports of reptile meat reported by EU Member States were reported by Belgium

68,129 m³

of sawn wood, predominantly *Pericopsis elata*, was imported by Belgium, making it 1 of 5 EU importers

757,695 kg

of Nile Crocodile meat was imported by Belgium



87%

Belgium's share of the EU's total imports of reptile commodities, reported by weight

149,320 kg

of eel meat was imported by Belgium

3,215

Hippo products were imported into Belgium

14,415

live frogs were imported into Belgium

OUR FINDINGS AT A GLANCE: ILLEGAL TRADE

Unless otherwise stated these figures concern the survey period of 2007–2016.

69%

involved species of fauna

31%

involved species of flora

1,264

seizure records were reported

52%

of seizure records were intercepted at airports

28%

of seizure records were intercepted at mail centres

216

seizure records of ivory involving 4,318 specimens of tusks, carvings and pieces

218

seizure records involved reptile bodies, parts and derivatives

66

seizure records of live reptile involving 1,241 live specimens seized internally within Belgium

1,424

leather products seized made from species of Crocodylia spp. and Serpentes spp.

69

seizure records involving 99 live birds

19,370

individual specimens of seahorses, and an additional 80 kg of dried seahorses from 65 seizures

177

seizure records of plant medicinals, mainly imported from the USA

204

seizure records of medicinals, involving 59 155 specimens. 87% of seizures involved plant medicinals

3,615

ivory items were seized in transit through Belgium from Africa to Asia

EXECUTIVE SUMMARY

Common Seahorse *Hippocampus kuda*

EXECUTIVE SUMMARY

The European Union (EU) plays an important role in the international legal and illegal wildlife trade. It is a major destination market and trade hub for wildlife and their commodities, including species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Sina *et al.* 2016). In 2014, EU imports of CITES-listed animal and animal products (excluding caviar extract) were estimated at EUR 641 million, while EU (re-)exported the value of approximately EUR 1.1 billion (UNEP-WCMC, 2016). For CITES-listed plants, the EU was responsible for importing an estimated EUR 261 million and (re-)exporting EUR 91 million (UNEP-WCMC, 2016). Estimating the value of the EU's involvement in illegal trade is challenging due to its clandestine nature, however it continues to be of significant concern within the EU and resulted in the adoption of the EU Action Plan against Wildlife Trafficking, 2016–2020 (EC, 2016a).

Belgium is a key EU transport hub of goods; Brussels Airport is amongst the top 15 busiest airports in the EU in terms of commercial flights, and Antwerp is ranked second highest amongst all EU Member States in terms of tonnes of shipments unloaded and loaded in the EU's seaports. Busy transport hubs provide opportunities for both legal and illicit wildlife trade to occur. Previous analyses of illegal trade data have identified Belgium as an important destination and transit point of CITES-listed species, particularly from Africa to Asia, with elephant ivory and reptiles amongst the main commodities in trade. This report provides an assessment of the current state of Belgium's legal and illegal wildlife trade for the period 2007 to 2016 to provide insight into the key commodities in trade, prevailing trends and main trading partners involved.

Data were extracted from four different sources: trade data reported under CITES on import and (re-)export of all wildlife commodities from Belgium between 2007 and 2016 (i.e. "legal trade"); European Union Trade in Wildlife Information eXchange (EU-TWIX) seizure data as reported by Belgium during the same time period; US seizure data implicating Belgium, also derived from the CITES Trade Database; and TRAFFIC's global seizure database containing seizure information from open sources. Furthermore, available literature was reviewed to provide context.

CITES trade data (2007–2016) indicated Belgium as the top EU importer of reptile commodities within the EU, as reported by weight, with trade dominated by imports of reptile meat for the domestic EU market. Belgium was responsible for importing 787,251 kg of reptile meat, predominantly of *Crocodylus niloticus* coming from Zimbabwe, with the importance of this commodity in trade increasing over this ten-year period. However, based on the available data, it is unclear if the imported meat is consumed in Belgium or traded on within the EU to other Member States, due to the EU single market and free movement of goods. Belgium was also the second largest importer of plant products, including timber, as reported by volume, within the EU in 2007-2016, with trade dominated by sawn wood products. Reported CITES trade indicated that significant quantities of plants with known medicinal properties were imported into Belgium between 2007 and 2016, including the import of 213,919 kg of wild-sourced African Cherry *Prunus africana* bark. Trade was also dominated by imports of sawn wood, as reported by volume, from wild-sourced *Pericopsis elata*, a tree with high commercial value as hardwood, from Cameroon and Democratic Republic of the Congo (DRC). These imports indicate Belgium's key role in the timber trade. Yet, according to illegal trade data between 2007 and 2016, seizures of timber were rare in Belgium. Due to Belgium's position within the EU and the country being home to one of the EU's major sea ports, this disparity highlights the need for Belgium to ensure it is not being used as an illegal trade hub for protected timber species.

Belgium has also been involved in trading other wildlife commodities, such as sturgeon caviar, plants and their products, amphibians and hippo carvings.

While much of wildlife trade is legal, seizure analysis reveals that wildlife is also illicitly traded, and that Belgium is a major intermediary in the illegal transport of CITES-listed commodities such as plant-derived medicinal products, ivory, seahorse bodies and reptiles. The data suggest that these commodities in transit through Belgium are mainly coming from West and Central Africa, going to China and are being shipped through air transport and postal systems.

Key recommendations of the report include:

- **Permits:** The CITES Management Authority is encouraged to increase investigations of export and re-export permits from third countries to ensure the legality of shipments entering Belgium, particularly for timber imports, in accordance with Commission Regulation (EC) No 865/2006, as amended on 15th January 2015, to ensure continued robustness of the legal import process;
- **Training:** Regular training should be provided to Customs officers, particularly at points of entry into Belgium, and to all other enforcement staff dealing with CITES, such as relevant police officers. This should be based on best practices from other EU Member States that are also being used as hubs for illicit wildlife trade;
- **Controls at Antwerp seaport:** Targeted controls of CITES-listed timber imports at Antwerp sea port would need to be increased. Special attention should be paid to timber products coming from the African continent, particularly the DRC and Cameroon;
- **National co-operation:** Co-operation, co-ordination and communication between enforcement and prosecution staff at all relevant institutional and policy levels should be given a higher priority in Belgium to strengthen their operational work by assuring, inter alia, sufficient technical, financial and capacity;
- **Market and consumer demand surveys:** CITES Management and Enforcement Authorities, Research Institutes, non-governmental organisations and other relevant stakeholders to conduct market and consumer demand surveys to understand trade dynamics in certain species and commodities, and consider running campaigns to raise awareness. Initiatives to change consumer behaviour should also be developed further where needed. Key priorities should be to understand better the demand for reptile meat in the domestic market, and to conduct online and physical market surveys on the pet trade for live birds, reptiles and frogs, and conduct assessments and follow-up actions on the bushmeat trade. These surveys should be used as an opportunity to determine whether Belgium is being used as a transit point for other EU countries;
- **Awareness:** The Belgian CITES Management and Enforcement Authorities, non-governmental organisations and other relevant stakeholders should raise awareness to tourists regarding rules for purchasing and consuming products containing CITES-listed species and their transportation across borders. Collaboration with tour operators and airlines are recommended to disseminate such information.

African Elephant *Loxodonta africana*

INTRODUCTION AND CONTEXT

Common Tortoise *Testudo graeca*

1 INTRODUCTION

While sustainable and legal trade can benefit both conservation of species and support livelihoods, over-exploitation for unsustainable or illegal trade threatens many species.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aims to regulate the international trade in wildlife and covers approximately 35,000 species of wild animals and plants (CITES, 2018a). Currently, there are 183 Parties to the Convention, including all EU Member States and the European Union (EU). The European single market which allows the free movement of goods within the EU means that CITES is regulated uniformly in all EU Member States through a set of Regulations. These Regulations are known as the EU Wildlife Trade Regulations and include Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein, Commission Regulation (EC) No 865/2006 (as amended) laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97.

The EU plays an important role in the international legal and illegal wildlife trade and is known to be a major destination market and trade hub for wildlife and and commodities thereof (Sina *et al*. 2016; EC, 2016a). According to the latest financial valuation of the EU's legal trade which was conducted in 2014, the EU's imports of CITES-listed animal and animal products (excluding caviar extract*) was estimated at approximately EUR 641 million, with (re-)exports amounting to more than double the value, totalling approximately EUR 1.1 billion. For plants, the EU imported the value of EUR 261 million and exported a value of EUR 91 million (UNEP-WCMC, 2016). While quantifying the value of the EU's involvement in illegal trade is challenging due to its clandestine nature, it continues to be of significant concern within the EU (EC, 2016a). In February 2016, the European Commission adopted a European "Action plan against wildlife trafficking 2016-2020", to demonstrate political commitment to improve enforcement of relevant legislation, enhance co-operation and to take measures to prevent illegal wildlife trade (EC, 2016b).

EU WILDLIFE TRADE

(UNEP-WCMC, 2016)

EUR 641 million
estimated value of legal EU imports of CITES-listed animals (/products) (excl. caviar extract) in 2014

EUR 261 million
estimated value of legal EU imports of CITES-listed plants (/products) in 2014

EUR 1.1 billion
estimated value of EU exports in CITES-listed animals (/products) in 2014

Belgium's involvement in the EU's legal and illicit wildlife trade, particularly as a destination and transit point, is well documented (Knapp and Affre, 2007; Mundy-Taylor 2013; Sina *et al*. 2016). In 2007, Knapp and Affre analysed historical data between 1984 and 2006 on seizures of specimens listed in CITES and/or the EU Wildlife Trade Regulations implicating Belgium.

The analysis revealed that the main commodity reportedly seized was elephant ivory, with 71 of 405 seizure cases and 2,691 of 6,475 specimens reportedly involving ivory between 2000 and 2005 alone. Other species seized in significant quantities included reptiles, such as Nile Crocodile *Crocodylus*

** Caviar extracts are excluded from parts of the analysis due to their disproportionately high financial values (almost USD 23 billion [~ EUR 20 billion] combined) (UNEP-WCMC, 2016).*

niloticus, Red-eared slider *Trachemys scripta elegans* and Ball Python *Python regius*, with the most significant seizures occurring internally within Belgium. Analysis revealed that the Democratic Republic of the Congo (DRC) was the main country of origin of seizures carried out between 2000 and 2005, and China was the leading country of destination, with traders predominantly smuggling specimens in personal baggage, mail or freight.

Belgium is a key EU transport hub of goods that provide significant opportunity for both legal and illicit trade to occur, which includes wildlife. In 2015, 221,000 commercial air flights (including passengers, freight and mail) went through Brussels Airport ranking it among the top 15 busiest airports in the EU. These flights involved a total of 23.27 million air passengers and more than 483,000 tonnes (t) of cargo and mail, loaded and unloaded (EC, 2017a). In terms of tonnes of shipments unloaded and loaded in the EU's sea ports in 2015, Antwerp ranked second amongst all EU Member States, with more than 190 million tonnes reported. Belgium also has strong links with other EU Member States, with the country's sea ports receiving 44 million tonnes of goods from the EU in 2015, accounting for 34.7% of the total EU share. In the same year, Belgium also shipped 37 million tonnes to the EU (EC, 2017a). These trade and transport opportunities are known to be used by illegal traders with both Brussels airport and Antwerp seaport used as a major transit point in the movement of illegal wildlife such as skins, ivory and sea horses, from Africa to Asian countries including China, South Korea and Viet Nam (European Parliament, 2016; Sina *et al*. 2016).

Owing to Belgium's involvement in the EU's wildlife trade it is vital to better understand the dynamics of the trade. This report provides an assessment of the current state of Belgium's legal and illegal wildlife trade for the period 2007 to 2016 to provide insight into the key commodities in trade, prevailing trends and main trading partners involved.

2 METHODOLOGY

2.1 CITES legal trade data

2.1.1 General imports

CITES trade data were used to understand the legal trade of CITES-listed species implicating Belgium. The CITES trade database is managed by UN Environment World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat. Article VIII, paragraph 7, of CITES requires each Party to submit an annual report on CITES trade, containing a summary of information on, inter alia, the number and type of permits and certificates granted, the countries with which such trade occurred, the quantities and types of specimens, and the names of species as included in Appendices I, II and III. These reports are called the CITES Annual Reports. Parties are requested to submit their data for inclusion in the CITES trade database by 31st October each year following the year for which the report was due. Therefore, the most recent complete 10 year period to base this analysis on was 2007 to 2016.

Trade data implicating all 28 EU Member States were extracted on 8th February 2018 for the years 2007-2016, with 2016 being the most recent year for which relatively complete data were available at the time of writing. However, it should be noted that while all EU Member States have submitted their CITES Annual Reports, the full dataset as downloaded on 8th February 2018, including data reported by the (re-)exporter and the importer, may be incomplete as not all CITES Parties had submitted their 2016 reports by this time (CITES, last updated 29th January 2018).

Comparative tabulations to assess the import into and (re-)export out of Belgium were used. In the CITES trade database it is possible to make some distinction between a country's direct exports and their re-exports. In the "Origin" column, this is left blank if the country of export is the country of origin, however it can also be left blank if the country of origin is not reported. If a country has re-exported specimens, then the "Origin" column should be filled in (CITES, 2013). As it is not always possible to rely on the accuracy of the "Origin" column, this type of analysis is only conducted in Section 3.2 (CITES trade data analysis – (Re)-exports) to investigate whether Belgium may be acting as a processing or transit hub for CITES-listed species.

In the CITES trade database it is only possible to report the quantity of specimens traded in one unit, such as kilogrammes (kg), volume (m^3) or area (m^2). If no unit is shown in the database, the figure represents the total number of specimens. This method of reporting ensures there is no duplication in quantities traded in further data analysis. For this report, key units were processed and standardised for analysis; grammes were converted to kilogrammes (kg), centimetres (cm) to metres (m) and millilitres (ml) to litres. For Section 3.1 (CITES trade data analysis – Imports) the quantities are based on importer reported quantities, while Section 3.2 (CITES trade data analysis – (Re-)exports) is based on exporter reported quantities.

[1] https://trade.cites.org

[2] *For the purposes of this report, the current 28 EU Member States were considered as Member States, irrespective of when they joined the EU (for example, Croatia joined the EU in 2013). At the time of writing, the 28 EU Member States include the following countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Spain, Slovakia, Slovenia, Sweden and the United Kingdom.*

[3] https://www.cites.org/sites/default/files/annual_reports.pdf

The CITES trade database records information on the purpose of trade in specimens which include the following possible purpose codes:

- **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;
- **B** – Personal;
- **Q** – Circus or travelling exhibition;
- **S** – Scientific;
- **T** – Commercial;
- **Z** – Zoo.

The CITES trade database also records information on original source of the specimens being traded includes the following possible source codes:

- **A** – Plants that are artificially propagated in accordance with Resolution Conf. 11.11 (Rev. CoP15), 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 Resolution Conf. 10.16 (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 Resolution Conf. 12.10 (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 Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof;
- **I** – Confiscated or seized specimens;
- **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; and
- **X** – Specimens taken in "the marine environment not under the jurisdiction of any State".

Section 3.1 (CITES trade data analysis – Imports) and Section 3.2 (CITES trade data analysis – (Re)-exports) analyse legal trade data reported with all source codes excluding "I" (Confiscated or seized specimens), while Section 3.3 (Illegal trade data analysis) provides an overview of all US CITES seizure records reported with source code "I" to complement the seizure analyses of EU-TWIX data. Reporting seizures to the CITES trade database is not a formal requirement for Parties and therefore there is an incomplete dataset. However, each year, the USA submits detailed data on seizures as part of its CITES Annual Report and are therefore analysed in section 3.3 to provide insight into Belgium's involvement as a country of export of illegally traded commodities.

2.1.2 Imports

Section 3.1.1 (EU imports – overview) focuses on examining all trade into the EU to identify the most important commodities and Belgium's position within it. To help identify trade reported at lower levels for which Belgium is a key importer, several families for which Belgium was one of the top five EU importers were identified.

Section 3.1.1.3 (Taxonomic families for which Belgium is a top five EU importer) – All reported imports to the EU were divided into three categories, according to the reporting units used: kg, number of specimens (blank), and all other units. The top five importers (according to importer reported quantities) were then filtered to identify families for which Belgium was found to be one of the top five importing countries. Trade amounting to under 1000 units was excluded so that a more meaningful analysis could be developed focusing on the main families reported in trade.

2.1.3 (Re)exports

Section 3.2 (CITES trade data analysis – (Re-)exports) focuses on investigating whether Belgium acts as a processing hub for CITES-listed species, particularly for those families in which Belgium was identified as a top five EU importer.

Nile Crocodile *Crocodylus niloticus*

The databases used for our analysis

2.2 Seizure data

The illegal trade data analysis draws on data from three databases: EU-TWIX, CITES and TRAFFIC. At the time of download, the EU-TWIX database held the most complete dataset, therefore the analysis in Section 3.3 (Illegal trade data analysis) focuses primarily on these data, with US CITES seizure data used to provide further context, where applicable.

As the EU-TWIX database has been well established for many years and Belgium has played an active role in submitting seizure information to this database, the 174 seizures reported by Belgium to TRAFFIC's global seizure database were not analysed to avoid duplication, however some anecdotal information from these seizure records is included in Section 3.3 to provide further context. It is important to note that between 2007 and 2016, there were 14 records in the TRAFFIC database that were reported by other countries, including China, United Arab Emirates and Thailand, which implicated Belgium. These 14 records, which involved seizures of ivory and birds, are subsequently analysed in the respective commodity groups within Section 3.3.

The illegal trade data analysis begins by providing an overview of seizures reported to EU-TWIX and CITES, before analysing the main commodity groups reported to be illegal traded. For each commodity group, the number of seizure records and specimens, weight and/or volume are examined, followed by an analysis of the main species involved, trade routes and sources of the specimens.

2.2.1 EU-TWIX

Illegal trade data implicating Belgium were extracted from the EU-TWIX database on 19th March 2018 for the period 2007-2016, following authorisation received from the relevant authority. Top line analysis focused on the number of seizure records[4] which identified key commodity groups in trade. These commodity groups were then analysed in terms of number of specimens, weight and/or volume. Where the number of specimens and mass were simultaneously reported, both were considered in the analysis. If not stated otherwise, any listings in each of the sections are in order of importance, based on number of seizure records, number of specimens, weight and/or volume. Maps were created using TradeMapper[5], an interactive tool to visualise trade data, to illustrate key trade routes and the commodities involved.

[4] Each seizure record does not necessarily represent one distinct seizure. Instead, seizures involving several different taxa and commodity types are separated and treated as distinct "seizure records" in the EU-TWIX database. Therefore, the number of seizures is lower than the number of seizure records.
[5] https://trademapper.aptivate.org/

Officials inspect a shipment of dried shark fins at Brussels airport

Agencies who provide data to be uploaded to the EU-TWIX database may report the number of specimens/items seized as part of one seizure in different ways. The number of all specimens/items is mentioned in the "Count" column, for example five live tortoises or two tusks. Any information about mass or volume (regardless of the description code) is indicated in the "Mass" column, for example 2 kg of unworked ivory, 0.2 litres of medicinal liquid or 700 m^3 of timber. It is possible that both the number and the mass/volume of seized specimens/items were reported by law enforcement agencies.

However, it is important to highlight that the EU-TWIX database software used in the past to store EU-TWIX data in the past had certain limitations. It was not possible to leave the "Count" cell blank. For this reason, a "1" had to be added for cases where only the mass information had been provided by agencies, although the digit "1" might not reflect the actual non-reported number of specimens/items seized. In the current dataset, this was applicable for 67 seizure records.

Furthermore, authorities are not always able to provide complete datasets with regards to seizures. In the case of this dataset of seizures implicating Belgium, the following data were missing:

- Irregular reporting on source of the specimens;
- **For 56% of seizure records (711)**, the taxon involved was identified to the species level (the rest to a higher taxonomic level);
- **For 27% of seizure records (341)**, the type of transport was not reported or was reported as unknown; and
- **For 11% of seizure records (134)**, the method of concealment was not reported.

2.2.2 US CITES seizure database

US seizure data implicating Belgium between the years 2007–2016, as reported using source code "I", were extracted from the CITES trade database on 5th April 2018.

It should be noted that reporting seizures to the CITES trade database is not a formal requirement for Parties and therefore there is an incomplete dataset between 2007 and 2016. However, each year, the United States of America (USA) submits detailed data on seizures as part of its CITES Annual Report and therefore, this section of the analysis is able to provide insight into Belgium's involvement as a country of export to and transit point for legally traded commodities .

Top line analysis (Section 3.1.1.2 – US CITES seizures) focused on the number of seizure records which identified key commodity groups in trade. These commodity groups were then analysed based on number of specimens, weight and/or volume. Note that data are aggregated in the CITES trade database and therefore the number of records is merely a proxy for the number of seizure cases that occurred. Consequently, the number of seizure cases is likely to be higher than the number of seizure records. It is also important to note that the CITES trade database holds different information to EU-TWIX and therefore a direct comparison of data is not possible. For example, EU-TWIX holds information on mode of shipment, location and reason for seizures while the CITES trade database does not.

2.2.3 TRAFFIC's global seizure database

All seizure data implicating Belgium were extracted from TRAFFIC's global seizure database on 29th March 2018 for the period 2007–2016.

TRAFFIC's seizure database reflects TRAFFIC's work programme priorities which are focused on areas where illegal wildlife trade is most prevalent e.g. Africa, Asia and the Americas. TRAFFIC's data are therefore skewed and cannot be taken as being comprehensive for all countries and all species. However, they still add interesting contextual information.

Johnston's Chamelon *Chamaeleo johnstoni*

Tropical forest at the foot of Mount Cameroon

3 RESULTS

3.1 CITES legal trade data analysis – Imports

3.1.1 EU imports

Between the years of 2007 and 2016, the EU commercially imported approximately:

376 million
individual specimens

34 million
kg, as reported by weight

0.3 million m³
of commodities, as reported by volume

3.1.1.1 Overview

Number of specimens

Of the 376 million items that were imported into the EU between 2007 and 2016, the most important commodity groups in trade were **plants, reptiles, corals, invertebrates** (Medicinal Leech *Hirudo medicinalis*) and **mammals** (Table 1).

It is important to note that in October 2005, the EU adopted a temporary ban on imports of wild birds in response to the spread of avian influenza. This was then made permanent two years later, hence the absence of legal trade in wild-caught birds implicating Belgium between 2007 and 2016[6].

The largest share of EU imports of the number of specimens was reported by the Netherlands (68%), followed by Germany (15%) and France (7%). **Belgium was the 9th most important EU importer, accounting for 0.4 % of all EU imports.**

[6] http://europa.eu/rapid/press-release_IP-07-40_en.htm

TAXONOMIC GROUP	COMMODITY TYPE	QUANTITY	PERCENTAGE OF TOTAL (%)
Plants	Live	194,100,966	51.60%
	Roots	98,708,312	26.20%
Reptiles	Skins*	11,403,637	3.03%
	Small leather products	9,736,120	2.59%
	Live	3,009,691	0.80%
Corals	Live	4,873,005	1.29%
	Raw corals	925,661	0.25%
Invertebrates (all of which were Medicinal Leech *Hirudo medicinalis*)	Live	1,063,263	0.28%
	Derivatives	253,828	0.07%
	Medicine	243,057	0.06%
Mammals	Skins**	1,157,770	0.31%
Total for all other taxonomic groups		**51,006,011**	**13.50%**
Grand Total		**376,481,320**	**100.00%**

Table 1

The main taxonomic groups and commodity types imported by the EU between 2007 and 2016, reported as number of specimens, based on importer reported quantities.

** A further 520,433 reptile skins were reported with the unit "sides" and 2,320 as "backskins".*
*** Mammal skins were from a wide range of species. The top three were Bobcat* Lynx rufus *(327,816), Collared peccary* Pecari tajacu *(304,434) and South American gray fox* Lycalopex griseus *(233,858).*
Source: CITES trade database

Medicinal Leech *Hirudo medicinalis*

Weight

Of the approximately 34 million kg imported into the EU between 2007 and 2016, the most important commodities were **plant parts/derivatives** (such as bark, wax and roots), **corals, gastropod meat, fish and reptile meat** (Table 2).

The largest share of EU imports by weight (kg) was reported by France (36%), followed by Germany (22%) and Italy (15%). **Belgium was the 7th most important EU importer, accounting for 4% of all EU imports reported by weight (kg).**

TAXONOMIC GROUP	COMMODITY TYPE	QUANTITY	PERCENTAGE OF TOTAL (%)
Plants	Bark	7,129,272	21.0%
	Wax	4,934,399	14.5%
	Roots	4,303,426	12.7%
Corals	Raw corals	3,884,896	11.5%
	Live	703,195	2.1%
Gastropod	Meat**	3,431,018	10.1%
Fish	Bodies	1,886,510	5.6%
	Meat	440,459	1.3%
	Live	290,502	0.9%
	Caviar	228,258	0.7%
Reptiles	Meat	899,772	2.7%
Total for all other taxonomic groups		**5,782,246**	**17.0%**
Grand Total		**33,913,954**	**100.0%**

Table 2

The main commodity groups and types imported by the EU between 2007 and 2016, as reported by weight (kg), based on importer reported quantities.

** Mainly African Cherry* Prunus africana
***The only species was Queen Conch* Strombus gigas
Source: CITES trade database

Ramin is often used as the heartwood for incense

144,692 m³
of wood carvings
(carved wood products such as handicrafts and dowels)

109,261 m³
of sawn wood

127,202 m³
of veneer

Volume and area

EU imports by volume mainly comprised carvings (144,692 m^3) and sawn wood (109,261 m^3), while the main EU import reported by cubic metre was veneer (127,202 m^2).

The largest share of imports by volume was reported by Denmark (53%), all of which was reported as Ramin *Gonystylus bancanus* carvings. Uses of *G. bancanus* carvings vary from mouldings such as picture frames, and the heartwood is used for incense (Lim *et al.* 2004). Belgium was the 2nd most important EU importer, accounting for 25% of all commercial imports to the EU as reported by volume and area. This is principally due to large amounts of *P. elata* sawn wood imported by the country. Belgium reported 57% of all EU imports of sawn wood during 2007–2016, making it the largest importer of sawn wood in the EU. The third largest EU importer as reported by volume was Italy (8%), the majority of which were reported as sawn wood involving Ramin *Gonystylus* spp. and Afrormosia *Pericopsis elata*.

Spain, Italy, Germany and France were responsible for the EU imports of veneer as reported by area; 41%, 35%, 21% and 3% respectively. Belgium was not responsible for importing veneer between 2007 and 2016. The main species imported were *P. elata* (55%), Red Cedar *Cedrela odorata* (30%) and Big-leaf Mahogony *Swietenia macrophylla* (15%).

3.1.1.2 Belgium's position within the top commodities imported by the EU

Of the main commodities commercially imported into the EU between 2007 and 2016, as reported by number of specimens, weight and volume (see Section 3.1.1.1), Belgium was found to be the **main importer for two commodities** (Table 3):

- **top importer of reptile commodities (mainly reptile meat),** as reported by weight (kg), accounting for 87% (787,251 kg) of the EU's imports;
- **second highest importer of plants including timber**, as reported by volume (m^3), accounting for 25% (68 226 m^3) of the EU's imports.

		BELGIUM		EU	
TAXONOMIC GROUP	**UNIT**	**TOTAL QUANTITIES IMPORTED**	**POSITION IN EU IMPORTS (% OF TOTAL)**	**TOP EU IMPORTER (% OF TOTAL EU IMPORTS)**	**MAIN TAXA IMPORTED BY THE EU (%)**
Reptiles	Kg	787,251	1 (87.00%)	Belgium (87%)	Nile Crocodile *Crocodylus niloticus* (95%)
	No. of specimens	42,284	14 (0.15%)	France (24%)	American Alligator *Alligator mississippiensis* (39%)
Plants	Kg	219,462	7 (1.00%)	France (37%)	African Cherry *Prunus africana* (33%)
	No. of specimens	1,297,381	8 (0.40%)	Netherlands (76%)	Giant Snowdrop *Galanthus woronowii* (41%)
	m^3	68,226	2 (25.00%)	Denmark (53%)	Ramin Melawis *Gonystylus bancanus* (56%)
Mammals	Kg	306	7 (0.10%)	Netherlands (66%)	Guanaco *Lama guanicoe*
	No. of specimens	6343	11 (0.40%)	Denmark (33%)	Collared peccary *Pecari tajacu* (24%)
Corals	Kg	46 716	8 (1.00%)	Denmark (37%)	Stony Corals *Scleractinia* spp. (99%)
	No. of specimens	77 630	9 (1.30%)	France (35%)	Small Stony corals *Acropora* spp. (18%)
Gastropods	Kg	0	N/A	France (99.6%)	Queen Conch *Strombus gigas* (99.6%)
	No. of specimens	7	10 (0.05%)	France (48%)	Queen Conch *Strombus gigas* (88%)

Table 3

Commercial imports reported by EU Member States between 2007 and 2016 for the top five taxonomic groups, for trade reported by weight, number of specimens and volume (m^3), based on importer reported quantities

**As reported in Table 1, a total of 522,753 reptile skins were reported with the units "sides" (520,433 specimens) and "backskins" (2,320 specimens). Italy imported 46% of these specimens, of which 98% was reported as Spectacled Caiman* Caiman crocodilus *(reported as either Caiman crocodilus crocodilus,* C. crocodiles *and* C. crocodilus fuscus*). Belgium did not report any imports of reptile skins with these unit descriptions.*
Source: CITES trade database

3.1.1.3 Families for which Belgium is a top five EU importer

Of all commercial EU imports between 2007 and 2016, exceeding 1000 units, Belgium was among the top five EU importers for a total of 18 families (Table 4).

Section 3.1.1.2 (Table 3) identified Belgium as a major importer of reptiles and plants within the EU; this trend was also observed in the 18 families in which Belgium is among the top five EU importers (Table 4):

- Belgium was a top five EU importer of **reptile meat**, as reported by weight. For example:
  - Belgium reported the import of 757,795 kg of Crocodylidae spp. (*Crocodylus niloticus* and Siamese Crocodile *C. siamensis*) meat, 76% of which came from Zimbabwe. 54% of specimens were reportedly from ranched[7] specimens, while the remaining 46% were from captive-bred specimens (Table 4).
- Belgium was among the top five EU importers of plant products, as reported by weight, volume and as number of specimens. For example:
  - In terms of weight, Belgium was a main importer of Rosaceae spp. (all trade reported as African Cherry *Prunus africana*), involving a total of 213,919 kg of wild-sourced bark, 82% of which came from Uganda. Notably, 82% of these imports occurred in 2013 and 2014;
  - In terms of volume, Belgium was a main importer of Leguminosae (all trade reported as *P. elata*), 72% of which came from Cameroon, involving 68,011 m^3, the majority of which was sawn wood (92%) and wild-sourced (99.9%); and
  - In terms of records reported as number of specimens, Belgium was a main importer of Cactaceae spp., involving 662,960 specimens, mainly consisting of live artificially propagated specimens (99.6%) from Tunisia (98%). Notably, 99% of these imports predominantly occurred in 2007 and 2008. (Table 4).

Belgium was identified among the top five EU importers for **species in the caviar trade**; Sturgeon Acipenseridae and Paddlefish Polyodontidae, as reported by weight and number of specimens. Furthermore, imports of **Eel Anguillidae spp. meat**, as reported by weight, were also significant for Belgium, involving 149,320 kg of pre-Convention specimens (re-)exported from China between the years 2009 and 2012.

Imports of mammals and amphibians were also prevalent between 2007 and 2016, as reported number of specimens. Over 14,000 live specimens of reportedly **captive-bred frogs** were imported by Belgium during this time period. Notably, Belgium was a major importer of Hippopotamus **Hippopotamidae spp products between 2007 and 2016.** Between 2007 and 2016, Belgium reported the import of 3,215 specimens, the majority of which were wild-sourced (99.97%) carvings (85%). The main trading partner was Hong Kong Special Administrative Region (SAR) (97%).

[7] *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*

TAXONOMIC GROUP	FAMILY	UNIT	QUANTITY	MAIN (RE-) EXPORTER(S) (% OF QUANTITY) *	MAIN SOURCE(S) (% OF QUANTITY) *^	MAIN TRADE TERM (% OF QUANTITY) *
Mammals	Hippopotamidae	No.	3,215	Hong Kong SAR (97%)	W (99.97%)	Carvings (85%)
	Cercopithecidae	No.	2,541	China (47%); US (37%)	C (47%) W (34%)	Specimens (96%)
Reptiles	Alligatoridae	Kg	20,000	Plurinational State of Bolivia	W	Meat
	Crocodylidae	Kg	757,795	Zimbabwe (76%)	R (54%) C (46%)	Meat
	Pythonidae	Kg	9,456	Viet Nam	C	Meat
Amphibians	Dendrobatidae	No.	11,342	Panama (91%)	C (98%)	Live (99.8%)
	Hylidae	No.	3,100	Nicaragua	C	Live
Fish	Acipenseridae	No.	52,668	Israel (95%)	C (95%)	Live (99%)
		Kg	36,683	China (79%)	C (94%)	Caviar (94%)
	Polyodontidae	No.	2,000	USA	F	Live
		Kg	8,698	USA	W (99.8%)	Eggs
	Anguillidae	Kg	149,320	China	O	Meat
Plants	Apocynaceae	No.	40,000	South Africa (99%)	A	Live
	Araucariaceae	No.	63,800	Chile	D (50%) A (50%)	Live
	Cactaceae	No.	662,960	Tunisia (98%)	A (99.6%)	Live (99.6%)
	Euphorbiaceae	No.	102,015	South Africa (97%)	A (97%)	Live (97%)
	Leguminosae	m^3	68,011	Cameroon (72%)	W (99.9%)	Sawn wood (92%)
	Orchidaceae	kg	3,017	USA (76%)	A	Extract (76%)
	Rosaceae	kg	213,919	Uganda (82%)	W	Bark
	Thymelaeaceae	No.	269,845	Japan	W	Carvings

Table 4

Families for which Belgium was among the top five EU importers for commercial trade, 2007–2016, where total trade exceeded 1000 units, as reported by weight, number of specimens (blank), and volume m^3, based on importer reported quantities.

**Where no percentage is given, the value is 100%.*
^ A = Artificial propagation; C = Captive-bred; D = Appendix I animals bed in captivity and Appendix I plants artificially propagated for commercial purposes in operations included in the Secretariat's Register; F= Animals born in captivity; O = pre-Convention specimens; R = Ranched specimens; and W = Wild.
Source: CITES trade database

3.1.1.4 Main species imported by Belgium

As identified in Section 3.1.1.2 Belgium is a main importer in the EU of **plant products, reptile meat,** species in the **caviar trade**, and eels. These trends were also observed when looking into Belgium's imports at species level, as reported by weight, volume and number of specimens.

Between the years of 2007 and 2016, Belgium mainly imported specimens of *Crocodylus niloticus*, as reported by weight. Notably, these imports accounted for 61% of all reported trade by weight.

TAXA	QUANTITY (KG)	PERCENT OF BELGIUM'S TOTAL TRADE (%)	MAIN TERMS (%)	MAIN SOURCES (%)
Nile Crocodile *Crocodylus niloticus*	757,695	60.69%	Meat (100%)	C (46%); R (54%)
African Cherry *Prunus africana*	213,919	17.13%	Bark (100%)	W (100%)
European eel *Anguilla anguilla*	149,320	11.96%	Meat (100%)	O (100%)*
Stony Corals *Scleractinia spp.*	46,711	3.74%	Live (32%); Raw corals (68%)	W (100%)
Spectacled Caiman *Caiman crocodilus*	20,000	1.60%	Meat (100%)	W (100%)

Table 5

Main species/taxa imported by Belgium, between the years of 2007 and 2016, as reported by weight, based on importer reported quantities

**European Eel* Anguilla anguilla *was listed in CITES Appendix II on 13/03/2009; All trade was reported as source O (pre-Convention) trade and was reported during the years 2009 and 2012.*
Source: CITES trade database

In terms of trade reported as number of specimens, four out of the five top species imported by Belgium were plants. The main species was Barbary Fig *Opuntia ficus-indica*, which accounted for 44% of all trade reported as number of specimens, and all of which were artificially propagated live plants (Table 6).

SPECIES	QUANTITY	PERCENT OF BELGIUM'S TOTAL TRADE (%)	TERM*	MAIN SOURCES (%)
Barbary Fig *Opuntia ficus-indica*	651,500	43.45%	Live	A (100%)
Ramin *Gonystylus bancanus*	269,845	18.00%	Carvings	W (100%)
Monkey Puzzle Tree *Araucaria araucana*	63,800	4.26%	Live	A (50%); D (50%)
Russian Sturgeon *Acipenser gueldenstaedtii*	50,000	3.33%	Live	C (100%)
Spurge *Euphorbia stellata*	31,600	2.11%	Live	A (100%)

Table 6

Main species imported by Belgium between the years of 2007 and 2016, reported as number of specimens, based on importer reported quantities.

**For each of the top five imported taxa, only one term was used for each of the species listed.*
Source: CITES trade database

A total of three species were reportedly imported by Belgium measured in volume. Only one of these species, ***Pericposis elata***, was traded in significant quantities, **accounting for 99% of all trade** (Table

SPECIES	M^3	PERCENT OF BELGIUM'S TOTAL TRADE (%)	MAIN TERMS*	MAIN SOURCES (%)
Afrormosia *Pericopsis elata*	68010.81	99.69%	Sawn wood (92%); Logs (8%)	W (99.9%)
Ramin *Gonystylus bancanus*	188.44	0.28%	Carvings (57%); Sawn wood (33%)	W (100%)
Big-leaf Mahogony *Swietenia macrophylla*	26.41	0.04%	Sawn wood (100%)	W (100%)

Table 7

Main taxa imported by Belgium between the years of 2007 and 2016, as reported by volume (m^3), based on importer reported quantities.

Stony Coral *Scleractinia spp.*

3.1.2 Main countries of (re-)export to Belgium

The top five countries who (re-)exported commodities to Belgium, accounting for a total of 93% of all Belgium's imports, as reported by weight, were Zimbabwe, South Africa, China, Uganda and Indonesia, respectively (Table 8). The total weight of imports increased between 2007 and 2016, with the relative importance of Zimbabwe also increasing during the same period (Figure 1). Zimbabwe only reportedly (re-)exported *Crocodylus niloticus* to Belgium, all of which was reported as meat. Between 2014 and 2015, there was a significant increase in Zimbabwe's (re-)exports of *C. niloticus* meat to Belgium; from 60,030 kg to 151,216 kg, and re-exports remained high in 2016 (157,790 kg).

South Africa was also a main (re-)exporter of *C. niloticus* meat, while China was responsible predominantly (re-)exporting European Eel *Anguilla anguilla* meat (83.78%), with (re-)exports reaching their peak in 2009 with 87,320 kg of *A. anguilla* meat (re-)exported to Belgium. Uganda only (re-)exported *Prunus africana* bark to Belgium, all of which occurred in 2013 and 2014, and Indonesia's (re-)exports to Belgium only involved Stony Corals *Scleractinia* spp.

EXPORTER	QUANTITY (KG)	PERCENT OF TOTAL (%)	MAIN COMMODITY
Zimbabwe	571,101	45.74%	Nile Crocodile *Crocodylus niloticus* meat
South Africa	185,575	14.86%	Nile Crocodile *Crocodylus niloticus* meat
China	178,238	14.28%	European Eel *Anguilla anguilla* meat
Uganda	176,000	14.10%	African Cherry *Prunus africana* bark
Indonesia	45,561	3.65%	Stony Corals *Scleractinia* spp. raw

Table 8

Top five (re-)exporters to Belgium, as reported by weight between the years of 2007 and 2016, based on importer reported quantities.
Source: CITES trade database

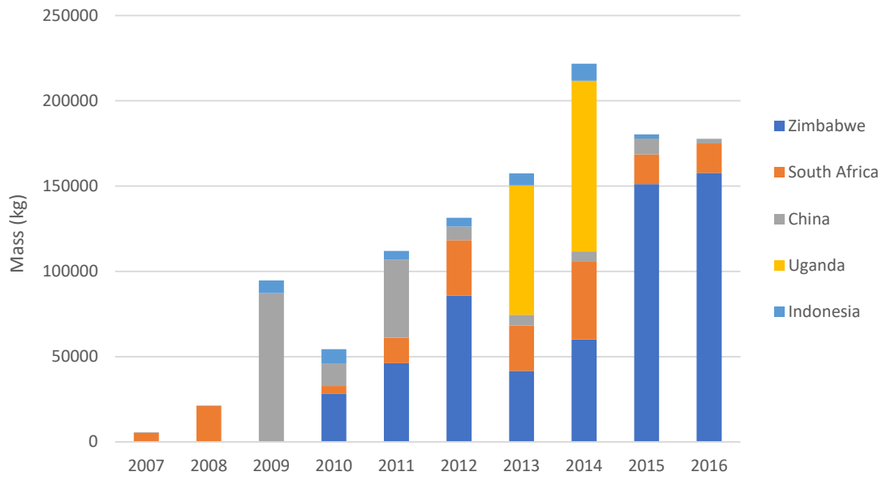


Figure 1

Top five (re-)exporters to Belgium, as reported by weight, between the years of 2007 and 2016, based on importer reported quantities.
Source: CITES trade database

The top five (re-)exporters to Belgium, reported as number of specimens accounting for a total of 84% of all Belgium's imports were Tunisia, Japan, Zambia, Taiwan and Indonesia (Table 9). The total number of items imported by Belgium appeared to decrease between 2007 and 2016, with most of the decrease occurring during the years 2007 and 2010 (Figure 2).

EXPORTER	QUANTITY (KG)	PERCENT OF TOTAL (%)	MAIN COMMODITY
Tunisia	651,500.0	43.45%	Live Barbary Fig *Opuntia ficus-indica*
Japan	273,776.0	18.26%	Ramin *Gonystylus bancanus* carvings
South Africa	150,288.0	10.02%	Live Euphorbia Euphorbiales spp.
Taiwan	105,072.9	7.01%	Live Orchids Orchidaceae spp.
Indonesia	75,076.0	5.01%	Live Stony Corals Scleractinia spp.

Table 9

Top five (re-)exporters to Belgium, reported as number of specimens, between the years of 2007 and 2016, based on importer reported quantities
Source: CITES trade database

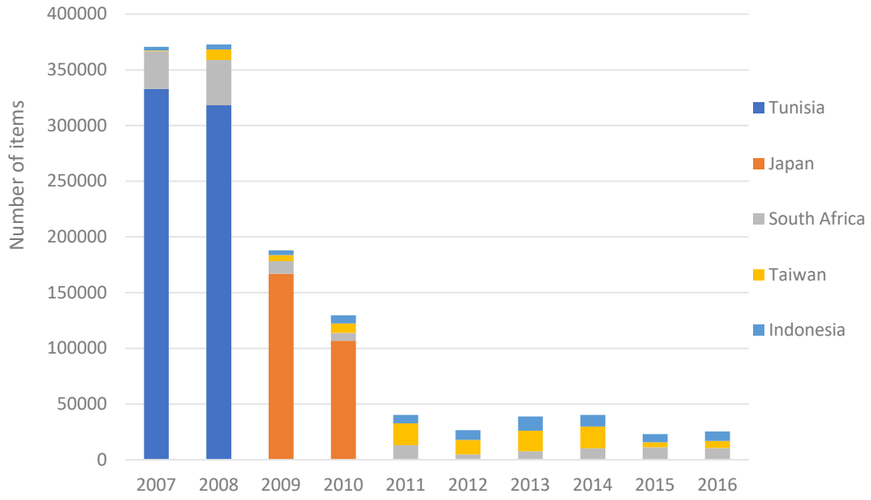


Figure 2

Top five (re-)exporters to Belgium, reported as number of specimens, between the years of 2007 and 2016, based on importer reported quantities.
Source: CITES trade database

Belgium's imports from Tunisia occurred only between 2007 and 2008 (Figure 2), all involving the species Opuntia fiscus-indica. The reason for imports only occurring during these two years is unknown. Belgium's imports from Japan also only occurred over a two year period, between the years 2008 and 2010. These imports involved Thymelaeaceae spp., Euphorbiaceae spp. and Orchidaceae spp. Excluding Tunisia and Japan, the number of items imported by Belgium does not appear to show any notable trends.

Two countries accounted for 98% of Belgium's imports, as reported by volume (m^3); **Cameroon and the DRC** (Table 10). The next three most important countries were the Republic of the Congo, Malaysia and the United Arab Emirates, accounting for 2% of Belgium's imports. No large variations were observed in either total volumes imported or the relative importance of the two main exporting countries over the time period 2007–2016 (Figure 3).

EXPORTER	QUANTITY (M^3)	PERCENT OF TOTAL (%)
Cameroon	48,655.23	71.32%
Democratic Republic of the Congo	18,122.79	26.56%
Republic of Congo	1,167.78	1.71%
Malaysia	223.15	0.33%
United Arab Emirates	30.30	0.04%

Table 10

Top five (re-)exporters to Belgium, as reported by volume m^3 between the years of 2007 and 2016, based on importer reported quantities.
Source: CITES trade database

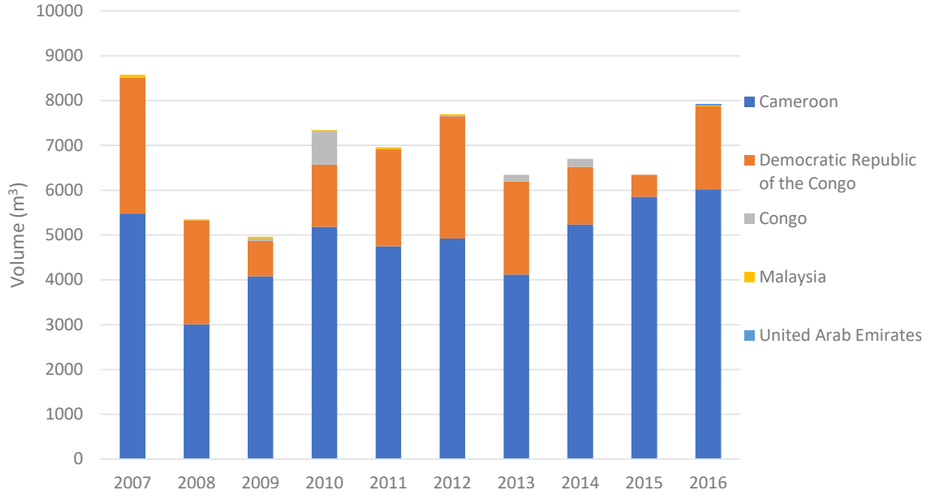
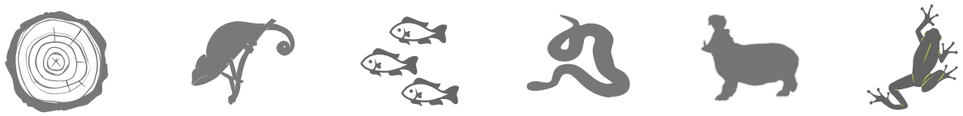


Figure 3

Top five (re-)exporters to Belgium, as reported by volume m^3 between the years of 2007 and 2016, based on importer reported quantities.
Source: CITES trade database



3.1.3 Case studies

Based on the analyses in Section 3.1.1, the following key commodities were identified as significant within Belgium's imports between 2007 and 2016 and were analysed in further detail below:

Key commodities:

- Plant products, specifically *Prunus africana* and timber products;
- Reptile meat;
- Sturgeon and Paddlefish products;
- Eel meat;
- Hippopotamus carvings and
- Frogs

AFRICAN CHERRY

African Cherry *Prunus africana*

213,919 kg
of *P. africana* was reported imported

3.1.3.1 African Cherry

Belgium reported the import of **213,919 kg of *Prunus africana*** between 2007 and 2016. All of this was declared as bark, wild-sourced, and reported by mass (kg). Virtually all trade was reported for commercial purposes, with the exception of 110 kg of wild-sourced *P. africana* specimens, derivatives and bark imported from Madagascar in 2008 for scientific purposes.

All reported commercial trade was from Uganda (82% of imports) and Democratic Republic of the Congo (18% of imports). There was an increase in reported trade between 2008 and 2014; however, no trade was reported in the years 2007, 2015 or 2016 (Figure 4).

Prunus africana is a tree from the mountain areas of tropical Africa and Madagascar that is harvested for its bark (which has medicinal properties) and timber (CITES, 2018b). The species has been listed in CITES Appendix II since 1995, however in 2005, the Plants Committee recommended the inclusion of the species under the "Review of Significant Trade[8]" process in line with Resolution Conf. 12.8 (Rev. CoP13). At its 16th meeting in 2006, the Plants Committee reported that the population status of *P. africana* from Burundi, Cameroon, the DRC, Equatorial Guinea, Kenya, Madagascar and the United Republic of Tanzania were "of urgent concern". This means that the available information indicated that the provisions of Article IV, paragraph 2 (a), 3 or 6 (a) were not being implemented. In consultation with the Secretariat, the Plants Committee formulated recommendations with deadlines for their implementation.

These recommendations, which included compliance measures, were conveyed to the range States concerned by the Secretariat in August 2006. Following a decision of the Standing Committee at its 57th meeting in 2008, trade from the DRC and other range States was suspended (with effect from 1st January 2009) and Parties were notified on 3rd February 2009[9] (Notification to the Parties No. 2009/003[10]) (CITES, 2016a). As indicated in Figure 4, Belgium accepted the import of 30,000 kg of wild-sourced *P. africana* bark from the DRC for commercial purposes in 2009. There are legitimate reasons as to why this trade could have occurred, for example the DRC may have exported the specimens on 31st December 2008 and the shipment may not have arrived in Belgium until January

[8] *The CITES Review of Significant Trade procedure (defined in Resolution Conf. 12.8 (Rev. CoP17)) was designed to identify species that may be subject to unsustainable levels of international trade, and to identify problems and solutions concerning effective implementation of the Convention.*
[9] *https://cites.org/sites/default/files/eng/notif/2009/E003.pdf*
[10] *https://cites.org/sites/default/files/eng/notif/2009/E003.pdf*

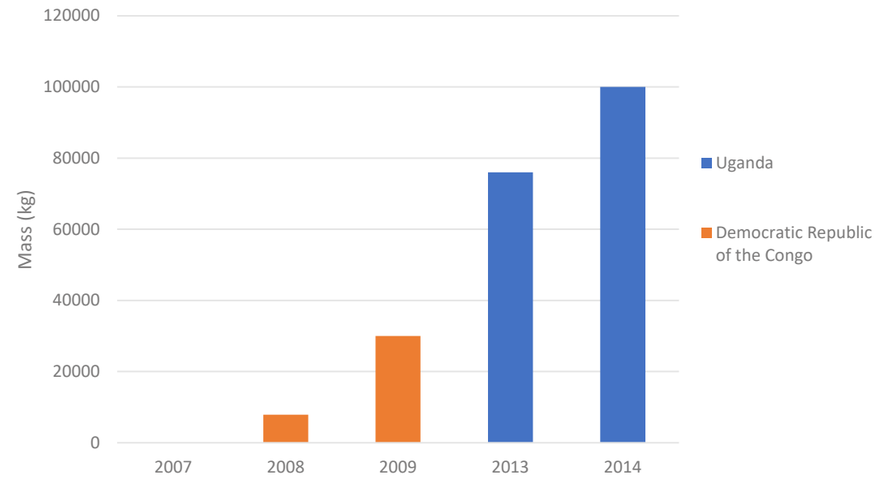


Figure 4

Countries of export of Prunus africana *imported by Belgium between 2007 and 2016, as reported by weight (kg), based on importer reported quantities.*
Source: CITES trade database

2009. However, it is important to note that there have been concerns regarding the DRC's exports of timber (CITES 2016a; Lawson, 2014).

Following a decision made by the Standing Committee at its 62nd meeting in July 2012, the DRC was able to resume trade with an export quota of 72,000 kg. The DRC then increased this export quota to 232,000 kg for the year 2015. Uganda published its first export quota of 75,893 kg in 2009, which was then increased to 176,179 kg in 2011 following the completion of inventories in additional districts of the country. Notably, Belgium was responsible for importing 43% of Uganda's export quota for the year 2013, and 57% in 2014.

CONCLUSION

Legal trade data indicate that Belgium imports significant quantities of wild-sourced *Prunus africana* bark which is believed to be of medicinal value to treat a range of ailments including fevers, stomach pain and urinary symptoms (Bodeker *et al.* 2014). As Belgium is one of the main EU importers of this plant-derived medicinal product, further attention is warranted to to determine the purpose of these imports and whether they are later shipped to other EU Member States. It is also important to better understand the reasons behind such high demand for this product.

TIMBER

A timber depot by the side of a highway in Cameroon

62,803 m³
of sawn wood were imported by Belgium

3.1.3.2 Timber

Overview of timber imports

Between 2007 and 2016, Belgium was among the top five EU importers of Leguminosae spp., as reported by volume. Belgium also reported the import of small quantities of Thymelaeaceae spp. and Meliaceae spp. wood between these years.

Belgium's reported imports of timber were categorised as either carvings, sawn wood, logs, live, timber or veneer with the majority involving "raw wood" products (sawn wood, logs and timber) (Table 11). Of all the product types, **Belgium's imports of sawn wood were most significant, accounting for 62,803 m³** (Table 11).

TERM	UNIT	TOTAL
Carvings	kg	991.7
	m³	107.6
	No. of specimens	269,848.0
Sawn wood	m³	62,803.3
	No. of specimens	21.4
Logs	m³	5,286.0
Live	No. of specimens	27.6
Timber	m³	18.3*
Veneer	m³	10.4
Total		**339,114.3**

Table 11

*Belgium's reported imports of Leguminosae spp., Thymelaeaceae spp. and Meliaceae spp. as reported by trade term, between 2007 and 2016, based on importer reported quantities. *Note, according to the Belgian CITES Management Authority there was an error as to the reporting of these specimens. The 18.3 m³ reported as 'timber' were in fact Ramin dowels and should have been reported as 'cavings' (BE CITES MA, pers. comm, 2018).*

FAMILY	TAXON	UNIT	TOTAL
Leguminosae	Afrormosia *Pericopsis elata*	m³	68,000.4
		No. of specimens	21.4
Meliaceae	Big-leaf Mahogony *Swietenia macrophylla*	m³	26.4
Thymelaeaceae	Ramin *Gonystylus bancanus*	m³	80.9

Table 12

Belgium's reported imports of "raw wood", reported by trade term of sawn wood, logs and timber, between 2007 and 2016, based on importer reported quantities.
Source: CITES trade database

Of the "raw wood" products imported into Belgium, virtually all trade (99%) was in *Pericopsis elata* of which 99.9% was wild-sourced (Table 12). The majority of these imports came from Cameroon (72%) and the DRC (27%), all of which were direct exports (Figure 5). *P. elata* was included in Appendix II of CITES in 1992 and in 2003 a CITES Review of Significant Trade was undertaken.

The report was presented to the 14th Meeting of the CITES Plants Committee in 2004, which endorsed a set of recommendations to be presented to Cameroon, Central African Republic (CAR), Congo and the DRC. Since the mid-2000s, Cameroon and the DRC set export quotas for logs, sawn wood and veneer sheets of *P. elata*; the DRC first set an export quota in 2003 of 50,000 m³ which remained the same until 2012 when it reduced to 25,000 m³. It then increased again to just over 50,000 m³ in 2016. Cameroon first set export quotas of sawn wood in 2005 amounting to 15,200 m³ which remained the same until 2014, where it reduced to 14,400 m³ in 2014 and 10,045 m³ to (Table 13). Notably, Belgium was responsible for importing between approximately 20% and 60% of Cameroon's export quotas for *P. elata*.

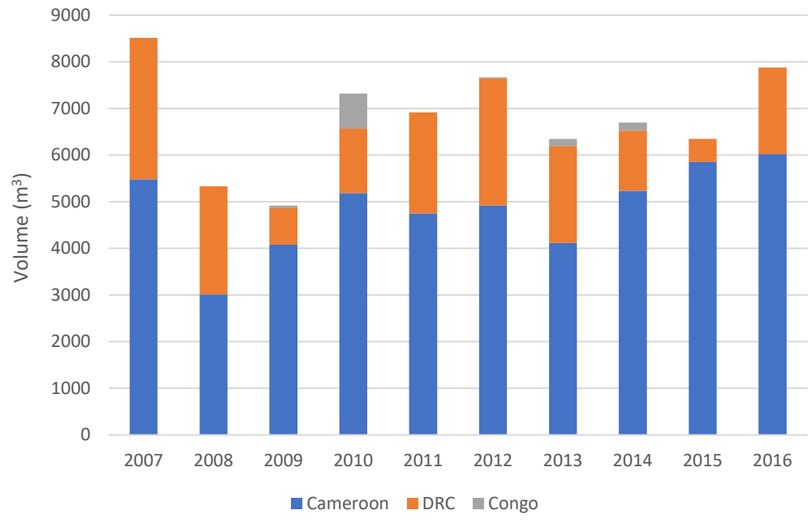


Figure 5

Commercial imports of Pericopsis elata *originating from Cameroon, the DRC and the Congo reported by Belgium between 2007 and 2016, based on importer reported quantities*
Source: CITES trade database

YEAR	CAMEROON		DRC	
	QUANTITY (M^3)	TERM	QUANTITY (M^3)	TERM
2007	15,200	Sawn wood	50,000	Logs, sawn wood, veneer sheets
2008	15,200	Sawn wood	50,000	Logs, sawn wood, veneer sheets
2009	15,200	Sawn wood	50,000	Logs, sawn wood, veneer sheets
2010	N/A	N/A	50,000	Logs, sawn wood, veneer sheets
2011	N/A	N/A	50,000	Logs, sawn wood, veneer sheets
2012	N/A	N/A	25,000	Logs, sawn wood, veneer sheets
2013	N/A	N/A	25,000	Logs, sawn wood, veneer sheets
2014	14,400	Sawn wood	25,000	Logs, sawn wood, veneer sheets
2015	14,400	Logs, sawn wood, veneer sheets	23,240	Logs, sawn wood, veneer sheets
2016	10,045	Logs, sawn wood, veneer sheets	56,201	Logs, sawn wood, veneer sheets

Table 13

CITES export quotas for Pericopsis elata *as set by Cameroon and the DRC between 2007 and 2016, based on importer reported quantities. Note: N/A represents no data*
Source: CITES trade database

Imports of Thymelaeaceae spp. and Meliaceae spp. only accounted for the remaining 107,269 m^3 imported by Belgium between 2007 and 2016. Small amounts of wild-sourced *Swietenia macrophylla* were imported by Belgium, amounting to 26.41 m^3 in the year 2007, all of which was directly exported from Guatemala. Big-leaf Mahogany is a highly valued commodity which is sought after, traded and used for the manufacture of furniture, musical instruments and other wood products of high quality and beauty (WWF, 2018). The import of a further 81.86 m^3 of wild-sourced *Gonystylus bancanus* directly exported from Malaysia was reported by Belgium, split between the years 2007 and 2016.

Uses of *G. bancanus* vary from its timber being used for light construction and mouldings such as picture frames, as well as the heartwood being used as carvings for incense (Lim *et al.* 2004).

58%
of all EU imports of sawn wood were to Belgium

Sawn wood

EU Member States reported the import of a total of 108,850 m^3 of sawn wood during the years 2007 and 2016 for commercial purposes. Belgium was consistently the top importer of sawn wood as reported by volume (m^3) during the same period, accounting for 58% of all reported EU imports. Italy (16%) was the second greatest importer, followed by Germany (13%), Spain (5%) and Portugal (4%) (Figure 6).

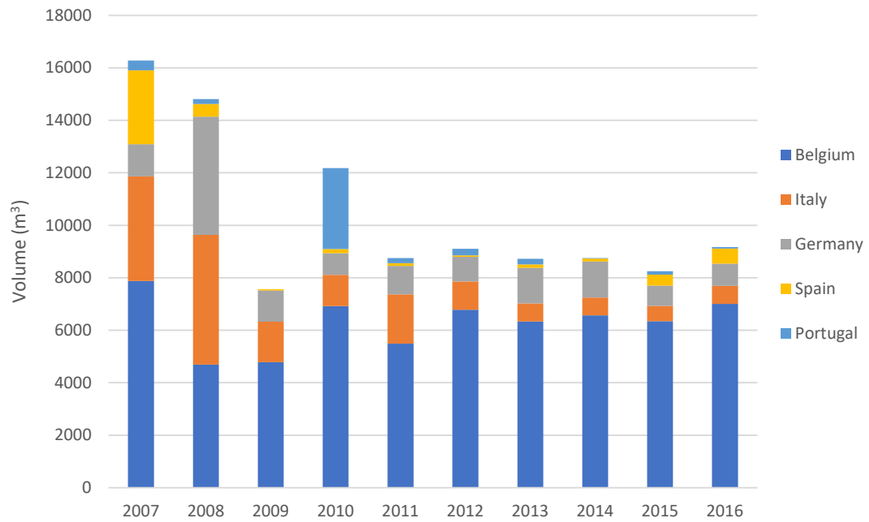


Figure 6

Top five EU importers of sawn wood as reported by volume m^3 between 2007 and 2016, based on importer reported quantities.
Source: CITES trade database

Imports of sawn wood were also reported by mass, which amounted to a total of **1,342,161 kg between the years of 2007 and 2016**. The main species imported were *Gonystylus bancanus* (89%) and *Pericopsis elata* (6%). **87% of the total imports were of wild-sourced *G. bancanus*** imported by the Netherlands from Indonesia in 2007. As with sawn wood reported by volume, Belgium was consistently a leading importer of sawn wood as reported by weight, except for 2011 when the Netherlands was the top importer.

95,560 m^3
of *P. elata* imports were reported by Belgium

Pericopsis elata

Pericopsis elata is a timber tree distributed across West and Central Africa. It has a high commercial value as hardwood and is primarily used in maritime constructions, flooring, veneer, furniture, and joinery. Its versatility has contributed to its demand in the wood market (Ngueguim *et al.* 2012).

The EU is a significant importer of *P. elata*, with reported imports totalling 95,560 m^3 for commercial purposes during the years 2007 to 2016. Belgium was consistently the top EU importer during the same period, accounting for 71 % of all reported imports. Portugal and Italy (8% each) were joint second largest importers, followed by France (6%) and Germany (5%). All trade in *P. elata* reported by volume comprised sawn wood (83%), logs (16%) and timber (1%) (Figure 7).

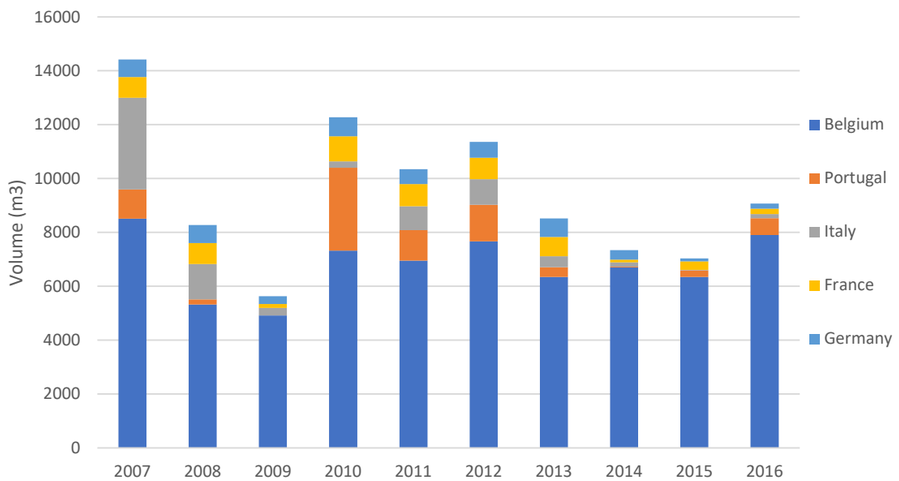


Figure 7

Top five EU importers of Pericopsis elata *reported by volume between 2007 and 2016, based on importer reported quantities*
Source: CITES trade database

CONCLUSION

Belgium is one of the most significant EU importers of timber products, based on analysis of legal trade data between 2007 and 2016. These imports predominantly consist of raw wood products of wild-sourced *Pericopsis elata*, a hardwood species of high commercial value which is mainly used for maritime construction, veneer, flooring and furniture.

Due to the extent of Belgium's legal trade in these products, further attention is warranted to better understand whether Belgium's imports are destined for the domestic/EU market or whether Belgium is being used as a hub/transit point for hardwood to be worked into items such as furniture and flooring. Furthermore, as several of the countries of origin have been subject to CITES export quotas, such as Cameroon and DRC, it is vital that Belgium understands better any potential for illegal trade of these timber products.

787,251 kg
of reptile meat was imported by Belgium

3.1.3.3 Reptile meat

Belgium reported the import of 787,251 kg of reptile meat during the years 2007-2016, most (96.25%) of which was *Crocodylus niloticus*. The other reported species were *Caiman crocodilus, Crocodylus siamensis* and Burmese Python *Python bivittatus*.

All reptile meat imported by Belgium was reported by weight and for commercial purposes. Although some wild-sourced reptile meat was reported in 2007 (20,000 kg of *Caiman crocodilus* from Plurinational State of Bolivia), all reported trade since then has been captive bred[11] (source code C, 46% of imports) or ranched (source code R, 52% of imports) (Figure 8).

The main trading partner was Zimbabwe (73% of imports) and there was an increase in the import of reptile meat between 2007 and 2016, most of which came from ranched species from Zimbabwe (Figure 9).

The only trade term used by Belgium for *C. niloticus* reported by mass was meat. However, Belgium also reported the import of a further 1,327 items of *C. niloticus*, nearly all of which were either small (86% of imports) or large (11% of imports) leather products.

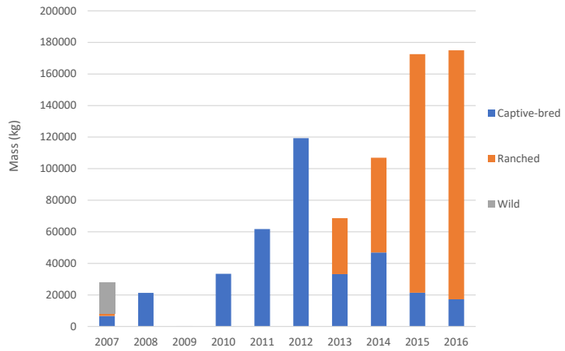


Figure 8

Belgium's commercial imports of reptile meat by source between 2007 and 2016, based on importer reported quantities.

Note: 100 kg of Appendix I animals bred in captivity imported in 2007 are excluded from this figure. This source code includes Appendix I animals bred in captivity for commercial purposes in operations included in the Secretariat's Register, in accordance with Resolution Conf. 12.10 (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.

[11] *Captive bred: Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention.*

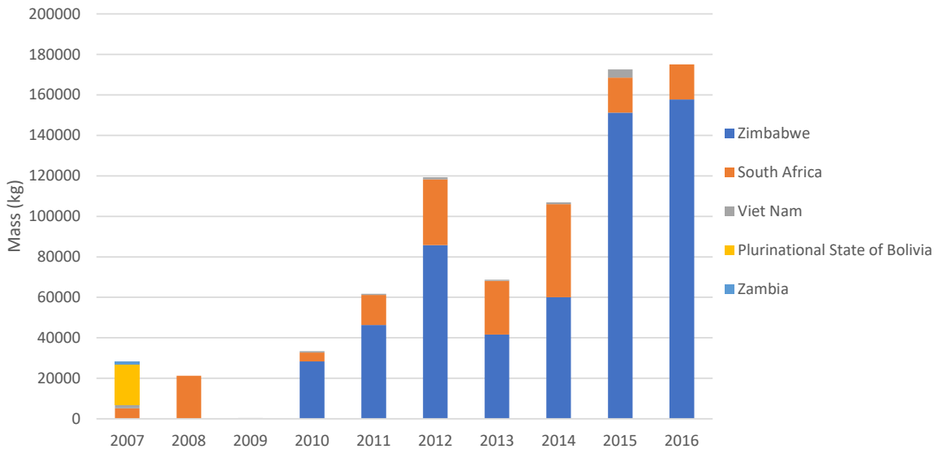


Figure 9

Belgium's commercial imports of reptile meat by trading partner between 2007 and 2016, based on importer reported quantities.
Source: CITES trade database

CONCLUSION

Legal trade data confirm Belgium as a major EU importer of reptile meat for the domestic market between 2007 and 2016, however due to the EU's single market and the free movement of goods, there is no record of whether these imports are destined for Belgium or other EU Member States. It is therefore important that Belgium better understand the dynamics of the market for reptile meat.

3.1.3.4 Sturgeon and Paddlefish

Belgium reported the commercial import of Acipenseriformes spp. (Sturgeon [Acipenseridae spp.] and Paddlefish [Polyodontidae spp.]) between the years of 2007 and 2016, all of which was either reported by weight or as number of specimens.

It should be noted that all results presented here focus on commodity terms "caviar" and "eggs" and excludes "eggs (live)" as generally these specimens are used for aquaculture purposes. The trade term "caviar" was first used for a record in the CITES trade database in 2005. Prior to this, "eggs" was used to record caviar, therefore these terms should be considered together when analysing caviar trade.

Sturgeon

94%
of imports were reported as caviar or eggs

Belgium reported the commercial import of 36,683 kg of sturgeon (mainly reported as caviar) between the years of 2007 and 2016, most of which was reported as a hybrid between Kaluga *Huso dauricus x* Japanese Sturgeon *Acipenser schrenckii* (40%). The other main reported imports were Siberian Sturgeon *Acipenser baerii* (25%), Acipenseridae hybrid (13%), Amur Sturgeon *Acipenser schrenckii* (8%) and Russian Sturgeon *A. gueldenstaedtii* (7%). Notably, there was a gradual increase in Belgium's import of sturgeon between 2007 and 2015, with a sudden decline in 2016 (Figure 10).

The majority of imports (94%) were reported as caviar and eggs (6%) and less than 1% as sturgeon extract. The main trading partners were China (79%), Uruguay (9%), Islamic Republic of Iran (6%) and Switzerland (5%).

Although, 94% of specimens imported by Belgium were reportedly captive-bred, 6% of imports (2,261 kg) were reportedly wild-sourced. All wild-sourced specimens were reported as eggs and were imported by Belgium between 2007 and 2009. The majority of this trade (ca. 99%) was reported in two years; between 2007 (1,113 kg) and 2008 (1,128 kg), respectively. The main reported species of wild-taken eggs were Persian Sturgeon *Acipenser persicus* (38%), Beluga Sturgeon *Huso huso* (25%), Russian Sturgeon *A. gueldenstaedtii* (18%) and Stellate Sturgeon *A. stellatus* (16%). The main trading partner was Iran (61% of imports) which was responsible for exporting 1371 kg of wild-sourced Acipenseriformes spp. eggs to Belgium. Belgium also reported the import of **889 kg of Acipenseriformes spp. eggs which had been re-exported** from several trading partners including Switzerland, who re-exported 345 kg of Acipenseridae eggs from Azerbaijan, Turkey, who re-exported 300 kg of Acipenseridae eggs from Kazakhstan, and the USA, who re-exported 243 kg of Acipenseridae eggs from Azerbaijan.

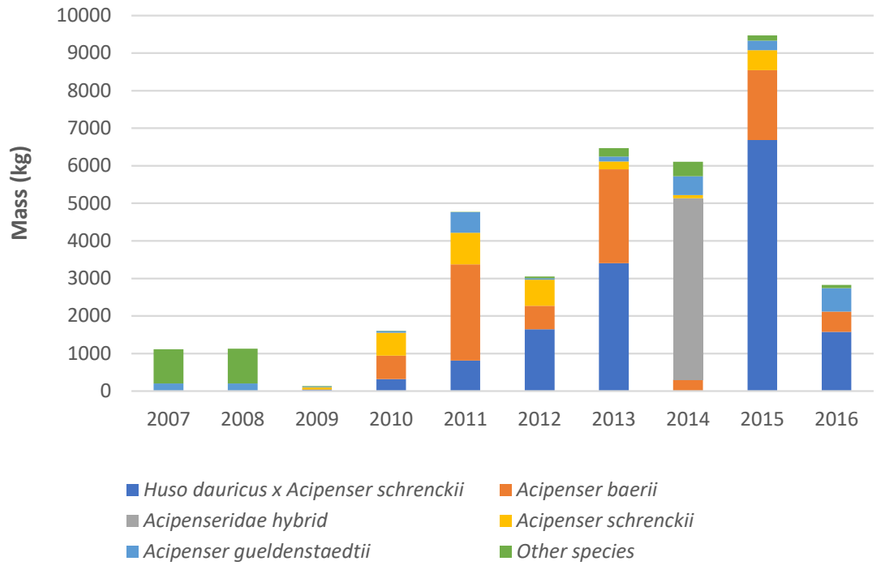


Figure 10

Commercial imports by Belgium of sturgeon species (94% reported as caviar, 4% reported as eggs) between 2007 and 2016, as reported by weight (kg), based on importer reported quantities. Source: CITES trade database

In 1998, all 27 species of sturgeon and paddlefish were listed under CITES in response to over-exploitation because of illegal fishing and declines in the stock; 25 species are listed in Appendix II of CITES and two species, European Sturgeon *Acipenser sturio* and Shortnose Sturgeon *A. brevirostrum* were listed in Appendix I restricting international commercial trade. CITES Resolution Conf. 12.7 (Rev. CoP17) on the conservation of and trade in sturgeons and paddlefish recommends that all range States of shared stocks[12] should establish scientifically-based annual catch and export quotas for each sturgeon or paddlefish species and communicate these to the Secretariat. This does not apply to aquaculture derived sturgeon. No trade in caviar or meat should be accepted for Acipenseriformes spp. from shared stocks between range States, unless there is an established export quota. All Acipenseriformes spp. eggs exported directly from the Islamic Republic of Iran to Belgium were permitted in accordance with the CITES export quotas set, as were those specimens re-exported from Turkey which originated from Kazakhstan (Table 15). Notably, in 2009 Azerbaijan did not communicate an export quota to the CITES Secretariat for *A. gueldenstaedtii, A. stellatus* or *H huso*.

For countries which share the stock of a given species, such as sturgeon, export quotas run from 1st March to the last day of February the following year and should be agreed by all the range States sharing the stock. The export quotas must be provided to the Secretariat by 31st December of the previous year, together with the scientific data used to establish the catch and export quotas. If the export quotas have not been communicated by the deadline of 31st December, then the relevant range States have a zero quota until the quotas are submitted. CITES Parties are therefore recommended not to accept imports of caviar and meat from these stocks (CITES, 2018c). In 2009, Belgium did accept the import of a total of approximately 20 kg of eggs of these three species from Switzerland which had originally been exported from Azerbaijan. If Switzerland imported these specimens from Azerbaijan in 2008 or earlier, these re-exports to Belgium would have been legitimate. However, as Azerbaijan did not communicate any export quotas to the CITES Secretariat before the 31st December 2008 deadline, a zero export quota was set for 2009. According to the CITES trade database, Azerbaijan were exporting wild-sourced Acipenser gueldenstaedtii, A. stellatus and H. huso in 2009, of which Switzerland was one of the importers. For example, Azerbaijan exported 483.346 kg of wild-sourced eggs of Acipenser gueldenstaedtii for commercial purposes to Switzerland in 2009. If Switzerland then re-exported these specimens to Belgium, this trade could have been in breech of the of the zero export quotas set for 1st March 2009 until the last day in February 2010. However, according to the Belgian CITES Management Authority, the CITES export permit from Azerbaijan for the trade in these caviar eggs to Switzerland and then to Belgium was issued on 20th February 2009, and therefore falls under the previous export quota year running from 1st March 2008 until the last day in February 2009, and was therefore legitimate (Belgian CITES MA, pers. comm, 2018).

EXPORTER	TAXON	2007	2008*
Azerbaijan	Russian Sturgeon *Acipenser gueldenstaedtii*	3,360	3,360
	Stellate Sturgeon *Acipenser stellatus*	3,000	3,000
	Beluga *Huso huso*	300	300
Islamic Republic of Iran	Russian Sturgeon *Acipenser gueldenstaedtii*	1,000	1,000
	Ship Sturgeon *Acipenser nudiventrisi*	0	0
	Persian Sturgeon *Acipenser persicus*	38,000	37,000
	Stellate Sturgeon *Acipenser stellatus*	3,200	3,200
	Beluga *Huso huso*	1,000	1,000
Kazakhstan	Russian Sturgeon *Acipenser gueldenstaedtii*	3,270	3,070
	Ship Sturgeon *Acipenser nudiventris*	0	0
	Stellate Sturgeon *Acipenser stellatus*	10,637	8,500

Table 15

*CITES export quotas for wild sourced caviar, 2001–2010, in weight (kg). *No export quotas were published in 2009 Source: CITES trade database*

Belgium also reported four records of commercial imports of sturgeon specimens between the years of 2007 and 2016, reported as number of specimens. This involved a total of 52,668 specimens:

- In 2009, Belgium reported the import of 2,200 live captive born[13] (source code F) specimens of Atlantic Sturgeon *Acipenser oxyrinchus* from Canada, and 467 wild-sourced eggs of Shovelnose Sturgeon *Scaphirhynchus platorynchus* from the USA[14];
- In 2010, Belgium imported 50,000 live captive-bred specimens of *Acipenser gueldenstaedtii* from Israel; and
- In 2015, Belgium imported one captive-bred body of *Huso huso* exported from the Islamic Republic of Iran.

[12] *Azerbaijan, Bulgaria, Canada, China, Islamic Republic of Iran, Kazakhstan, Romania, Russian Federation, Serbia, Turkmenistan, Ukraine, USA*

[13] *Captive born: Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of "bred in captivity" in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.*

[14] S. platorynchus *and American Paddlefish* Polyodon spathula *are two wild-sourced US species and are not subject to CITES export quotas as they are not within shared stocks.*

American Paddlefish *Polyodon spathula*

99%
of specimens were wild-sourced

Paddlefish

Belgium reported four records of commercial imports of paddlefish between the years of 2007 and 2016, as reported by weight. All trade occurred between 2007 and 2009 and involved a total of 8,698 kg of eggs. The only species reported in trade was American Paddlefish *Polyodon spathula*, and all specimens came from the USA. A total of 99% of specimens were wild-sourced, with all other specimens reported as captive born (source code F).

In 2008, Belgium also reported the commercial import of 2000 live captive-born *P. spathula* from the USA.

CONCLUSION

While legal trade data indicate a decline in Belgium's imports of sturgeon caviar in 2016, Belgium's involvement in the caviar trade over the years is evident, with imports of sturgeon caviar increasing significantly between 2007 and 2016. These trade trends may indicate a growing demand for this luxurious, high value commodity on the domestic market. As sturgeon stocks are heavily exploited and many species face extinction, further attention is warranted to better understand the dynamics of the domestic market and consumer demand.

EEL MEAT

European Eels *Anguilla anguilla*

149,320 kg
of eel meat was imported by Belgium

3.1.3.5 Eel meat

Of all EU Member States, only four reported the import of Anguillidae spp. meat which totalled 417,470 kg between 2007–2016. All trade was reported in weight and occurred between 2009 and 2012. In comparison with other EU Member States, **Belgium was the second highest importer of Anguillidae spp. meat**. Denmark reportedly imported 242,150 kg, followed by Belgium (149,320 kg), the United Kingdom (20,000 kg) and Italy (6,000 kg). All trade was reported as *A. anguilla* and came from China (417,420 kg) and Norway (50 kg).

Anguilla anguilla, one of the 16 species in the family Anguillidae (Jacoby *et al.* 2015) is believed to spawn in the Sargasso Sea in the Atlantic Ocean with its non-breeding range spanning most of Europe and parts of the North African coast (Jacoby and Gollock, 2014). All continental life stages of *A. anguilla* are commercially harvested, traded and used directly for human consumption (Crook and Nakamura, 2013). Concerns were raised from the late 1990s as to the impact that unsustainable exploitation and associated trade was having on the *A. anguilla* population (ICES, 2011). Consequently, the European Union (EU) adopted Council Regulation (EC) No 1100/2007[16] to ensure protection and sustainable use of *A. anguilla*. Furthermore, in 2007, the species was listed in CITES Appendix II, which came into force on 13th March 2009 (CITES 2007). In December 2010, the EU's Scientific Review Group (SRG) concluded that at the time it was not possible to perform a Non-Detriment Finding (NDF) for the export of *A. anguilla,* and subsequently a zero-quota policy was set for the EU (EC, 2014).

In the years following the CITES Appendix II listing of *A. anguilla*, the EU set several dates after which different types of specimens of *A. anguilla* could no longer be traded and would therefore be considered pre-Convention specimens (EC, 2009).While commercial trade in all commodities of *A. anguilla* to and from the EU was banned in December 2010, pre-Convention specimens were the exception to this (as set at the 48th Meeting of the EU Management Committee on Trade in Wild Fauna and Flora [COM 48] on 21st September 2009) (Table 22) (EC, 2009):

[16] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32007R1100&from=EN.

- trade in pre-Convention live specimens was permitted until 1st April 2011;
- trade in pre-Convention eel products was permitted until 1st April 2012;
- re-imports of live specimens or other eel products from third countries derived from eels legally exported from the EU between 13th March 2009 and 3rd December 2010 were permitted only until December 2013[17].

Between 2007 and 2016, Belgium reported the import of 149,320 kg of Anguillidae meat (Figure 11). All trade occurred between 2009 and 2012, which is in line with permitted trade dates as outlined above. Imports involved pre-Convention specimens of *A. anguilla* which had been reportedly (re-) exported from China. Of these shipments, China exported a total of 21,420 kg of *A. anguilla*, but they also re-exported a total of 127,900 kg. Notably, 78,900 kg of these re-exports had originated from France. The origin of the remaining 49,000 kg was reported as Unknown. As noted above, the EU was permitted to export live specimens until 1st April 2011 and eel products until 1st April 2012, therefore France's exports of *A. anguilla* to China were within the permitted trade dates. Belgium's subsequent re-imports of the *A. anguilla* meat from China were also permitted according to the dates outlined above. However, it is important to note that there were several issues surrounding the CITES listing of *A. anguilla* and the EU export ban that have made it challenging for the EU to ensure legal trade, particularly the re-import of specimens.

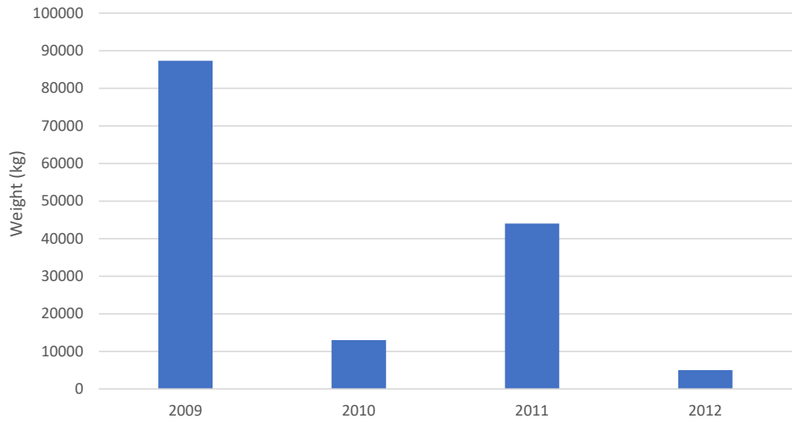


Figure 11

Commercial imports by Belgium of Anguillidae meat between 2007 and 2016, as reported by weight (kg). No trade was reported in 2007, 2008, 2013, 2014, 2015 and 2016, based on importer reported quantities.
Source: CITES trade database

CONCLUSION

While Belgium's imports of *Anguilla anguilla* meat are significant within the EU, all trade has occurred in accordance with the CITES listing and the EU trade ban, and re-imports of this species into the EU is no longer permitted, therefore no further attention is warranted.

[17] *As per Commission letter sent to all third countries on 1st October 2013: Import export regime of European Eel Ref. Ares(2013)3152470 - 01/10/2013*

3,215
Hippo products were imported into Belgium

3.1.3.6 Hippopotamus

In recent years, several reports have highlighted the possible illicit trade in Hippopotamidae spp. teeth to feed the ivory markets as a substitute for elephant ivory becoming subject to stricter controls.

Following the listing of the African Elephant *Loxodonta africana* in CITES Appendix I in 1989[18], which resulted in stricter controls on commercial trade of ivory, there was a surge in demand for hippo ivory (Weiler *et al.*, 1994; Williamson, 2004). Andersson and Gibson (2017) provide an insight on this demand for hippo teeth and carvings, particularly of those being exported from Tanzania. Export quotas of hippo products have been in place in Tanzania since 2001, resulting from recommendations of the Animals Committee and the Standing Committee (UNEP-WCMC, 2007).

According to Andersson and Gibson's (2017) research, there is a significant disparity between t¬he trade volumes reported by those exporting and importing hippo teeth which may indicate illegal trade. According to CITES trade data, between 1975 and 2016, 90% of the global trade in hippo teeth was destined for Hong Kong SAR with over 75% coming from Tanzania and Uganda. However, according to Andersson and Gibson (2017), Tanzania has only declared one shipment of hippo teeth to Hong Kong since 2004, while Hong Kong has reported the import of hippo teeth from Tanzania nearly every year after that. Overall, as of September 2016, Hong Kong SAR declared the import of 3,176 kg more hippo teeth than declared exported by Tanzania, indicating that actual trade levels may exceed internationally agreed quotas. These export quotas set by Tanzania for Common Hippopotamus *Hippopotamus amphibius* amounted to 10,598 kg of teeth since 2001, and in 2004, it was specified that this export quota should come from a total of 1,200 animals.

Due to this growing concern of hippo teeth and carvings being traded as a substitute for ivory, a more detailed analysis of Hippopotamidae spp. trade was chosen as a case study to identify whether Belgium may be implicated in this shift from elephant to hippopotamus ivory.

Between 2007 and 2016, Belgium was among the top five EU importing countries for Hippopotamidae spp. reporting the import of 3,215 items of *H. amphibius*. The main trade term reported by Belgium

[18] *Some populations of African Elephant* Loxodonta africana *remained in Appendix II, under a set of conditions, in 1997 (Botswana, Namibia and Zimbabwe) and 2000 (South Africa) (UNEP* et al.*, 2013).*

was carvings (85% of imports reported by number), with the remainder being teeth. Additionally, 228 kg of carvings were reported by weight. A total of 91% of trade reported as number of specimens originated from Tanzania and was re-exported by Hong Kong, SAR. Virtually all trade (99.97%) was wild-sourced. Similarly, all trade reported by weight (kg) originated from Tanzania and was re-exported by Hong Kong SAR and was wild-sourced. There appeared to be a decline in trade in imports of *H. amphibius* by Belgium over the time period 2007-2016, with the majority of imports occurring in the years 2007–2009 (Figure 12), however due to the ongoing concerns surrounding the demand for hippo teeth as a substitute for ivory, and specimens entering the black market (Bale, 2018), it is important to recognise that a decline in legal imports does not mean demand has reduced and that illicit trade is not occurring.

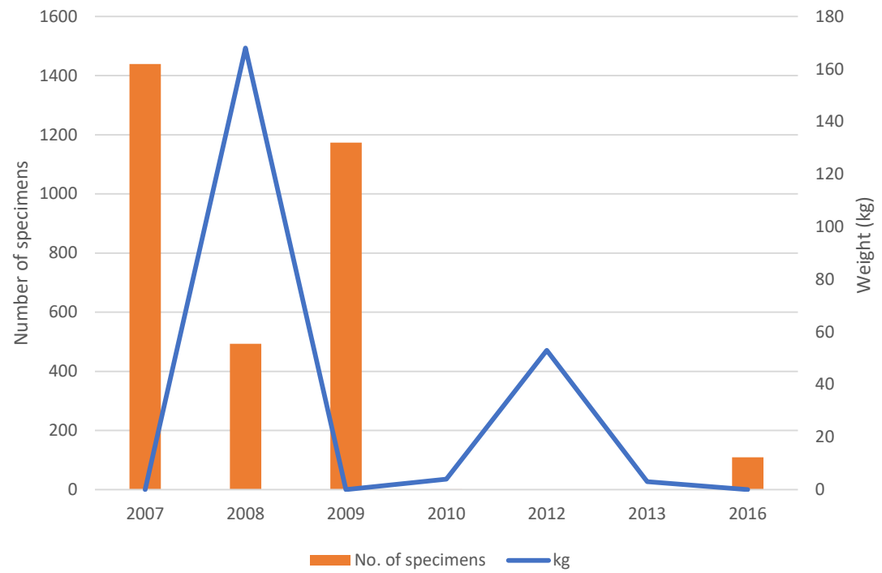


Figure 12

Total reported commercial imports of Hippopotamus amphibius *by Belgium 2007–2016, as reported by the importer. (No trade was reported in 2011, 2014 or 2015), based on importer reported quantities.*
Source: CITES trade database

CONCLUSION

Despite legal trade in Hippopotamidae spp. carvings and teeth declining between 2007 and 2016, the growing demand of these commodities in substitute for elephant ivory is of international concern. Further attention and investigation into the trade an use of this commodity is therefore warranted by Belgium, particularly in identifying whether illegal trade is occurring.

14,415
live frogs were imported into Belgium

3.1.3.7 Frogs

Belgium was among the top five EU importing countries for Dendrobatidae spp. and Hylidae spp. between 2007 and 2016. Notably, no trade in frogs was reported before 2011, and there appeared to be a decline in imports of frogs by Belgium during the period of 2012 to 2016 (Figure 13). Virtually all reported trade was in live frogs, 14,415 of which were imported during the period. Nearly all trade (98%) in live frogs was reported to be captive bred (Source code C), the remainder being captive born (Source code F). All trade in live frogs was direct trade, the main exporter being Panama (71% of trade). The main species in trade were Red-eyed Treefrog *Oophaga pumilio* (52%), Green and Black Poison Frog *Dendrobates auratus* (25%) and Red-eyed Treefrog *Agalychnis callidryas* (22%).

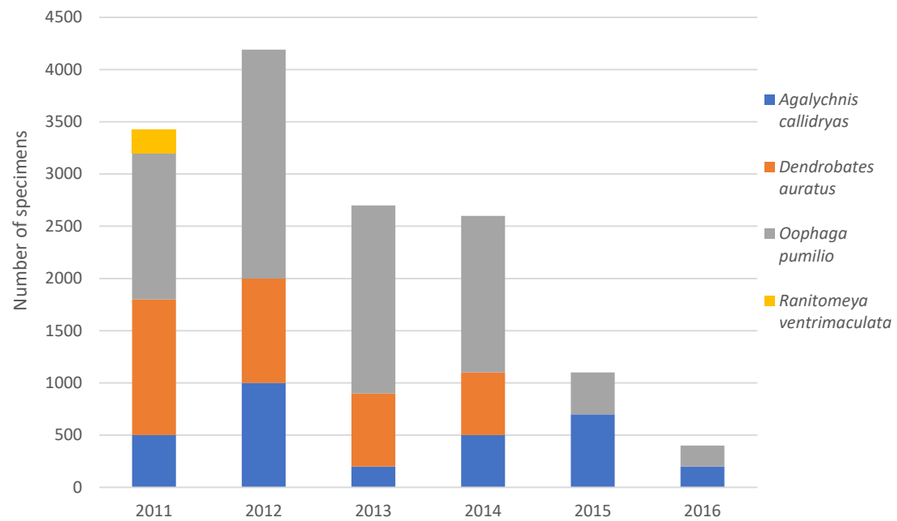


Figure 13

Reported commercial imports of amphibians by Belgium 2007–2016, based on importer reported quantities. (No trade was reported before 2011).
Source: CITES trade database

Concerns have been raised by the Standing Committee regarding the implementation of CITES in relation to captive bred and ranched specimens, specifically in relation to potential mis-declarations of specimens (CITES, 2014).

The CITES Secretariat has taken steps to evaluate the situation, particularly through the development of a report examining concerns on trade in specimens claimed to be derived from captive breeding or ranching, as referred to in Decision 16.63 a i and iii. The report identifies areas of concern which warrant further investigation such as unexpected trade patterns, in terms of source codes used and reported trade routes/volumes in trade (CITES, 2014). It also contains details of subsequent actions by, and conclusions, of the Secretariat. Some examples relevant for Belgium include (CITES, 2016b):

RED-EYED TREE FROGS *AGALYCHNIS CALLIDRYAS*

1,253
breeding females are held by six trade supplying companies

50,000
juveniles could be produced by these, according to the CITES MA

- Red-eyed Treefrogs *Agalychnis callidryas* from Nicaragua traded using source code C. Nicaragua is a main exporter of *A. callidryas* and according to the country's CITES Management Authority (MA), there are six companies breeding this species which were established prior to 2013. They hold a total of 1,253 breeding females which, according to the CITES MA, could produce 50,000 juveniles per egg lay. A female can lay three to five times each night all year round in captivity. No information regarding the number of males held, or the capacity of the facilities to hold such numbers was provided. Every company must produce a monthly report of hatches and deaths, and these are verified by the CITES MA. The CITES MA manages a central database containing the productivity of facilities and quantities available for export. When the CITES MA receives an application for an export permit, it is checked to confirm that the quantities for export match with the information held in the database. All exports are inspected by CITES officials at the international airport of departure.
- Red-eyed Treefrog is listed as Least Concern in the IUCN Red List in view of its wide distribution, tolerance of a degree of habitat modification, presumed large population, and because it is unlikely to be declining fast enough to qualify for listing in a more threatened category. Due to the assurance given by the Management Authority of Nicaragua (as outlined above), the CITES Secretariat believes no further action is required.

POISON ARROW FROG DENDROBATIDAE spp.

least concern
as assessed by the IUCN Red List

- Poison arrow frogs (Dendrobatidae spp.) from Central America traded using source code C. Panama was by far the largest exporter of Dendrobatidae spp., with the strawberry poison frog *Oophaga pumilio* and Green and Black Poison Frog *Dendrobates auratus* the main species concerned. Due to their complex reproductive strategies, some experts consider these species difficult to breed in captivity. After CoP16 in 2013, the Conference of Parties adopted Decisions 16.63 to 16.66 on Implementation of the Convention relating to captive-bred and ranched specimens. As part of this work and with the agreement of the Panamanian CITES MA, the Secretariat contracted TRAFFIC to visit a major facility producing specimens of these species in Panama. The frogs were being kept in more than 40 densely vegetated outside enclosures, the largest of approximately 64 m^2 with fences reaching one metre high. All enclosures were equipped with sprinkler systems to ensure high humidity. The visit report concluded that the conditions the frogs are kept in does not allow for a reliable inventory system to be in place and it is not possible to provide numbers of specimens held at the facility. Although there was evidence of breeding taking place at the facility it was not possible to determine how extensive this was. The CITES authorities in Panama have limited knowledge of these species but appear confident that the facility is legitimate. Inspection protocols used by the authorities are rather general in some breeding facilities and unrealistically detailed in others. The breeding stock is supplemented with additional wild specimens each year although it is not clear how it is determined that collection of these is not detrimental to the wild populations. There is no mechanism to ensure that exports do not include "parental" stock sourced from the wild or F1 generation specimens as breeding stocks are not separated from export animals. It would therefore be easy for the facility to be used to export wild-taken specimens as captive-bred. Authorities in the Netherlands have recently undertaken tests for the presence of skin toxins (pumiliotoxine) on live frogs as evidence of a natural diet and therefore of wild origin. However, the extensive outdoor nature of this facility in Panama may confound the results of such analyses. Both *Oophaga pumilio* and *Dendrobates auratus* are listed as Least Concern in the IUCN Red List in view of their wide distribution, tolerance of a degree of habitat modification, presumed large population, and because they are unlikely to be declining fast enough to qualify for listing in a more threatened category. The Secretariat concluded that the precise source code which is to be used for this sort of facility is difficult to determine, but overall there is little indication of major negative conservation impacts on the species from this activity. In such circumstances, the Secretariat concludes that it may be preferable to use the source code W in order for a full legal origin and NDF to be made (CITES, 2016).

CONCLUSION

While Belgium's legal trade in live frogs has declined since 2012, further attention may be warranted to better understand the market for these specimens, particularly to determine the demand for these specimens as pets and clarifying whether species are legitimately from captive-bred sources.

Orchid Orchidaceae spp.

3.2 CITES trade data analysis – (Re)exports

928
Nicobar Crab-eating Macaques were exported

189
Hippo carvings were re-exported in 2009

In this report Belgium was identified as a key (top five) importer for eighteen families containing CITES-listed species (Section 3.1.1.3). Here the relative size of the imports and (re-)exports of CITES-reported trade within these families is examined to determine whether the trade is mainly for the domestic/EU market, or whether Belgium was acting as a processing/transit hub for re-exports.

For most families, the quantities re-exported are very small in comparison with the quantities imported by Belgium, suggesting that the majority of trade is for the domestic/EU market (Table 16). Note that due to the single EU market and the free movement of goods, no import/export permits are therefore required for further trade between EU Member States. However, one notable exception is Orchidaceae spp. for which the quantity of reported total exports exceeded the number of imports (Table 16).

For Cercopithecidae spp., 37% of Belgium's imports were subsequently (re-)exported. Of these 943 specimens re-exported, the majority (928) were of specimens of Nicobar Crab-eating Macaque *Macaca fascicularis* destined for Switzerland for medical purposes. These re-exports occurred in 2012 and all specimens were reportedly captive-bred and originated from China. Furthermore, in 2009 Belgium re-exported 189 carvings of Hippopotamidae spp. teeth, which had originated from Tanzania and were going to the USA.

For Acipenseridae spp., Belgium was responsible for (re-)exporting specimens reported as number of specimens and by weight. Those (re-)exports reported as number of specimens amounted to 40 specimens only. However, those (re-)exports as reported by weight accounted for 30% of the original imports by Belgium. In total, Belgium reported the (re-)export of 11,062 kg of Acipenseridae products between 2007 and 2016 involving 8,700 kg of re-exports and 2,632 kg of direct exports.

Belgium is the 4th largest (re-)exporter of Acipenseridae spp. globally behind Germany, France and the United Arab Emirates (Harris, 2018 in prep). (Re-)exports of Acipenseridae spp. from Belgium gradually increased over the years from 380 kg in 2007 to 1,125 kg in 2016, with the highest quantity of re-exports recorded in 2015, amounting to 2,581 kg (30% of all re-exports of Acipenseridae).
The main countries of destination were the United Arab Emirates (34%), the USA[18] (34%), Switzerland (23%) and Norway (4%). The main species involved were *A. baerii* (38%), hybrid of *H. dauricus x A. schrenckii* (30%) and *A. gueldenstaedtii* (11%) which are the top three taxa in global trade derived from aquaculture. Virtually all re-exports were of Acipenseridae spp. caviar (85%) and eggs (14%) mainly derived from aquaculture (source code C) (8,212 kg) or wild-sourced (487 kg). Wild-sourced

TAXONOMIC GROUP	FAMILY	UNIT	IMPORTS	EXPORTS	Relative quantity of (re-)exports compared to imports (%)
Mammals	Hippopotamidae	No.		*189*	*5.9*
			3,215	191	5.9
	Cercopithecidae	No.	2,541	943	37.1
Reptiles	Alligatoridae	Kg	20,000		
	Crocodylidae	Kg	757,795	12,664	1.7
	Pythonidae	No.		*3,775*	*14.8*
			25,508	3,779	14.8
Amphibians	Dendrobatidae	No.		*51*	0.5
			11342	54	0.5
	Hylidae	No.	3,100		
Fish	*Acipenseridae*	No.		*18*	*0.03*
			52,668	40	0.1
		kg		*8,700*	*23.7*
			36,683	11,062	30.2
	Polyodontidae	No.	2,000		
		kg	8,698	184	2.1
	Anguillidae	kg	149,320	600	0.4
Plants	Apocynaceae	No.		*0*	-
			40,000	1,004	2.5
	Araucariaceae	No.		*0*	-
			63,800	2,407	3.8
	Cactaceae	No.		*0*	-
			662,960	139,658	2.1
	Euphorbiaceae	No.			
		No.	102,015		
	Leguminosae	m^3	68,011	154	0.2*
	Orchidaceae	No.		*0*	-
			141,880	194,857	137.3*
		No.		*368*	*12.2*
		kg	3,017	385	12.8
	Rosaceae	No.	213,919		-
	Thymelaeaceae	No.	269,845		-
		m3	188		-

Table 16

*A comparison of the quantities of imports and exports for families for which Belgium was identified as among the top five EU importers for commercial trade, 2007 to 2016, where total trade exceeded 1000 units, as reported by weight, as number of specimens, and volume m^3 (see table 4 in section 3.1.1.3), based on exporter reported quantities. *Note that the relative quantity of (re-) exports compared to imports in percentage is higher than 100% as Belgium may have re-exported specimens of Orchidaceae spp. between 2007 and 2016 that had been imported prior to 2007. Note, the numbers indicated in orange italics are where total exports (re-exports and direct exports combined) exceed the number of direct exports.*
Source: CITES trade database

[19] *Note that the USA is a source country for* Scaphirhynchus platorynchus *and* P. spathula *only.*

specimens included *Acipenser persicus, A. stellatus, H. huso, S. platorynchus* and *A. gueldenstaedtii*. All trade in these species occurred between 2007 and 2010, apart from *H. huso* which was re-exported between 2007 and 2012.

Direct exports of Acipenseridae spp. from Belgium amounted to 2,632 kg were reported to occur between 2011 and 2016 with the quantities that were exported increasing every year, from approximately 2 kg in 2011 to 704 kg in 2016. The main importers of Belgium's direct exports of Acipenseridae spp. were Japan (56%), the USA (30%), Switzerland (10%), followed by Republic of South Korea, Hong Kong SAR, Thailand, South Africa and the United Arab Emirates (all accounting for less than 1% each). All specimens that were sent to these countries/territories were reported as caviar and derived from aquaculture. The main species involved were *Acipenser gueldenstaedtii* (78%), *A. baerii* (12%). Other species were Acipenser hybrid, Sterlet *Acipenser ruthenus* and *Huso huso* (less than 2% each).

For reptiles, Belgium reported the import of 787,251 kg of reptile meat, and the (re-)export of 12,731 kg of reptile meat between 2007 and 2016. The main species reportedly re-exported was *C. niloticus,* of which 757,695 kg were imported and 12,659 kg were re-exported. Because some meat may have been re-exported in a different year to the year in which it was imported, it is not possible to tell as to what extent these numbers refer to the same commodities. However, it is clear that the domestic/EU market is important, as reported re-exports were only 1.6% of the size of reported imports.

787,251 kg

of reptile meat was imported into Belgium

12,731 kg

of reptile meat was (re)exported from Belgium

There appeared to be an increasing trend of both imports and exports during the period 2007–2016 (Figure 14). The main importing country for commercial re-exports of *C. niloticus* meat from Belgium was Switzerland (96% of re-exports); the remaining trade (4%) was re-exported to Norway.

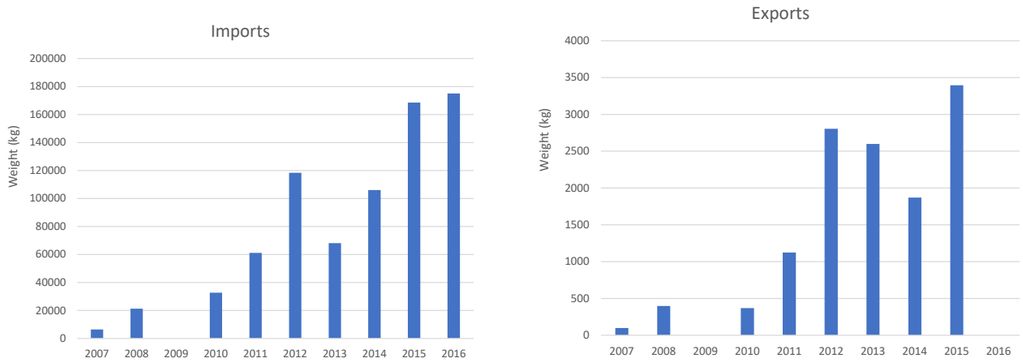
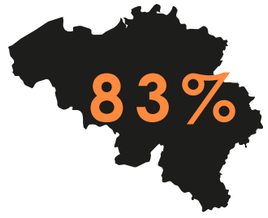


Figure 14

Belgium's reported imports (left) and (re-)exports (right) of reptile meat between 2007 and 2016, as reported by weight, based on exporter reported quantities.
Source: CITES trade database

Three EU Member States reported the commercial (re-)export of reptile meat, of which Belgium was the most important, accounting for 83% of all re-exports of reptile meat reported by EU Member States during the years 2007–2016 (Table 17).



of all re-exports of reptile meat reported by EU Member States were done so by Belgium

EXPORTER	MASS (KG)	% OF TOTAL RE-EXPORTS
Belgium	12,731	83
Germany	1,478	10
Netherlands	1,100	7

Table 17

Commercial re-exports of reptile meat from EU Member States 2007-2016, based on exporter reported quantities.
Source: CITES trade database

Nile Crocodile *Crocodylus niloticus*

3.3 Illegal trade data analysis

3.3.1 Overview

1,264
seizure records reported by Belgium in EU-TWIX

92%
of seizures in transit in Belgium came from Africa

94%
of seizures were reported as specimens

3.3.1.1 EU-TWIX

Number of seizure records

Between 2007 and 2016, there were a total of **1,264 seizure records reported by Belgium in the EU-TWIX database** (Figure 15); 69% of these seizure records (868) involved species of fauna, and 31% involved species of flora (396). The number of seizure records fluctuated between 2007 and 2016 with the most significant increase between 2008 and 2009; from 66 to 192 seizure records. Conversely, between the years of 2013 and 2014, the most significant decrease was observed; from 136 to 47 seizure records. Note any trends in illegal trade observed from the seizure data may be due to varying enforcement efforts over time, instead of shifts in demand or changes in illegal trade patterns.

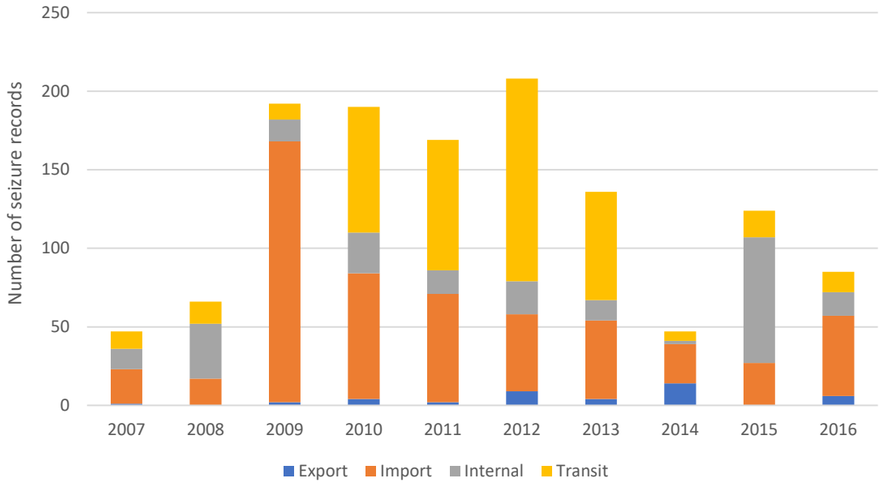


Figure 15

Total number of seizure records per direction of trade implicating Belgium between 2007 and 2016
Source: EU-TWIX database

Direction of trade

Of the 1,264 seizure records reported by Belgium, **44% (556) were carried out on import**, 34% (432) in transit, 19% (234) internally and 3% (42) on export. Of the 556 seizures carried out on import, Thailand, China and the USA were the main countries of export, accounting for 69% of all seizure records (Figures 16 and 17).

Figure 16

Countries of export for all seizures on import in Belgium, between 2007 and 2016.
Source: EU-TWIX database

Thailand was the main country of export for all seizures on import, involving a total of 182 seizure records. The main commodity seized from Thailand was live plants. China was the country of export for 104 seizure records, which mainly involved Traditional Chinese Medicines (TCM) and live plants. Notably, most seizures exported from China were reported between 2009 and 2013, with only five seizure records reported between 2014 and 2016. The USA were reported as the country of export for 99 seizure records, which mainly involved medicinals[20] that was seized in the mail. The majority of seizures implicating the USA as the country of export were reported in 2009 and 2016, accounting for approximately 72% of the dataset.

[20] *The term "medicinals" is used in this report to refer to medicinal products. These can be derived from plants and animals; animal-derived medicinals may refer to products such as rhino horn used for medicinal purposes, while plant derived medicinals are understood to also include health/food supplements and cosmetics*

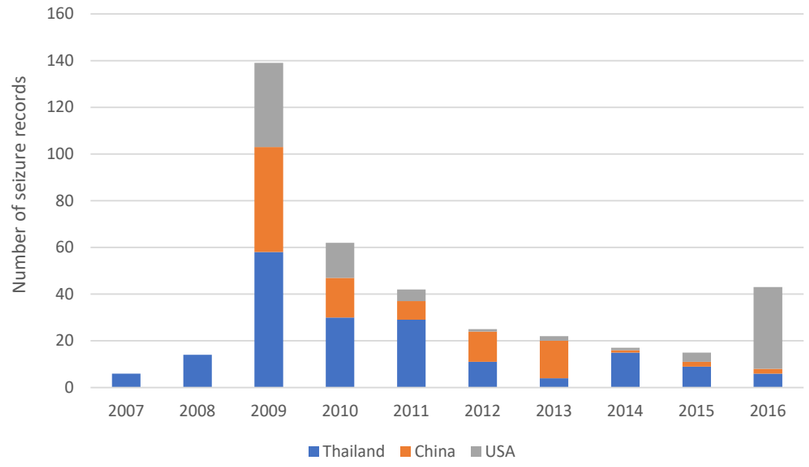


Figure 17

The main countries of export for seizures on import in Belgium between 2007 and 2016
Source: EU-TWIX database

A 2007 report, which analysed historical data between 1984 and 2006 on seizures of specimens listed in CITES and/or the EU Wildlife Trade Regulations implicating Belgium, found that African countries played an important role in the export of illegally traded wildlife to Belgium (Knapp and Affre, 2007). Notably, between 2000 and 2005, over a quarter (114 out of 405) of the seizures carried out in Belgium reported the DRC as country of origin. According to EU-TWIX data between 2007 and 2016, a total of 432 seizures were carried out in transit implicating Belgium and **92% of countries of export were African countries**. The top ten countries of export were Guinea, Liberia, the DRC, Burundi, Cameroon, Sierra Leone, Senegal, Ivory Coast, Congo and Uganda. Most of the seizures carried out in transit occurred between 2010 and 2013 (Figure 18).

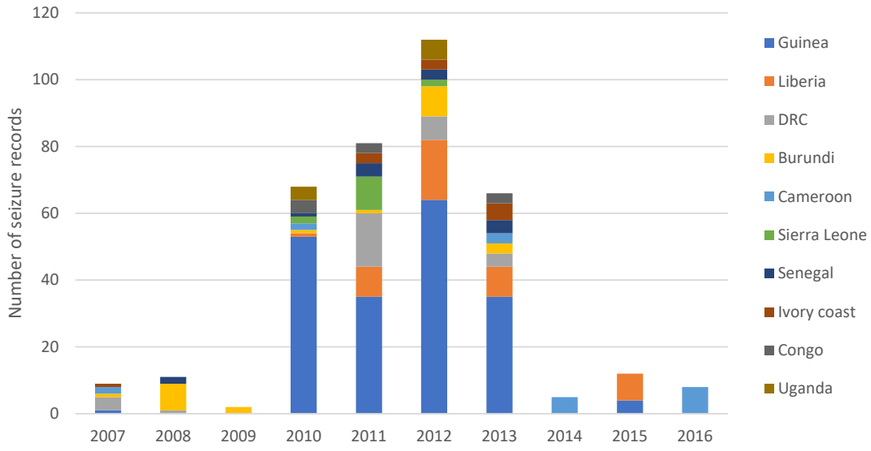


Figure 18

The top ten countries of export for seizures during transit in Belgium between 2007 and 2016
Source: EU-TWIX database

Guinea was the country of export for 44% (192) of seizure records carried out in transit through Belgium between 2007 and 2016, with the majority reported between 2010 and 2013. The main commodities seized in transit were ivory (68 seizure records), small and large reptile leather products (59 seizure records) and seahorse bodies (44 seizure records). A total of 10% (45) of seizure records in transit were exported from Liberia mainly involving ivory, reptile skin products, duiker skins and skulls, pangolin scales and seahorse bodies. The DRC was the country of export for 7% (32) of seizure records in transit which mainly involved ivory carvings.

For most of the seizure records (70%) reported in transit via Belgium, **China was reported as the country of destination** (Figure 19) with the majority of these taking place between 2010 and 2015. The main commodities seized in transit en route to China were:

- **ivory** (119 seizure records) involving 3,339 carvings and 9 elephant tusks;
- **small and large leather products** (83 seizure records) involving 410 specimens;
- **seahorse bodies** (57 seizure records) involving 10,179 specimens; and
- **pangolin scales** (21 seizure records) involving 706.5 kg of scales.

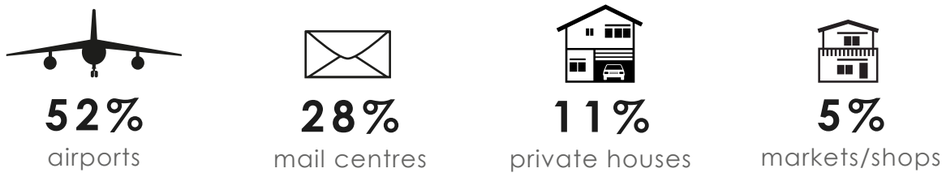
It is important to note that at the EU level, China has consistently been implicated as the country of destination for seizures on export and in transit through EU Member States (Mundy-Taylor 2013; EC, 2017b). An analysis of EU-TWIX data between 2007 and 2011, found that China was the country of destination in over half of seizure records (approximately 300 records) during this period. In Belgium, the main commodities involved in these seizures were reportedly elephant Elephantidae spp. ivory, seahorse *Hippocampus* spp., rhino Rhinocerotidae spp. horn and pangolin *Manis* spp. scales (Mundy-Taylor, 2013; EC, 2016c; EC, 2017b).

Figure 19

Destination of seizures in transit through Belgium, between 2007 and 2016.
Source: EU-TWIX database

Location of seizures

Based on the number of seizure records, over half were intercepted at airports (52%). The main reported airport where seizures took place was Brussels (Zaventem) airport. Seizures at mail centres were also frequent (28%), followed by seizures from private houses (11%), and market/shops (5%). Notably, very few seizures were conducted at sea ports, despite Antwerp being one of the major sea ports in Europe (EC, 2017a).



Main commodity groups

The main commodity groups seized in Belgium were reptile bodies, parts and derivatives[21], ivory[22], medicinals, live plants and mammals (live, bodies, parts, derivatives)[23] (Table 18).

COMMODITY GROUPS	NO. OF SEIZURE RECORDS
Reptile bodies, parts and derivatives	218
Ivory	216
Medicinals	204
Live plants	199
Mammals (live, bodies, parts and derivatives)	144
Live birds	69
Live reptiles	66
Seahorse bodies	65
Other	83
Total	**1.264**

Table 18

Main commodity types seized as reported by Belgium between 2007 and 2016.
Source: EU-TWIX database

Reptile bodies, parts and derivatives, and mammals (live, bodies, parts and derivatives) were among the top five commodity groups seized in all trade directions; on import, export, in transit and internally. Live plants accounted for the highest number of seizure records on import (193 seizure records) while seizures of ivory occurred in all trade directions.

[21] Includes BOD – body; CAP – carapace; CAR – carving; DER – derivative; LPL - large leather products; LPS - small leather products; SKI - skins SKU – skulls; WHO – whole body.
[22] Includes CAR – carving; IVP – ivory pieces; TUS – tusks.
[23] Includes BOD – body; BON – bone; BOP – pieces of bone; DER – derivative; FOO – foot; GAR – garment; HAI – hair; HOR – horn; LIV – live; LPL - large leather products; LPS - small leather products; MEA - meat, SCA - scales, SKE – skeleton; SKI – skins; SKU – skulls; TAI – tails; TEE – teeth; TRO – trophy; WAX – wax; WHO – whole body.

DIRECTION	COMMODITY GROUPS	NO. OF SEIZURE RECORDS
Import	Live plants	193
	Medicinals	181
	Reptile BPD*	61
	Other	45
	Mammals (live and BPD*)	39
Transit	Ivory	160
	Reptile BPD*	124
	Seahorse bodies	60
	Mammals (live and BPD*)	52
	Live reptiles	10
Internal	Live birds	60
	Mammals (live and BPD*)	49
	Live reptiles	48
	Other	25
	Reptile BPD*	21
Export	Ivory	14
	Reptile BPD*	12
	Live birds	7
	Mammals (live and BPD*)	4
	Other	**3**

Table 19

The top five commodity groups, listed in order of importance, by direction of seizure, as reported by Belgium, between 2007 and 2016.
**Note BPD - bodies, parts and derivatives*
Source: EU-TWIX database

Dried seahorses

3.3.1.2 US CITES seizures

According to US CITES seizure data, Belgium was implicated in 118 seizure records between 2007 and 2016; 116 seizure records in which Belgium was the re-exporter, and two seizure records where Belgium was reported as the country of origin.

Belgium was reported as the country of origin in two CITES seizure records between 2007 and 2016, both of which involved seizures of bird bodies:

- **In 2008**, one body of American flamingo *Phoenicopterus ruber* which had been exported from Belgium and was re-exported by France to the USA. The specimen was reported to be for personal purposes; and
- **In 2016**, one body of Black Crowned-crane *Balearica pavonina* which had originated from Belgium and was re-exported by the Netherlands to the USA. This specimen was reported to be for commercial purposes.

In terms of Belgium as a country of re-export, the number of seizure records reported to the CITES trade database fluctuated between 2007 and 2016, with 2012 the year in which the highest number of seizure records occurred (23 seizure records) (Figure 20).

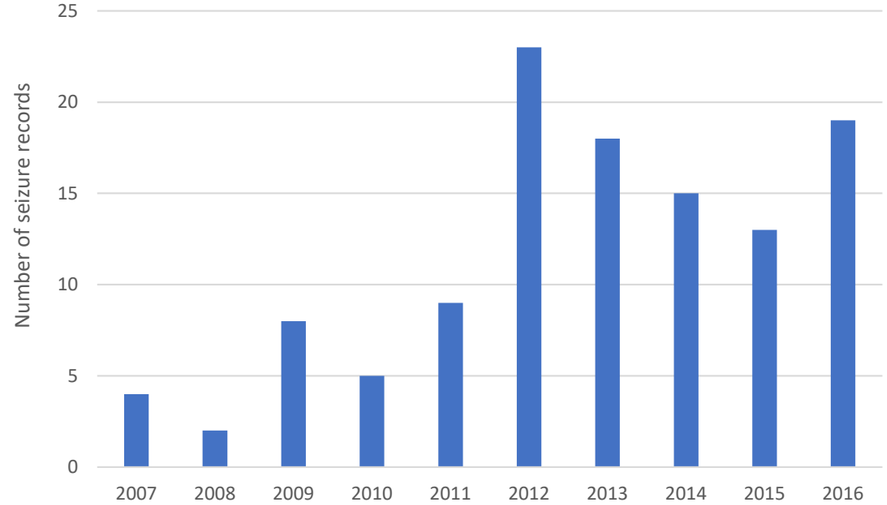


Figure 20

Number of US CITES seizure records implicating Belgium as the re-exporter of specimens, between 2007 and 2016.
Source: CITES trade database

The 116 seizure records implicating Belgium as the country of re-export, were reported either as number of specimens (94%), by weight (kg) (3%) and by volume (litres) (3%) (Table 20). Most seizure records involved specimens that were either for commercial or personal purposes (67% and 23%, respectively), followed by 7% for educational purposes, 2% for medicinal purposes and 1% for scientific purposes (Table 21). Species of the Class Reptilia (reptiles) were most commonly seized (40%) between 2007 and 2016, as based on the number of seizure records, followed by species of Mammalia (mammals, 29%) and Anthozoa (corals, 18%).

UNIT	NUMBER OF SEIZURE RECORDS	QUANTITY
Number of specimens	109	1,291
kg	4	5.612
litres	3	0.023

Table 20

Number of seizure records and quantity reported, as reported by unit, in seizure records implicating Belgium between 2007 and 2016
Source: CITES trade database

COMMODITY	PURPOSE					
	Commercial	Personal	Educational	Medicinal	Scientific	TOTAL
Reptile bodies, parts derivatives and live reptiles	32	13	1			46
Mammal bodies, parts derivatives	15	12	4	2	1	34
Corals	21					21
Bird bodies, parts, derivatives and live birds	7	1	3			11
Fish	2	1				3
Molluscs	1					1
TOTAL	78	27	8	2	1	116

Table 21

Number of seizure records as reported by commodity group and purpose in seizure records implicating Belgium between 2007 and 2016.
Source: CITES trade database

Seizure records reported by weight and volume were very low in comparison with those reported as number of specimens, and involved significantly less quantities, these were excluded from the analysis by commodity group below and are discussed separately.

The eight seizures reported for educational purposes are also excluded from the analysis below as these are typically destined for training purposes (for law enforcement). Consequently, the analysis in section 3.3.2 includes 108 seizure records. The eight seizure records reported for educational purposes mainly involved bird feathers, mammal teeth, mammal plates and skin pieces and reptile skin pieces, and all occurred in 2016.

3.3.2 Commodity groups

3.3.2.1 Reptiles

Reptile bodies, parts and derivatives[21]

EU-TWIX

A total of **218 seizure records involving 1,601 specimens of reptile bodies, parts and derivatives** were reported by Belgium between 2007 and 2016. 69% of the seizure records and the majority of specimens seized (1,424 specimens) reported the descriptive term small leather products (1,027) or large leather products (397) (Figure 21). The number of specimens seized fluctuated over the years with the highest quantity of specimens for both small and large leather products seized in 2016; 455 specimens and 121 specimens, respectively (Figures 22 and 23).

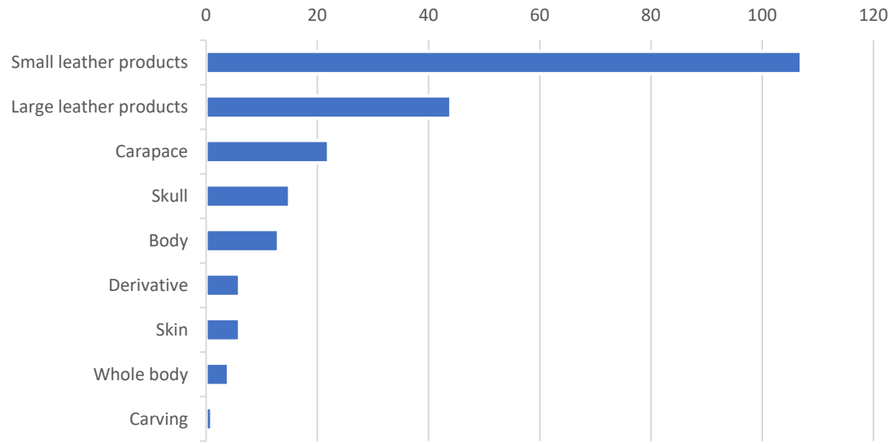


Figure 21

Number of seizure records involving reptile bodies, parts and derivatives, between 2007 and 2016.

The majority of specimens were species of Crocodylia spp. (53%), followed by Serpentes spp. (23%) with the remaining reported as Testudinata spp. and Sauria spp. (24%) (Figure 23). There were three significant seizures involving Serpentes spp.; one seizure in 2008 involving 194 small and large leather products, and in 2016, two seizures involving a total of 354 small and large leather products and skins, were reported.

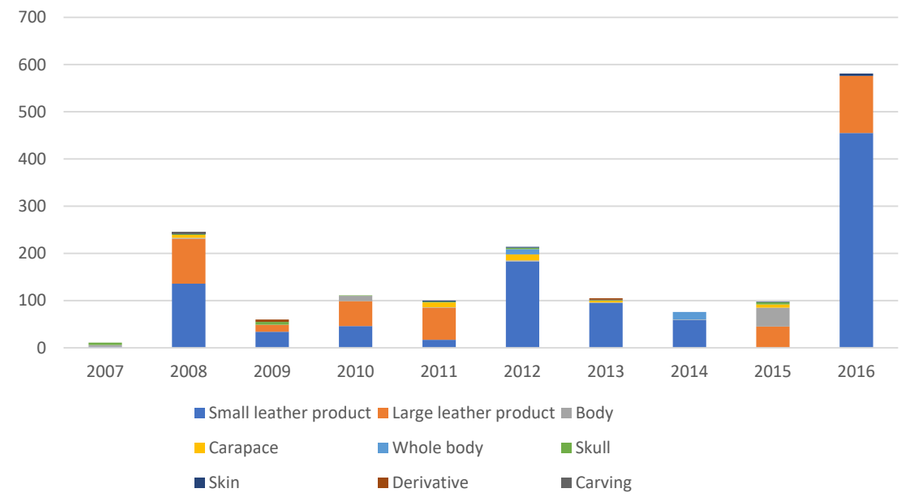


Figure 22

Number of specimens seized involving reptile bodies, parts and derivatives, between 2007 and 2016.
Source: EU-TWIX database

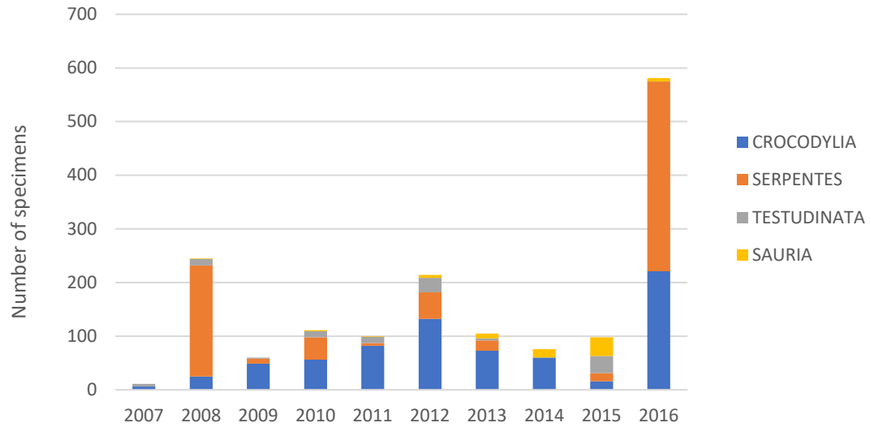


Figure 23

Number of specimens by taxonomic breakdown seized by Belgium between 2007 and 2016.
Source: EU-TWIX database

Based on the number of seizure records, reptile bodies, parts and derivatives were mainly seized in transit (124), followed by seizures on import (61), internally[24] (21) and on export (12) (Figure 22). Those seizures carried out in transit were mainly coming from African countries, predominantly Guinea, and going to China. However, based on the number of specimens seized in transit, the main countries of destination were Russia (581 specimens all seized in 2016), followed by China (435 specimens) and Italy (194 specimens, all seized in 2008) (Figure 24). Of the seizures carried out on import, 64% came from Asia, with Thailand reported as the top country of export. Notably, some of these seizures were for personal purposes which may indicate these were tourist seizures from individuals who were unaware of CITES requirements.

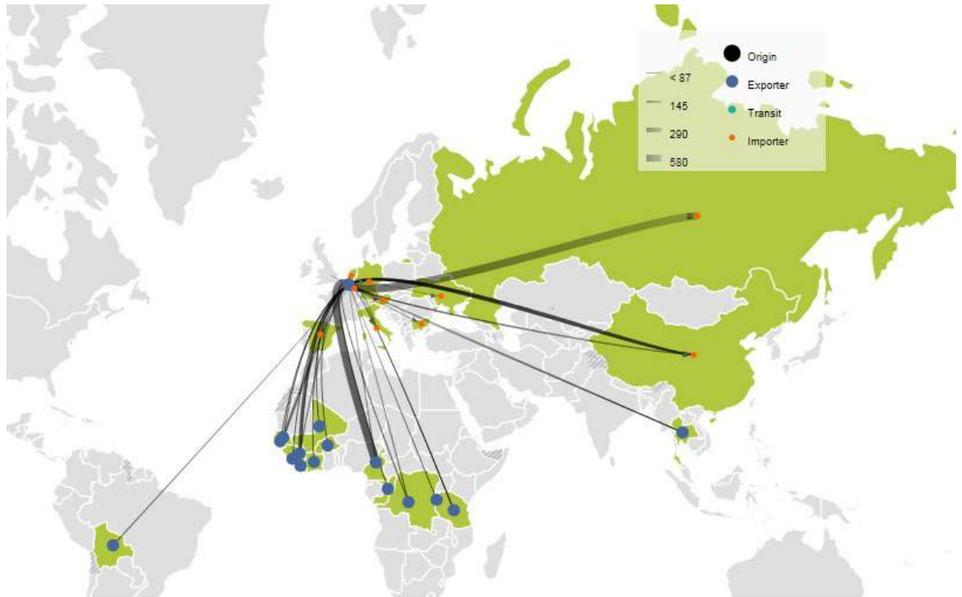


Figure 24

Countries of export and destination of seizures made in transit through Belgium between 2007 and 2016, as reported in number of specimens.
Source: EU-TWIX database

The main locations of seizures of reptile bodies, parts and derivatives were airports (148 records) and mailing centres (44 records) (Figure 25). Zaventem airport and its mailing centre was the primary location where seizures took place in Belgium. Notably, most seizures occurred due to lack of CITES documentation or invalid CITES permits.

[24] *Internally is defined as within the countries' borders.*

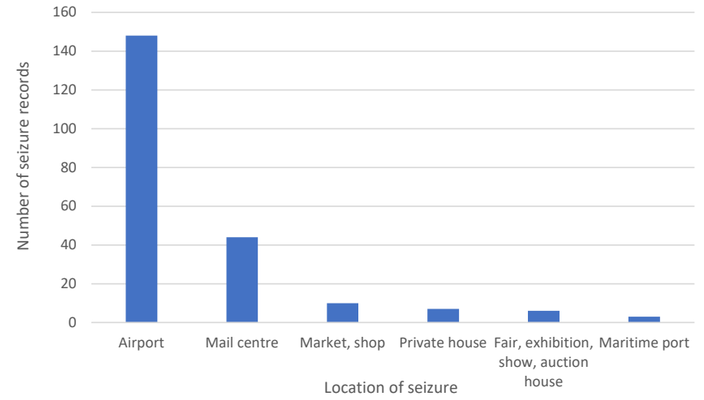


Figure 25

The locations of seizures in Belgium of reptile bodies, parts and derivatives, between 2007 and 2016.
Source: EU-TWIX database

Live reptiles

EU-TWIX

A total of **66 seizure records involving 1,241 specimens of live reptiles** were reported by Belgium between 2007 and 2016. The number of seizure records remained relatively stable across the years, however slightly fewer seizures occurred in 2008, 2009 and 2014. In terms of the number of specimens seized, there were three years where a significant number of live reptiles were seized: in 2012, 2013 and 2016 involving a total of 909 specimens (Figure 26). Notably, one seizure in 2016 involved 334 live specimens of Common Tortoise *Testudo graeca* which were confiscated from a private house.

The EU is known to be a major importer of live reptiles for the pet trade (Sina *et al.* 2016). While many imports of live reptiles into the EU are reportedly from captive-bred sources, the authenticity of these claims has been questioned and numerous sources document the use of breeding facilities to launder wild-caught specimens (Engler and Parry-Jones, 2007; Sollund and Maher, 2015). According

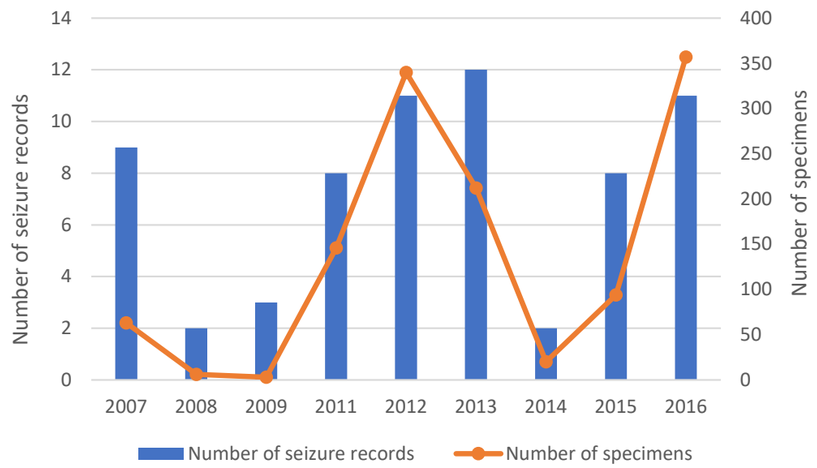


Figure 26

Number of seizure records and number of specimens of live reptiles seized by Belgium between 2007 and 2016.
Source: EU-TWIX database

to an analysis of EU-TWIX data between 2007 and 2011, there were over a 1,000 seizure records in EU Member States involving 9,000 live reptiles with the most common taxonomic group seized being turtles/tortoises (Mundy-Taylor, 2013). A similar trend is identified for Belgium between the years of 2007 and 2016; of the 32 different species of reptiles seized, *T. graeca* was the most frequently seized species both in terms of number of seizure records (29%, 19 records) and number of specimens; (42%, 525 specimens). The majority of seizures took place in 2011 and 2016, all of which were internal seizures of specimens confiscated from private houses: in 2011, 144 specimens were seized and in 2016, a total of 338 specimens were seized. Media reports also confirm ongoing illegal trade in *T. graeca*. In 2017, Belgian authorities seized 337 live *T. graeca* in Kortrijk that had been illegally imported by a man of Moroccan origin.

In terms of the number of seizure records, apart from the above-mentioned seizures involving *T. graeca*, the majority involved Hermann's Tortoise *Testudo hermanni* (9 seizure records, 70 specimens), followed by Boa Constrictor *Boa constrictor* and Python *P. regius*, each with 3 seizure records, involving 11 and 23 specimens, respectively. In terms of the number of specimens seized, Johnston's Chameleon *Chamaeleo johnstoni* (172 specimens) and Home's Hinge-back Tortoise *Kinixys homeana* (99 specimens) were predominantly seized, after *Testudo graeca*.

The majority of seizures were internal: 72% of seizures (48 records) involving 628 specimens. A total of 15% of seizures (10 records) involving 366 specimens were seized in transit, followed by those seized on import (6 records involving 237 specimens) and (re-)export (2 records involving 10 specimens). Of the 633 specimens seized in transit or on import, Uganda was the main country of export in terms of number of specimens, involving 204 specimens accounting for 34%. All these specimens were seized in transit in 2012, to Germany. Togo was also a main country of export, with 171 specimens (28%) seized on import. Other countries of export included Burundi, Tanzania and Cameroon (Figures 27 and 28). At the EU level, Morocco and Tunisia have emerged as important countries of export (Mundy-Taylor, 2013; Sina *et al.* 2016) and Togo and Tanzania have also been identified as prominent exporters of live reptiles to the EU (Mundy-Taylor, 2013; Sina *et al.* 2016).

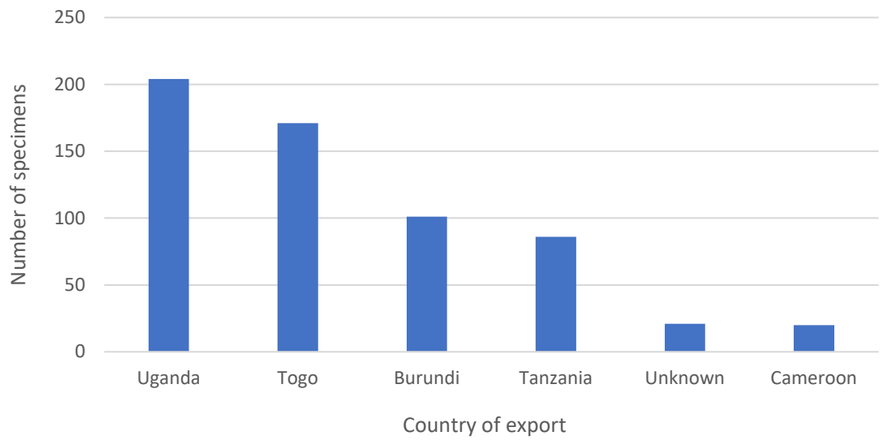


Figure 25

Countries of export of specimens of live reptiles seized in transit or on import by Belgium between 2007 and 2016, based on number of specimens.
Source: EU-TWIX database

All records which reported the country of destination of those seizures conducted in transit were EU Member States including Germany, the Czech Republic, the Netherlands and Austria (listed in order of importance, based on number of specimens) (Figure 28).

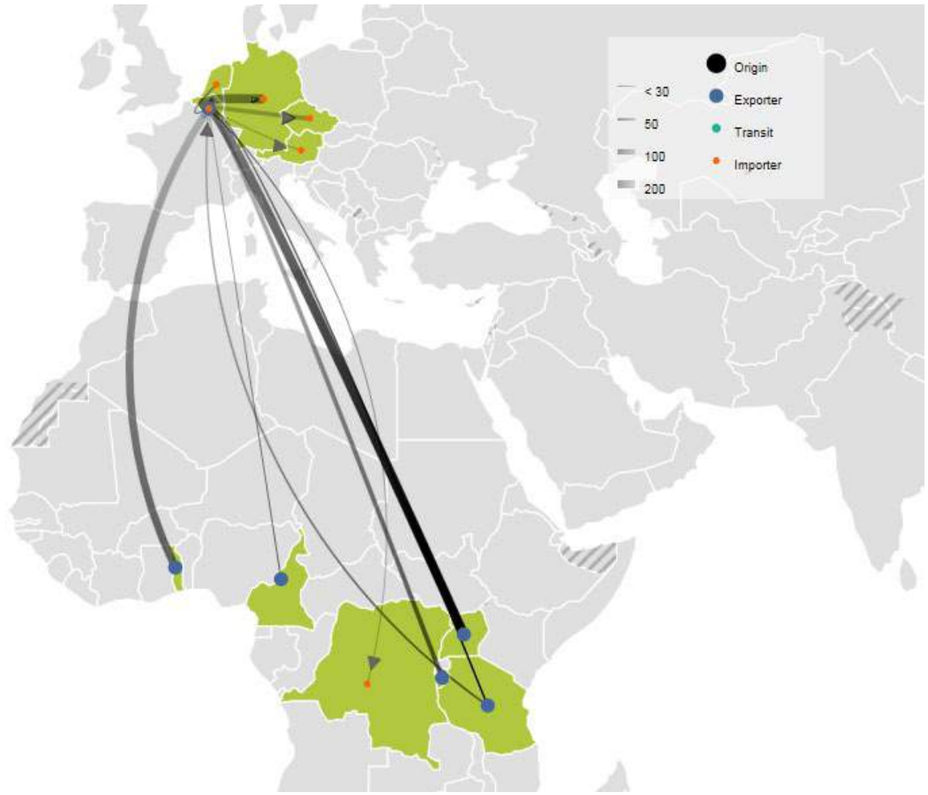


Figure 28

Countries of export and import of those seizures of live reptiles in transit through Belgium between 2007 and 2016, based on number of specimens.
Source: EU-TWIX database

Of the records that reported the source of the specimens[25], the majority (44%, 550 specimens) stated that the specimens were wild-sourced. Only one seizure record involving two specimens reported the source as captive-bred.

Over half of the seizure records (53%) were reportedly for commercial purposes involving 653 specimens. A total of 46% of seizure records (572 specimens) recorded the purpose as unknown, and the remaining seizures were for personal use and zoological organisations, totalling 16 specimens.

In terms of the location where seizures took place, based on the number of seizure records and the number of specimens, the majority of specimens were confiscated from private houses (35 seizure records involving 594 specimens). Airports were also a main location where seizures took place

[25] *It is normal for seizure data to lack information on the source code. See Section 2 (Methodology) on limitations of the dataset.*

with a total of 16 seizures involving 490 live reptiles between 2007 and 2016. Markets/shops and mail centres accounted for 13 seizure records involving 154 specimens (Figure 29). Notably, most seizures occurred due to lack of CITES documentation or invalid CITES permits. However, some of the seizures in transit occurred due to breach of International Air Transport Association (IATA) Regulations[26].

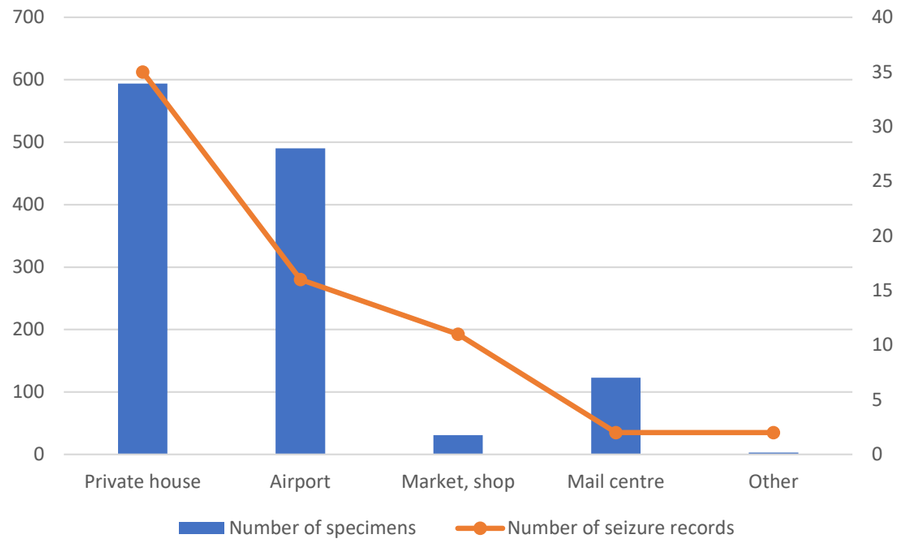


Figure 29

Location of seizures of live reptiles reported by Belgium between 2007 and 2016.
Source: EU-TWIX database

Reptile bodies, parts, derivatives and live reptiles[27]

US CITES seizure data

Between 2007 and 2016, a total of 45 seizure records (all purposes excluding educational) involving 510 specimens of reptile bodies, parts, derivatives and live reptiles were seized having been re-exported from Belgium. All seizures were for either commercial (96%) or personal (4%) purposes. Apart from 2012 where 212 specimens were seized, the quantity of specimens seized remained relatively stable, with no more than 98 specimens seized in one year (Figure 30).

[26] *IATA Regulations are the worldwide standard for transporting live animals by commercial airlines. Whether it is a pet, an animal transported for zoological or agricultural purposes or for any other reason, the objective of the Live Animal Regulations (LAR) is to ensure all animals are transported safely and humanely by air.*
[27] *According to the CITES trade database guide (CITES, 2013): CAR – carvings; GAR – garments; LPL – large leather products; LPS - small leather products; LIV – live; SHE – shells; SKP - skin pieces;*

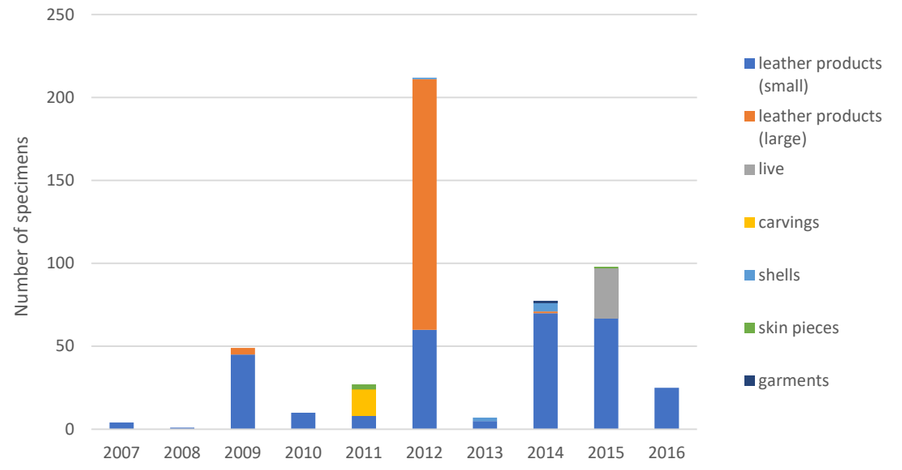


Figure 30

Number of specimens seized of reptile bodies, parts, derivatives and live reptiles, per commodity type as re-exported from Belgium, between 2007 and 2016.
Note: reported seizures of carvings involved the species Alligator mississippiensis
Source: CITES trade database

According to US seizure data, the majority of specimens seized were **small or large leather products**, accounting for a total of 451 specimens (88%), most of which were made from species of **Pythonidae spp.** (332 specimens) and **Alligatoridae spp.** (96 specimens) (Table 22). Of the small and large leather products made from Pythonidae, the main species was Reticulated python ***Python reticulatus*** (310 specimens) and Burmese Python *Python bivittatus* (19 specimens), and those made from Alligatoridae spp. were either *C. crocodilus fuscus* (60 specimens) or *Alligator mississippiensis* (36 specimens). Other species included *Crocodylus niloticus* (eight specimens) and *Varanus niloticus* (five specimens).

COMMODITY TYPE	QUANTITY	MAIN FAMILIES (% OF TOTAL)
Small leather products	295	Pythonidae (61%); Alligatoridae (33%)
Large leather products	156	Pythonidae (97%); Varanidae (3%)
Live	30	Chamaeleonidae (100%)
Carvings	16	Alligatoridae (100%)
Shells	8	Cheloniidae (88%)
Skin pieces	4	Varanidae (75%)
Garments	1	Pythonidae (100%)
Total	**510**	

Table 22

Number of specimens seized of reptile bodies, parts, derivatives and live reptiles, per commodity type between 2007 and 2016.
Source: CITES trade database

Thailand was the main country of origin for all seized small and large leather products re-exported from Belgium, accounting for 202 specimens. It should be noted that all the 202 small and large leather products were seized in 2012, and all involved the species *Python reticulatus*. Indonesia was also a main country of origin of leather products seized, accounting for 90 specimens. While these seizures occurred between 2009 and 2014, similarly to Thailand, all specimens were of *P. reticulatus*. Other main countries of origin included Colombia, which only involved species of *Caiman crocodilus fuscus*, followed by **the USA** (only involved seizures of *Alligator mississippiensis,* and Viet Nam (mainly involving *Python bivittatus*) (Figure 31).

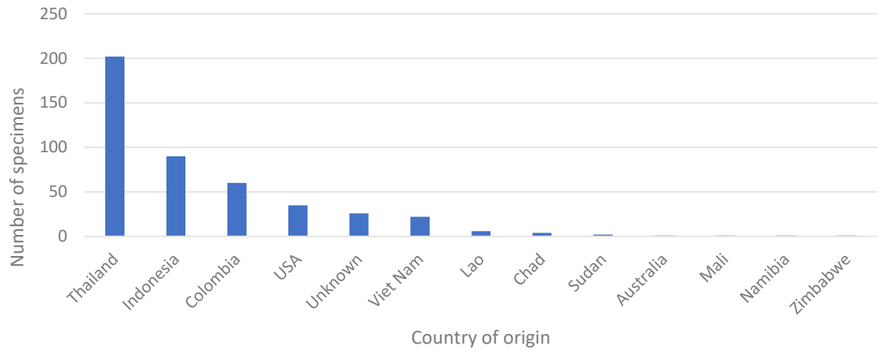


Figure 31

Number of small and large leather products seized, as re-exported from Belgium, between 2007 and 2016
Source: CITES trade database

Other main commodities seized include live specimens, carvings, shells, skin pieces and garments. The main seizures were:

- A total of 30 live specimens of Panther Chameleon *Furcifer pardalis* seized in 2015, all of which originated from the Netherlands;
- 16 carvings of *Alligator mississippiensis* seized in 2011, all of which originated from the USA;
- Between 2012 and 2014, a total of eight shells of Cheloniidae spp. seized (country of origin unknown).

CONCLUSION

Leather products made from CITES-listed species of crocodile, pythons and alligator are consistently the top commodities seized in Belgium, according to both EU-TWIX and US seizure data.

Similar trends were identified by Knapp and Affre (2007) who reported that of the 12 most seized CITES-listed species between 2005 and 2007, eight were reptile species including CITES-listed species of crocodile and snake (particularly *Crocodylus niloticus, Caiman crocodilus* and *Python regius).*

While Thailand is reportedly the main country of origin of these specimens, according to both EU-TWIX and US seizure data, trade trends reveal that Belgium is also frequently used as a transit hub to smuggle these products, predominantly from Africa to Asia and Russia. It should be noted that the main reason for leather products being confiscated is due to the lack of CITES documentation or invalid permits.

This is likely because many of these seizures from tourists who are unaware of the permits required to export/import CITES listed species. Seizures of other reptile commodities by Belgium are less significant than those made of leather products, however EU-TWIX data and external information on seizures occurring in 2017 reveal the ongoing domestic/EU market for live reptiles, likely destined for the commercial pet trade. Species of live tortoises and chameleons are the most commonly seized within Belgium, however US seizure data do indicate that some species of chameleons are being sent from Belgium to the USA indicating that the **domestic/EU market may be fuelling the international pet trade.**

Python leather boot

IVORY

Part of 52 kg of ivory seized at Brussels airport

4,318
specimens of elephant tusks, carvings and pieces

3.1.2.2 Ivory

Historically, Belgium played an important role in the international ivory trade due to its links with former African colonies and the country is believed to still have significant stockpiles.

While Belgium no longer appears to be involved in the production of worked ivory products (Knapp and Affre, 2007), ivory objects can still be found for sale throughout Belgium (Knapp and Affre, 2007; IFAW, 2014; Mundy-Taylor, 2014). According to research conducted on the illegal trade of CITES listed species in Belgium between 1984 and 2006, elephant ivory was the most frequently seized CITES-listed product in Belgium between this time period, both in terms of number of seizures and number of specimens seized (Knapp and Affre, 2007). The authors noted that while data indicated that the volume of ivory seized and the number of seizures of ivory in Belgium had steadily declined since 1990, when all elephant populations were listed in Appendix I of CITES, Belgium was still considered to be an importamt market, particularly due to links with its former African colonies and protectorates (Knapp and Affre, 2007). Market surveys carried out by the latter authors in 2006 over a five day period found 353 objects of elephant ivory in 24 locations in three cities. Jewellery and statuettes represented more than half of the objects found, most were declared by vendors as antique. In comparison to other EU Member State ivory markets at that time, the Belgian market was found to be less significant (e.g. Martin and Stiles recorded 16,444 objects made of ivory for sale in Germany in 2005).

At the EU level there has been an increase in export of pre-Convention raw ivory from the EU to Asia in recent years. As a result, the EU Action Plan against Wildlife Trafficking[28] called on the European Commission to adopt a guidance document suspending the export of raw ivory from the EU. This was adopted in May 2017 (EC, 2018c). With a view to examining if further restrictions on ivory trade would be warranted at the EU level to ensure that the EU domestic ivory market does not contribute to elephant poaching or illegal ivory trade, the European Commission carried out a public consultation between 15th September and 8th December 2017. This consultation aimed at gathering evidence, compile information and views on ivory trade and ivory trafficking within the European Union (EU) as well as on the priorities that the EU should follow in its approach against ivory trafficking. The results of this consultation are to be published in 2018.

EU-TWIX

Ivory continues to be a main commodity seized by Belgium, with a total of 216 seizure records involving 4,318 specimens of elephant tusks, carvings and pieces of ivory reported between 2007 and 2016. Ivory carvings were the main commodity seized by Belgium (88%, 191 seizure records), followed by tusks (11%, 23 seizure records) and ivory pieces (1%, 2 seizure records). The majority of seizures took place between 2010 and 2013, with fewer than 10 seizures occurring in all other years. Notably, seizures involving ivory have significantly decreased since 2013 (Figure 32) which correlates with Knapp and Affre's (2007) findings that seizures of ivory had steadily decreased since 1990. This indicates that the volume of ivory seized and the number of seizures of ivory in Belgium have steadily declined since 1990, when all elephant populations were listed in Appendix I of CITES. However, it is important to note that these declines may be due to changing modus operandi used by traders to avoid detection and alternative trade routes being used (EC, 2016c; EC, 2017b).

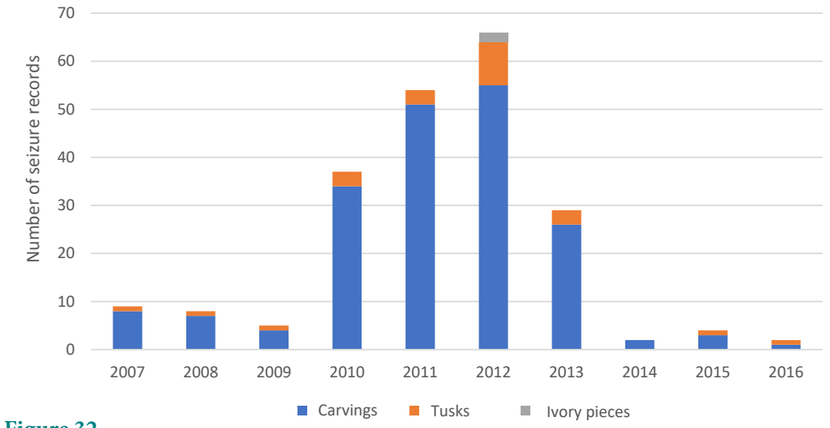


Figure 32

Total number of seizure records involving ivory, as reported by Belgium between 2007 and 2016.
Source: EU-TWIX database

3,615
items were seized in transit through Belgium

166
seizure records occured at airports

Guinea
was the leading country of export

Ivory was mainly seized in transit through Belgium (74%, 160 seizure records) which involved a total of 3,615 items with a reported weight of 148 kg. According to Knapp and Affre (2007), a significant number of the transit cases identified in their analysis between 1989 and 2005 comprised raw or semi-worked ivory moving through Belgium to ivory manufacturers in other locations for commercial purposes. It was summarised that this trade was most likely transiting through Belgium because of air routes linking African ivory producing countries with Asian ivory manufacturing and consuming markets.

Seizures on import (12%, 26 seizure records involving 602 specimens), export (6%, 14 seizure records involving 46 pieces weighing 109 kg reported between 2009 and 2014) and internal seizures (7%, 16 seizure records, involving 55 specimens) were also reported between 2007 and 2016. In 2012, 100 kg of ivory (mostly tusks) were seized from a private home in Belgium. Nearly all seizures occurred at airports (166 records) and mail centres (31 records). These seizures were mainly made at Zaventem airport. Other seizure locations included private houses, markets/shops, river ports or at a fair/exhibition/auction house. Notably, most seizures occurred due to lack of CITES documentation or invalid CITES permits accompanying the specimens.

The main countries of export for seizures of ivory in transit and on import were within the African continent (Figure 33). Guinea was the leading country of export of ivory in terms of number of seizure records (68) and number of ivory specimens (2,033 specimens).

[28] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:87:FIN

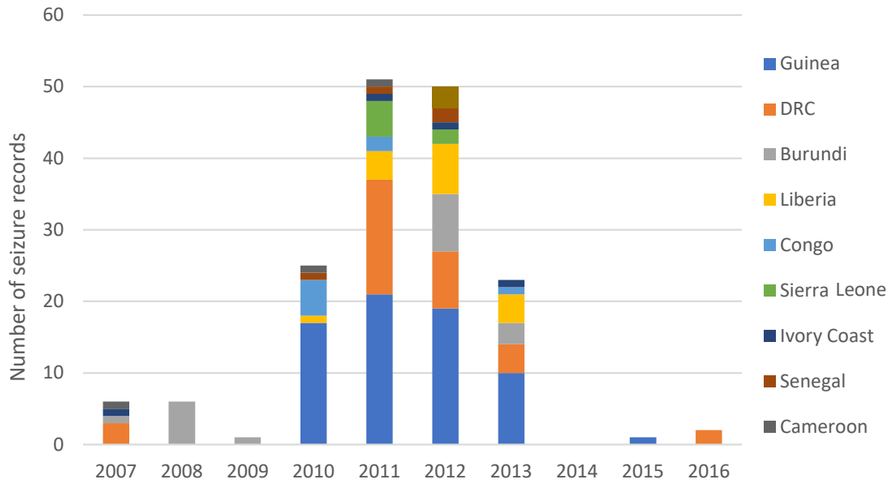


Figure 33

Number of seizures of ivory in transit and on import for the top countries of export as reported by Belgium between 2007 and 2016
Source: EU-TWIX database

The leading country of **destination of seizures in transit was China** accounting for 119 seizure records involving 3,339 ivory carvings and 9 tusks, totalling a reported weight of 57 kg (Figures 34 and 35). Furthermore, Belgium also reported seizing a total of 46 ivory specimens with reported weight of 109 kg on export, between 2007 and 2016. The main countries of destination were Viet Nam, Australia and Israel.

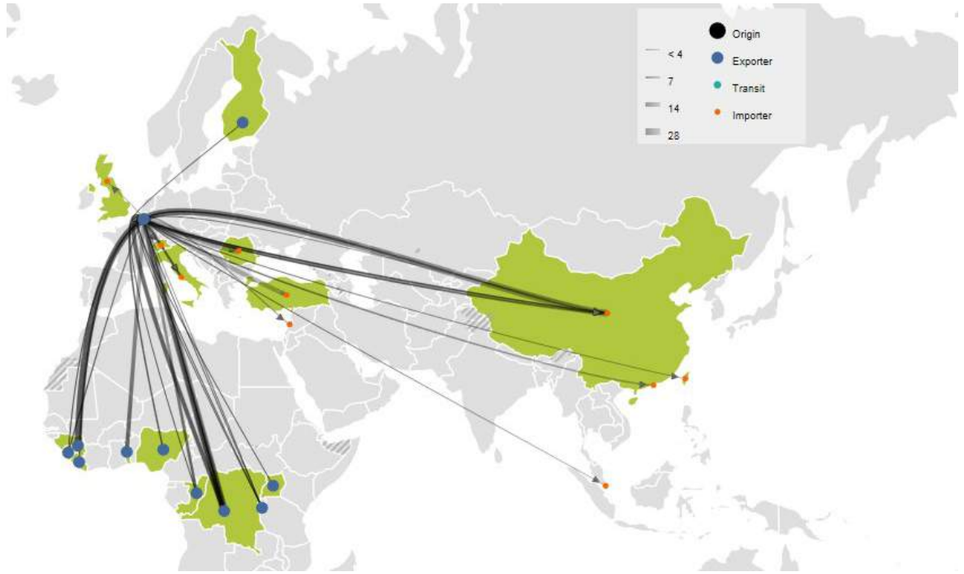


Figure 34

Trade routes of ivory seized in transit through Belgium, in terms of weight (kg) between 2007 and 2016
Source: EU-TWIX database

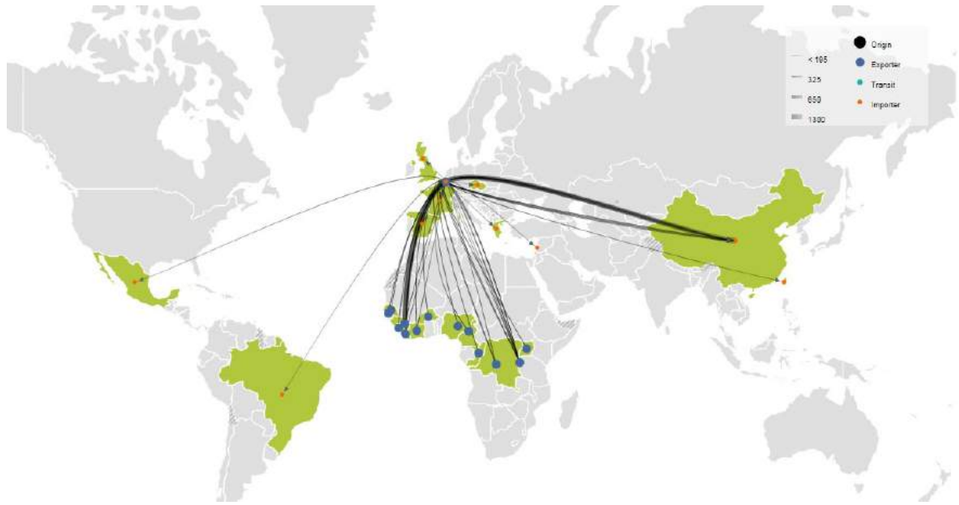


Figure 35

Trade routes of ivory seized in transit through Belgium, in terms of number of specimens between 2007 and 2016.
Source: EU-TWIX database

Herd of African Elephants *Loxodonta africana*

According to the TRAFFIC database, 10 records involving ivory were reported by other countries implicating Belgium between the years of 2009 and 2015. In total, these seizures involved 154 specimens and an additional 36.95 kg of ivory carvings, tusks and pieces of raw ivory. China reported 90% of these seizures with Thailand reporting the remaining 10% of seizures, based on the number of records reported and the number of specimens involved. The following specimens were seized:

IVORY CARVINGS

138
specimens and an additional 36.95 kg

via mail
and postal parcels were the preferred modes of transport

- Seizures of ivory carvings involved 138 specimens and an additional 36.95 kg. The method of transport used to ship these specimens was either by air or via mail in postal parcels. These specimens were all seized in China, specifically in Beijing (4 records), the Tianjin Municipality (2 records) and Inner Mongolia (1 record). One record involved Customs seizing 119 ivory carvings in May 2010 which were found during a routine inspection at a postal depot in Tianjin. The specimens were shipped via mail from Belgium and confiscated from the perpetrator. Another record reported the seizure of six ivory carvings in April 2015. Customs officers in Hohhot in northern China's Inner Mongolia autonomous region carried out an inspection using X-ray machinery on a postal parcel and raised suspicions after noticing mis-labelling on the accompanying document in comparison to what the specimens looked like in the X-ray image. Within the postal parcel, Customs officers discovered chocolate and the 6 ivory carvings weighing a total of 0.65 kg.

ELEPHANT TUSKS

16
elephant tusks were seized

- A total of 16 elephant tusks were seized which were reported in two separate records. One seizure took place in Bangkok, Thailand in December 2013 where 15 elephant tusks were confiscated after being shipped via air transport from Belgium. The other record noted the seizure of one elephant tusk in Shanghai, China in June 2009 which was discovered in the mail.

RAW IVORY

- One record reported the seizure of pieces of raw ivory in April 2015, however no reported quantity or weight was provided. These specimens were discovered in Hohhot in northern China's Inner Mongolia autonomous region when Customs officers used X-ray machinery to scan a package that looked suspicious.

US CITES seizure data

Elephant ivory was a main commodity reportedly seized by the USA (re-)exported from Belgium, involving a total of 52 specimens (29 ivory carvings, 12 ivory pieces and 10 elephant tusks) seized between 2007 and 2016. Some records did not report the county of origin, however of those that did, all specimens originated from African countries including Namibia and Congo. All specimens were for commercial (62%) or personal purposes (38%).

CONCLUSION

Both EU-TWIX and US seizure data highlight the use of **Belgium as a transit hub in the shipment of elephant ivory, particularly of ivory carvings but also raw ivory**, from Africa to Asia. As highlighted by Knapp and Affre (2007), this is likely due to the country's strong links with its former African colonies and protectorates which facilitate this movement of goods. While the DRC was highlighted as one of the main exporting countries of ivory by Knapp and Affre (2007), which also correlates with EU-TWIX data, this dataset also reveals that Guinea and Liberia are also responsible for shipping large quantities of illicit elephant ivory to Belgium. While illegal trade data seem to indicate a decline in the number of seizures since the 1990s, the illicit trade of elephant ivory involving EU Member States remains a priority within the EU (EC, 2016a).

MEDICINALS

Aloe *Aloe ferox*

59,155
medicinals were reportedly seized

3.1.2.3 Medicinals
EU-TWIX

A total of 204 seizure records involving 59,155 specimens were reported by Belgium between 2007 and 2016[29]. It should be noted that for medicinal products, if the label or packaging states that the ingredients include an Annex listed species under the EU Wildlife Trade Regulations, the product shall be taken as containing that particular species (Article 2(t) Regulation (EC) No 338/97), and therefore may be seized without any DNA testing beforehand.

Of these 204 seizure records, 15 reported the weight, amounting to ca. 22 kg and five records reported the volume, amounting to ca. 3 litres of medicinals. The majority of seizure records (87%) involved seizures of plant-derived medicinals, compared with 13% of seizure records which involved seizures of animal-derived medicinals (Figure 36). Notably, most seizures of both plant- and animal-derived medicinals occurred due to lack of CITES documentation.

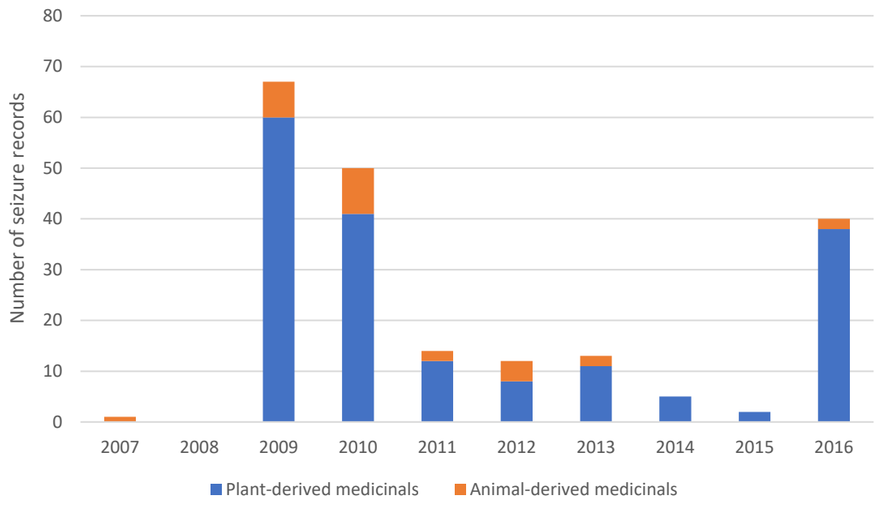


Figure 36

Number of seizure records involving plant- and animal-derived medicinals reported by Belgium between 2007 and 2016. No seizures reported in 2008
Source: EU-TWIX database

[29] *It should be noted that examining data on medicinals is challenging due to the difference in reporting methods i.e. some products are reported as specimens, others as pills, packets or jars etc. As a result, the total quantity and volume of medicinals in trade is unknown and therefore not provided in the discussion.*

Plant-derived medicinals
EU-TWIX

Between 2007 and 2016, Belgium reported 177 seizure records involving plant-derived medicinals. No seizures occurred in 2007 and 2008.

The main species involved in Belgium's seizures of plant-derived medicinals were Hoodia *Hoodia spp.*, Aloe *Aloe ferox*, Saussurea *Saussurea spp.*, African Cherry *P. africana*, Orchid *Orchidaceae spp.*, Cacti *Cactaceae spp.*, Desert Broomrape *Cistanche deserticola* and American Ginseng *Panax quinquefolius* (Figure 37). A total of 90% of seizures were made on import into Belgium, with 87% of these coming from either the USA (89 seizure records) or China (49 seizure records). Some of these seizures (25%) were for personal purposes, however for the remaining 75% the purpose of the specimens was unknown. It is important to note that neither of these countries are range States for the majority of these species. Belgium only reported seizures from the USA in 2009 and 2016 and seizures from China declined between 2009 and 2014, with no seizures reported in 2015 and 2016.

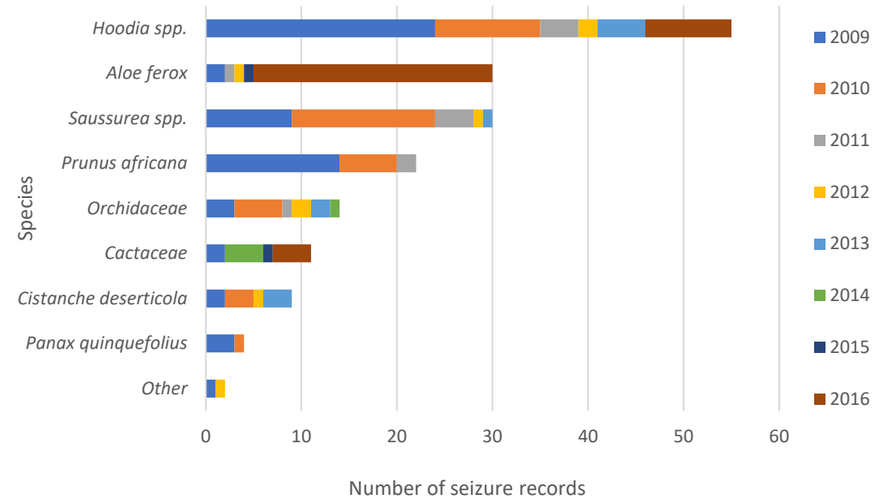


Figure 37

Number of seizure records of plant-derived medicinals as reported to genus or species level between 2007 and 2016
Source: EU-TWIX database

Seizures of plant-derived medicinals primarily occurred in mail centres (103 records) and at airports (63 records). The remaining 11 seizure records were reportedly made in private houses.

Animal-derived medicinals
EU-TWIX

Between 2007 and 2016, Belgium reported 27 seizure records involving animal-derived medicinals, with no seizures reported in 2008, 2014 and 2015. According to Mundy-Taylor (2013), EU seizures involving animal-derived medicinals between 2007 and 2011 fluctuated between 80 and 120 seizure records annually, with Belgium identified as one of the main transit points for the illegal trade in medicinal products containing seahorse.

The main species reportedly seized in Belgium in this analysis were *Hippocampus spp*. (nine records), followed by Saiga Antelope *Saiga tatarica* and Musk Deer *Moschus spp*. (five records each) (Figure 38). Most seizures were conducted on import (81%, 22 records) into Belgium, while only three seizure records were reported internally and two in transit. The majority of specimens were seized in mail centres (52% of records) and at airports (30%). China was the leading country of export of animal-derived medicinals imported by Belgium (17 records). Viet Nam (two records) and South Africa (one record) were also reported exporters. For two seizure records, the country of export was reported as unknown. Notably, while the USA was a major exporter of plant-derived medicinals to Belgium, the USA was not indicated as the country of export in any seizures of animal-derived medicinals.

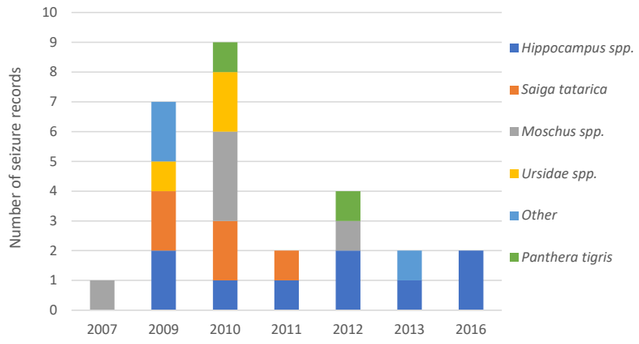


Figure 38

Number of seizure records involving animal-derived medicinals between 2007 and 2016.
Source: EU-TWIX database

72,589
live plants were seized by Belgium

3.1.2.4 Live plants
EU-TWIX

A total of 199 seizure records involving 72,589 live plants were reported by Belgium between 2007 and 2016. The number of seizure records remained relatively stable across the years, apart from a sharp increase in 2009 from eight seizure records to 71.

There was also a significant increase in the number of specimens seized, from 278 specimens in 2009 to 71,171 specimens of live plants in 2010 (Figure 39). This significant increase was due to one seizure that took place at the airport of Bierset where 69,120 live cacti were seized. The total number of seizures reported involving all species started to decline after 2013, falling from 22 seizure records involving 723 specimens in 2013 to nine records involving nine specimens in 2014.

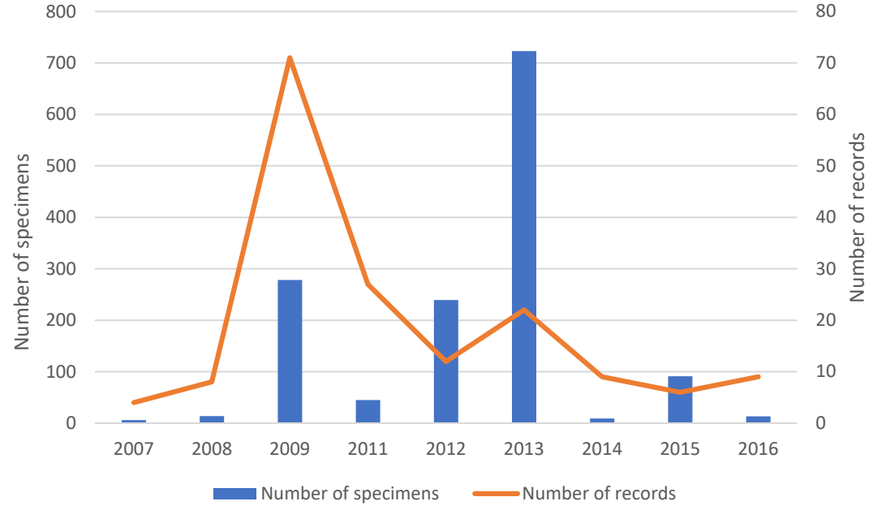


Figure 39

The number of seizure records and number of specimens of live plants reportedly seized by Belgium between 2007 and 2016. Note: Data from 2010 have been excluded from this figure to allow for a more meaningful analysis of the other years of reported trade. In 2010, a significant number of specimens were seized totalling 71,171 live plants.
Source: EU-TWIX database

Seizures made in transit (involving a total of eight seizure records) accounted for 98% of live plants seized. This is due to one seizure in 2010 involving a total of 69,120 cacti en route from Ethiopia to the Netherlands which were confiscated due to lack of CITES documentation.

The main species reportedly seized between 2007 and 2016 were Orchidaceae spp. and Cactaceae spp.; 150 seizure records involving 658 orchids, and 35 seizure records involving 71,819 live cacti, respectively. For seizures of Cactaceae spp., there were two years, 2010 and 2013, in which a high number of specimens were seized; 71,081 specimens in 2010 (see above) and 603 specimens in 2013. For seizures of Orchidaceae spp., 97% were seized between 2009 and 2013.

Thailand, Ethiopia, Plurinational State of Bolivia and China were the leading countries of (re-)export; Thailand was the country of (re-)export for 136 seizure records, mainly involving orchids, while Ethiopia, Bolivia and China were responsible for (re-)exporting larger numbers of specimens; 69,120, 1,952 and 632 specimens (Figure 40).

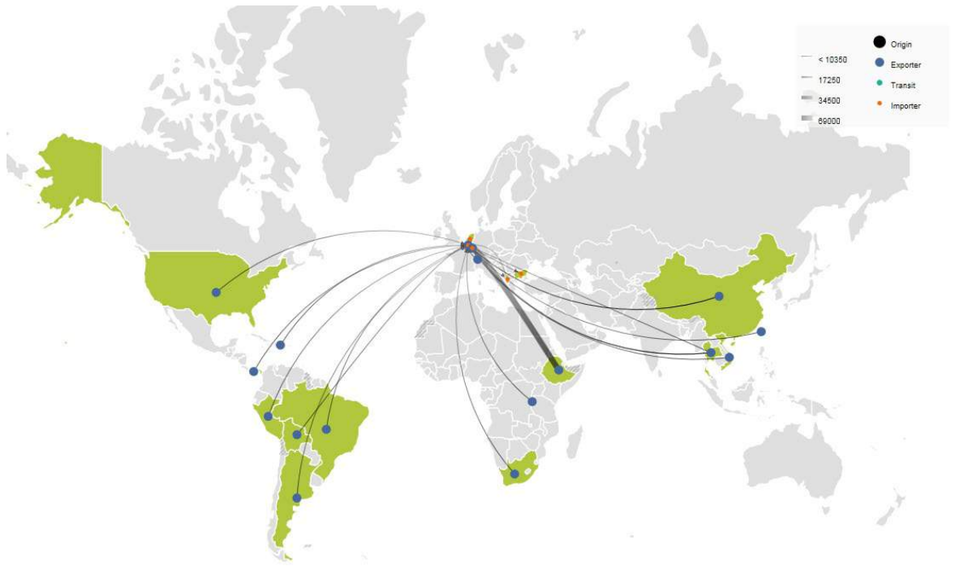


Figure 40

Export and destination locations of seizures of live plants as reported by Belgium between 2007 and 2016, based on number of specimens.
Source: EU-TWIX database

Seizures were made in either **mail centres** (106 records) or **airports** (93 records). Based on the number of specimens seized, airports were the main location for seizures to take place, however this was due to a single seizure (involving a total of 69,120 cacti). Notably, most seizures occurred due to lack of CITES documentation.

MAMMALS

Unidentified pangolin for sale

1,157 kg
of mammal bodies, parts and derivatives seized

3.1.2.5 Mammals

Mammal bodies, parts and derivatives and live mammals[30]

EU-TWIX

Between 2007 and 2016, Belgium reported 144 seizures involving 1,819 specimens with all seizures reporting a total of 1,157 kg of mammal bodies, parts and mammal bodies, parts and derivatives and live mammals. The number of seizure records remained relatively stable across the years, aside from a significant increase from 2014 to 2015, from six to 44 records (Figure 41).

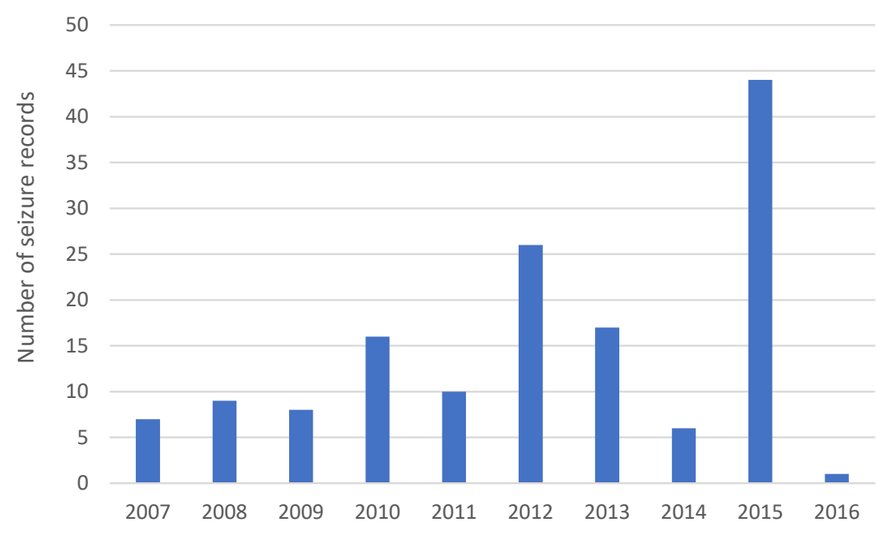


Figure 41

Number of seizure records reported by Belgium involving mammal BOD and live mammals, between 2007 and 2016.
Source: EU-TWIX database

[30] *Includes: BOD – body; BON – bone; BOP – pieces of bone , DER – derivative; FOO – food; GAR – garment; HAI – hair; HOR – horn; LIV – live; LPL – large leather products; LPS – small leather products; MEA – meat; SCA – scales; SKE skeleton; SKI – skin; SKU – skull; TAI – tails; TEE – teeth; TRO – trophy; WAX – wax; WHO – whole body*

A total of eight different taxonomic orders were reportedly seized by Belgium between 2007 and 2016 (Figure 42), with four of these accounting for 84% of all seizure records: Carnivora (29, 42 records), Primates (28 records), Pholidota (26 records) and Artiodactyla (25 records). Other taxonomic orders included Proboscidea, Cetacea, Perissodactyla and Rodentia.

ORDER	FAMILY (NO. OF SEIZURE RECORDS)	SPECIES (NO. OF SEIZURE RECORDS)
Carnivora	Felidae (25)	Leopard *Panthera pardus* (4)
		Tiger *Panthera tigris* (3)
	Ursidae (8)	Brown Bear *Ursus arctos* (5)
	Canidae (5)	Grey Wolf *Canis lupus* (4)
Primate	Cercopithecidae (11)	
Pholidota	Manidae (26)	Pangolin *Manis* spp. (26)
Artiodactyla	Hippopotamidae (14)	Common Hippopotamus *Hippopotamus amphibius* (13)
	Bovidae (9)	Duiker *Cephalophus* spp. (8)

Table 42

The main families and species reportedly seized.
Source: EU-TWIX database

In total, there were **22 different commodity types** seized by Belgium between 2007 and 2016. The main types of specimens seized accounting for **66% of all seizure records** were as follows:

skulls
42 seizure records,
95 specimes

scales
23 seizure records,
946.5 kg

skins
18 seizure records,
63 specimens

teeth
12 seizure records,
63 specimens

Other records included, among others, commodity types such as bodies, live specimens, skeletons, carvings, hair, horn, meat, feet, small and large leather products, garments and bones. The number of seizures reported of all commodities remained relatively stable across the years, apart from in 2016 when there was a significant decrease (from 44 seizure records in 2015, to one seizure record in 2016).

It should also be noted that between 2014 and 2015, there was a significant increase of seizures involving skulls, increasing from 2 to 29 seizure records. According to the CITES Management Authority, this rise in seizure records was due to two large internal cases in Belgium seizing these specimens (personal communication CITES MA, 2018). Furthermore, all seizures of scales were conducted in 2012 and 2013, 96% of which involved pangolin scales.

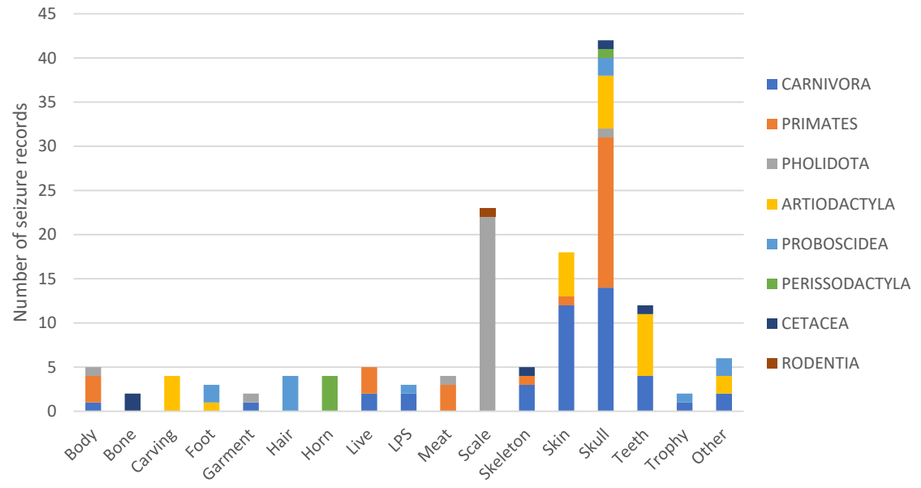


Figure 43

Number of seizure records for the eight taxonomic orders seized by Belgium per commodity type between 2007 and 2016. Note that the number of specimens is not indicated in this figure due to the different units that seizures were reported (including weight and number of specimens). LPS - small leather product.
Source: EU-TWIX database

The majority of skulls seized were of species of Primates and Carnivora, 17 and 14 records respectively. 2015 saw the highest quantity of skulls seized: a total of 57 specimens mainly of species of primate of the family Cercopithecidae. Of the 23 seizures of scales, 96% were reported as pangolin scales (*Manis* spp.) weighing a total of 946.5 kg. Seizure of skins mainly involved species of Felidae and *Cephalophus* spp. and those seizures involving teeth were mainly of species of *Hippopotamus amphibius* and Felidae. There were seizures of hippopotamus carvings between 2007 and 2011, mainly in transit from African countries en route to other EU Member States, and in 2010 and 2012 (see Section 3.1.3.6 – Hippopotamidae), there were four seizures of rhino horn involving 15 specimens. Furthermore, in terms of number of specimens, the most significant commodity type seized were derivatives of musk deer (*Moschus* spp.); a total of **1,200 derivatives of musk deer exported from China in 2010**[31].

In terms of number of seizure records, those conducted in transit (52 records), internally (49 records) and on import (39 records) were of similar frequency, however the number of seizure records on export were significantly lower accounting for only four records. A total of 94% of countries of export of seizures in transit through Belgium were countries from the African continent, with Liberia and Guinea accounting for 50% of seizure records (16 and 10 records, respectively). China was the country of destination in over half of the transit seizure records (54%), with other EU countries accounting for 15% of seizure records. In terms of seizures in transit, a total of 316 specimens and 946.5 kg were sent through Belgium between 2007 and 2016. The main countries of export were from the African continent including Liberia, Guinea and Cameroon, and the main country of destination was China.

[31] *Note that musk deer is also used as a medicinal product and therefore should be examined with Section 3.1.2.3 Animal-derived medicinals.*

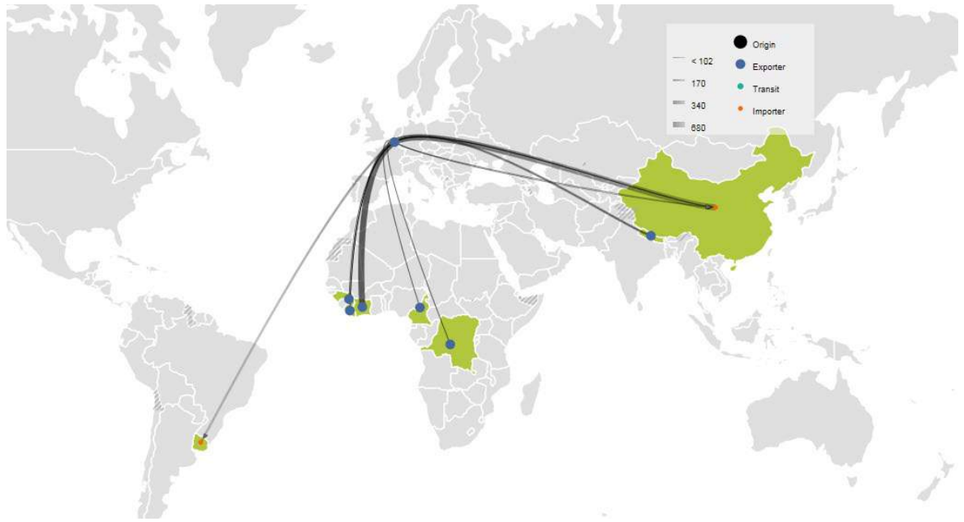


Figure 44

Seizures involving mammal bodies, parts and derivatives and live mammals in transit through Belgium between 2007 and 2016, as reported by weight (kg).
Source: EU-TWIX database

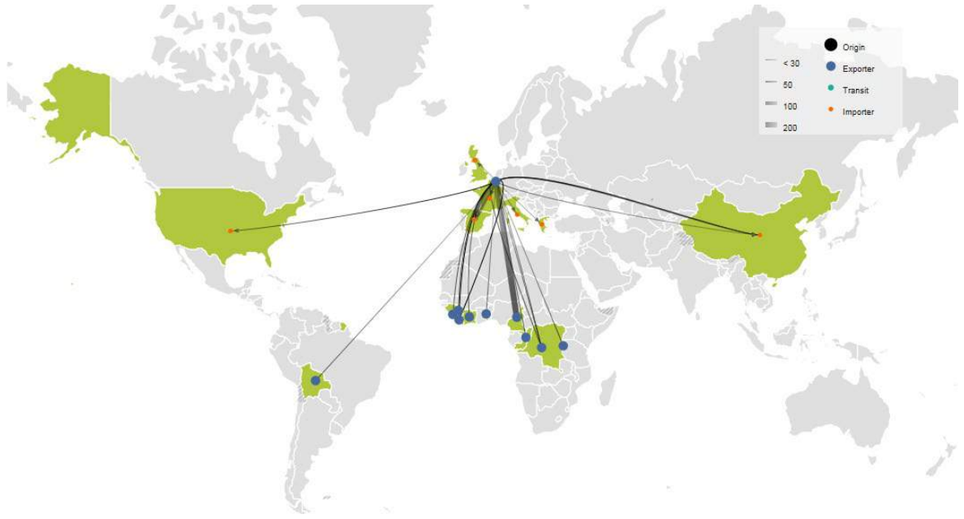


Figure 45

Seizures involving mammal bodies, parts and derivatives and live mammals in transit through Belgium between 2007 and 2016, as reported by number of specimens
Source: EU-TWIX database

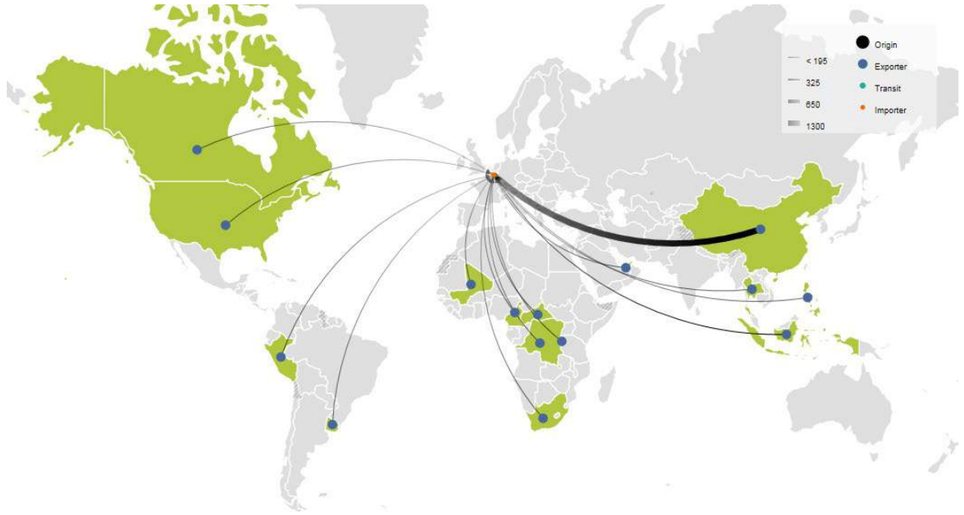


Figure 46

Seizures involving mammal bodies, parts and derivatives and live mammals on import reported by Belgium between 2007 and 2016, as reported by number of specimens.
Source: EU-TWIX database

The locations of seizures as reported by Belgium between 2007 and 2016 were mainly airports (69 records, involving 480 specimens and 943 kg), followed by private houses (35 records, involving 66 specimens) and mail centres (25 records, involving 1,250 specimens and almost 214 kg). Notably, most seizures occurred due to lack of CITES documentation or invalid CITES permits. However, in some cases the CITES documents were also found to be falsified or counterfeit documents.

Mammal bodies, parts and derivatives[32]
US CITES Seizure data

Between 2007 and 2016, a total of 15 seizure records involving 138 items and an additional 3 kg and 0.023 litres of mammal bodies, parts and derivatives were seized in the US, having been re-exported from Belgium. The following analysis is based on the number of specimens, unless otherwise stated. The majority of specimens were destined for medical and commercial purposes (62% and 34%, respectively) and were mainly seized in 2012 and 2014 (Figure 47). Most records did not report the country of origin of the specimens seized (77%), however of those that did, Germany was the country of origin for 22% of specimens and France for less than 1%.

[32] *BOD – bodies; CAR – carvings; EXT – extract; FPS – small fur products; LPL – large leather products; LPS - small leather products; PLA – plates; SKP – skin pieces; Specimens; TEE- teeth*

Grivet Monkey *Chlorocebus aethiops*

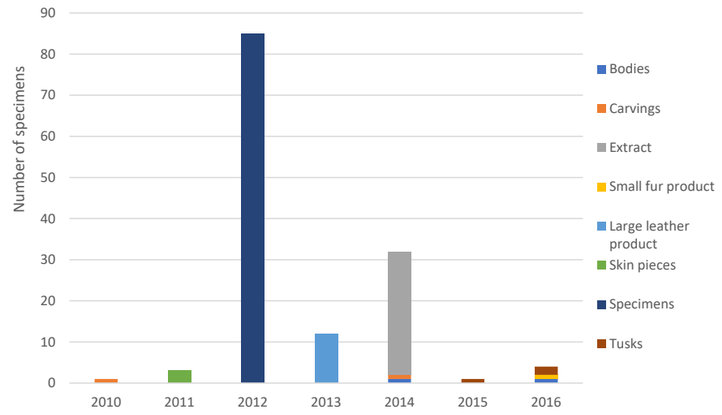


Figure 45

Number of specimens seized of mammal bodies, parts, derivatives, per commodity type as re-exported from Belgium, between 2007 and 2016.
Source: CITES trade database

Of all the different commodity types seized, those reported as scientific specimens (i.e. blood, tissue etc.) accounted for the majority (85 scientific specimens, 62%). This was because in 2012, the USA reported the seizure of 85 scientific specimens of Grivet Monkey *Chlorocebus aethiops* for medical purposes.

While this is the largest quantity reported according to US seizure data, the CITES Management Authority noted that these scientific specimens could been vials of cells of Grivet Monkey, instead of large whole specimens.

Extract from the Common marmoset *Callithrix jacchus* accounted for 30 specimens seized between the time period, all of which was seized in 2014 and reported for commercial purposes. All specimens originated from Germany. Furthermore, 12 leather products made of rhino hide were also seized by the USA having been re-exported by Belgium, however the country of origin was unknown. All were for commercial purposes and did not report the country of origin. There were also three tusks that were seized by the USA; one tusk of Narwhal *Monodon monoceros* destined for personal purposes, and two commercially seized tusks of *Hippopotamus amphibius.*

In addition to the specimens reported as number of specimens, 3 kg of hippo teeth were seized in 2009 for commercial purposes, and in 2013 and 2014, 0.023 litres of primate tissue/derivative (*Chlorocebus aethiops, Macaca fascicularis* and Rhesus Macaque *Macaca mulatta*) were confiscated. A total of 78% of these specimens were for medical or scientific purposes.

CONCLUSION

Both EU-TWIX and US seizure data confirm Belgium's involvement in the illegal trade of mammal body parts and derivatives, however the datasets indicate different commodities in trade. EU-TWIX data show that Belgium is increasingly being used as a transit point for the shipment of skulls of CITES-listed carnivore and primate species from Africa, primarily from Liberia, Guinea and Cameroon, to China.

This trade route is also used in the shipment of pangolin scales, and hippo carvings. However, US seizure data alternatively provide insight into the use of Belgium as an export country of primate species, specifically grivets, marmosets and macaques, and their derivatives for medical and scientific purposes in the USA.

Musk Deer Moschidae spp.

BIRDS

Rainbow Lorikeet *Trichoglossus moluccanus*

3.1.2.6 Birds

Live birds

EU-TWIX

Reported seizures were relatively stable across the years, apart from in 2008 and 2015 seeing 58% of all seizure records (Figure 48). No seizures were reported in 2013. The number of specimens seized also remained relatively stable with less than 100 specimens seized per year apart from in 2008 when 634 specimens were seized (a single seizure at a zoological garden in Sint-Laureins)[33].

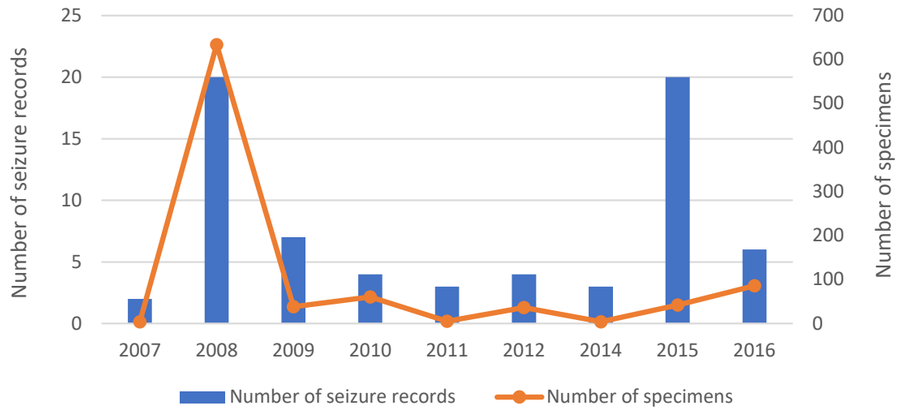


Figure 48

Number of seizure records and number of specimens of live birds reportedly seized by Belgium between 2007 and 2016.
Source: EU-TWIX database

Psittaciformes was the main taxonomic order identified in terms of the number of seizures records; **36 records involving a total of 224 live specimens**. While Falconiformes appear in a lower number of seizure records, the number of seized specimens was significantly higher than those of Psittaciformes; a total of **20 seizure records involving 554 live specimens of Falconiformes** (Figure 49).

[33] *According to the Belgian CITES Management Authority there was an error as to the reporting of this seizure. The seizure of live birds from the zoological garden in Sint Laureins actually involved 85 specimens were seized and confiscated, not 634. At the time of the seizure, all those birds detected at the zoological garden were reported to the EU-TWIX database, including those species that were not eventually confiscated (Belgian CITES MA, pers. comm, 2018).*

Red-rumped Parrot
Psephotus haematonotus

Figure 49

Number of seizures records and number of live specimens of all species reportedly seized by Belgium between 2007 and 2016.
Source: EU-TWIX database

In total, 54 different species of live birds were seized between 2007 and 2016. The main species seized in terms of number of specimens was Black Kite *Milvus migrans*, followed by Bonelli's Eagle *Hieraaetus fasciatus*, Booted Eagle *H. pennatus*, Bourke's Parrot *Neopsephotus bourkii* and Red Kite *Milvus milvus*.

Notably, 16 of the top 20 different species were seized during one seizure in 2008 (Figure 50). (See Footnote 33).

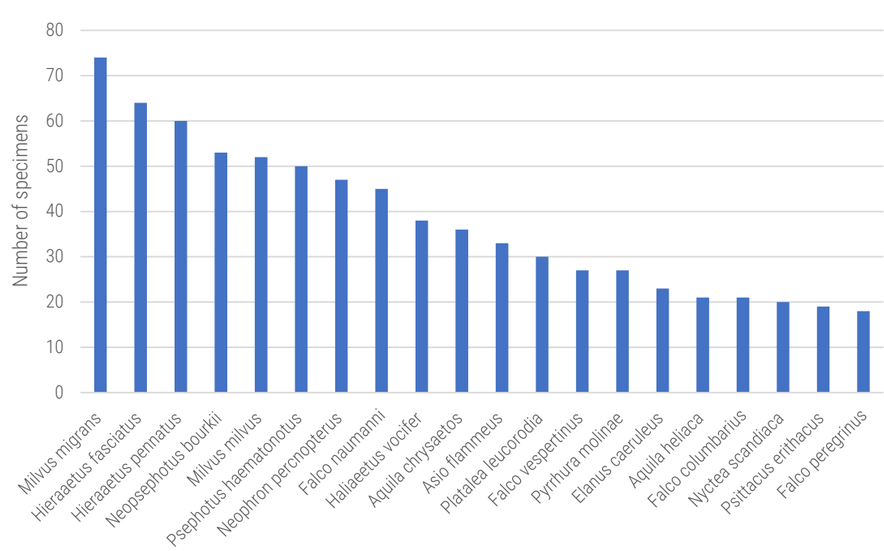


Figure 50

The top 20 bird species reportedly seized by Belgium between 2007 and 2016, as reported by number of specimens.
Source: EU-TWIX database

When looking at the different species involved excluding the seizure in Sint-Laureins, the main species included *Neopsephotus bourkii*, Red-rumped parrot *Psephotus haematonotus,* Green-cheeked Parakeet *Pyrrhura molinae* and Grey Parrot *Psittacus erithacus* (Figure 51). (See Footnote 33).

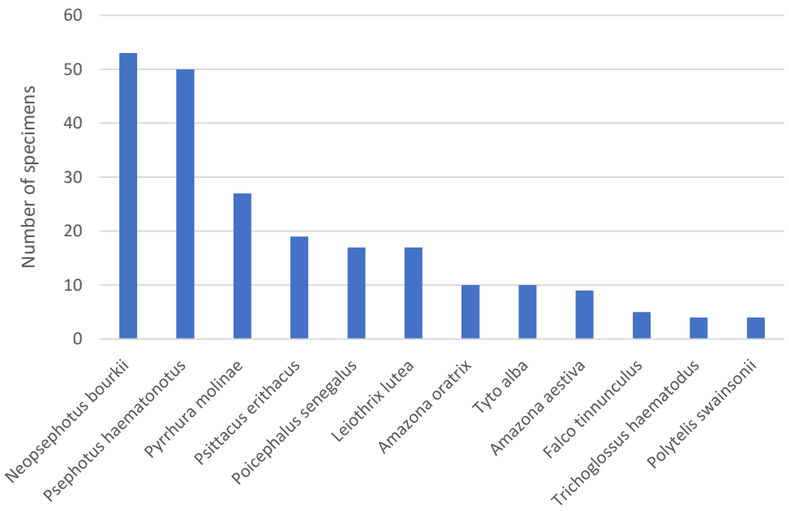


Figure 51

The top bird species reportedly seized by Belgium between 2007 and 2016, excluding the seizure of 634 specimens at a zoological garden in Sint-Laureins, as reported by number of specimens.
Source: EU-TWIX database

87% of the seizures involving birds took place internally and involved 753 specimens. These internal seizures mainly took place because either no CITES documents accompanied the specimens or the documents had been falsified. The remaining 156 live birds were reportedly seized on (re-)export (140 specimens) and import (16 specimens). As mentioned in Section 3.1 (EU imports), the EU imposed a temporary ban on the import of wild-caught birds in 2005 which became permanent in 2007, hence these imports are in breach of these regulations.

The 140 specimens of live birds that were (re-)exported from Belgium were of the family Psittacidae and were destined for Libya. A single seizure that took place in 2016 involved 81 live parrots of reportedly captive-bred source and was intended for commercial purposes. Of the 16 live birds that were imported into Belgium, 15 specimens were Senegal Parrot *Poicephalus senegalus* exported from Morocco (seized in 2012) and one specimen Yellow-Crowned Amazon *Amazona ochrocephala* exported from Turkey in 2014.

Based on the number of specimens, the majority were reported as wild-sourced (635 specimens, 70%) followed by those bred in captivity (83 specimens, 9%), with 21% (191 specimens) of seizure records not reporting the source of the specimens. In terms of the purpose of the specimens seized, 88% of specimens (796 specimens) were destined for commercial purposes, followed by 2% (20 specimens) for personal purposes, which were predominantly seized internally within Belgium. A total of 10% of specimens (93 specimens) did not report the purpose of the transaction/trade.

Several locations were identified where seizures took place. In terms of the number of seizure records, the majority took place in **private houses**, followed by zoological gardens/animal parks and markets/shops, and airports (Figure 52). In terms of the number of specimens seized, a total of 87% of live birds were seized in zoological gardens/animal parks or airports.

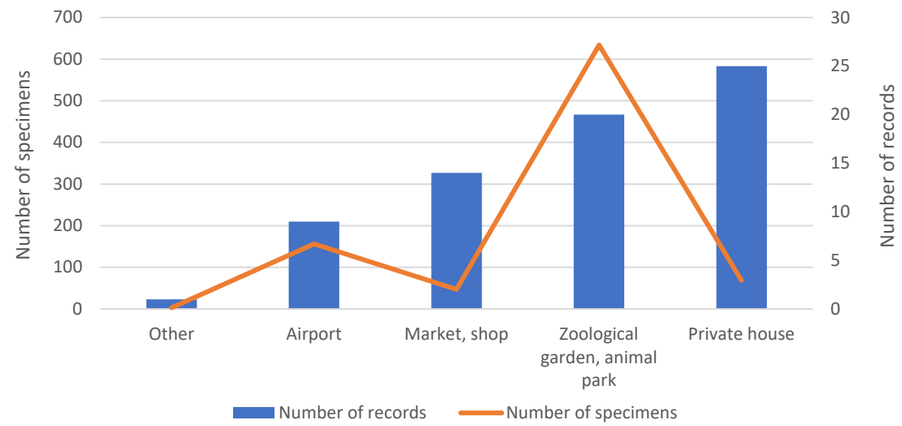


Figure 52

The location of seizures involving live birds as reported by Belgium between 2007 and 2016.
Source: EU-TWIX database

According to the TRAFFIC database, four records involving the seizure records of live birds were reported by other countries implicating Belgium between the years of 2011 and 2013. These seizures involved 79 specimens of live birds from four different families/species; Java Sparrow *Lonchura oryzivora* (35 specimens), Psittacidae spp. (34 specimens), Red Siskin *Carduelis cucullate* (8 specimens) and Galah *Eolophus roseicapilla* (2 specimens).

There was a near equal split between those countries that reported these records; Israel reported two seizures involving 42 specimens and the United Arab Emirates reported the remaining two seizure records involving 37 specimens.

Israel reported one large seizure of 34 live parrots at Ben Gurion Airport, Tel Aviv in February 2014. It is reported that the Agriculture Ministry received a tip off that exotic birds were to be smuggled through the country. Consequently, Customs officers targeted these individuals who were smuggling the live parrots in their carry-on baggage. According to the Ministry's press release, the parrots arrived without veterinary papers or licences and had not undergone the necessary inspections required for imported birds, however there was no mention as to whether the correct CITES permits were accompanying the specimens. The individuals were fined by both Israeli and Belgian veterinary authorities.

Israel also reported the seizure of eight Appendix I listed **Red Siskins *Carduelis cucullata*** at Ben Gurion Airport, Tel Aviv in January 2011. Customs officers were using scanning machinery on luggage that had arrived via air transport and detected the specimens on the body of an Israeli passenger who had returned from Brussels, Belgium. The specimens were being held on his person in four boxes on his body, in which he had hidden two birds each. The customs authority ordered a criminal investigation and the birds were put in the care of the Nature and Parks Authority.

In 2011, the United Arab Emirates reported two seizures involving CITES appendix-listed live birds: one seizure involving 35 live *Lonchura oryzivora* and another seizure of two *Eolophus roseicapilla*. All specimens were seized in Dubai.

Bird bodies, parts, derivatives and live birds
US CITES seizure data

Between 2007 and 2016, a total of eight seizure records involving 487 specimens of bird bodies, parts, derivatives and live birds were seized implicating Belgium. Six of these seizure records implicated Belgium as a country of export, and the remaining two seizure records implicated Belgium as a country of re-export. Note, all seizures were reported as number of specimens.

Virtually all specimens were for commercial purposes (99%), with less than 1% for personal purposes. All trade occurred between 2009 and 2015, with 92% reported in 2012. Only three different commodity types were reported including feathers, live specimens and bodies of which the vast **majority were feathers** all of which were seized in 2012 (Table 23).

COMMODITY TYPE	SPECIES	NUMBER OF SPECIMENS	% OF TOTAL SPECIMENS
Feathers	Long-eared Owl *Asio otus*	250	51.3%
		200	41.1%
	Common Kestrel *Falco tinnunculus*	2	0.4%
	Indian Peafowl *Pavo cristatus*	20	4.1%
Live	Red-Crowned Parakeet *Cyanoramphus novaezelandiae*	10	2.1%
	Australian ringneck *Barnardius zonarius*	4	0.8%
	Fischer's lovebird *Agapornis fischeri*	1	0.2%
Bodies	Blue-and-yellow macaw *Ara ararauna*	4	0.8%
TOTAL		**487**	**100%**

Table 53

Number of specimens and species of the bird feathers, live specimens and bodies, as reported in US seizure data between 2007 and 2016
Source: CITES trade database

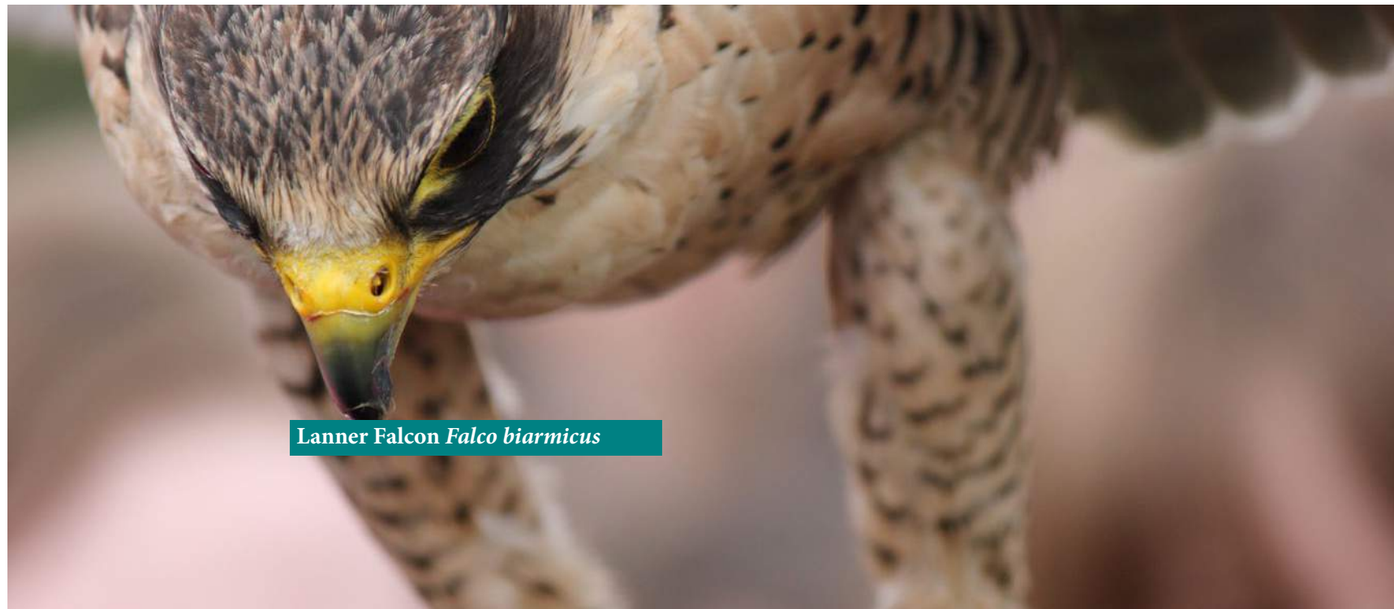
Nearly all bird feathers (450 specimens involving Long-eared Owl *Asio otus* and Common Kestrel *Falco tinnunculus*) seized by the USA were exported from Belgium. Only two feathers of the species Indian Peafowl *Pavo cristatus* were reportedly re-exported which had originated from India. One body of Blue-and-yellow Macaw *Ara ararauna* was also re-exported by Belgium (country of origin unknown).

CONCLUSION

Illegal bird trafficking has long been recognised as a significant problem within the EU (EC, 2016a). In 2014, a court ruling in Belgium found four individuals guilty of participating in an organised wildlife trafficking operation across Europe. The perpetrators were involved in the illegal taking of Annex A to Council Regulation (EC) No 338/97 listed species of bird eggs/infant birds (mainly birds of prey) from the wild in France and Spain.

The young birds were hand-reared and ringed. Through forging of rings and breeders' declarations, the defendants obtained CITES certificates for "captive born and bred" specimens, which allowed them to offer the birds for sale despite the general ban on trade in Annex A species. These specimens were each sold for between EUR 5,000 and 10,000. The defendants were found guilty of participating in a criminal organisation with branches in Spain, the UK, Austria, Germany, France and the Netherlands. This involved inter alia a clear hierarchy and division of tasks, the use of authorities and establishing a zoo to gain credibility and access to the market. During the criminal proceedings, the Belgian court explicitly compared the case with international drugs trafficking and highlighted that the defendants had taken advantage of the low political priority assigned to wildlife trafficking (EC, 2016a).

Despite import restrictions on the import of live birds into the EU as set in 2005, live birds are still being smuggled into/through the EU, including Belgium, indicating some involvement in the illegal trade of live birds for the commercial domestic/EU market, particularly of species of parrot including the CITES Appendix I listed *Psittacus erithacus*. Both US seizure data and TRAFFIC's database confirm Belgium's involvement in the illegal trade in live birds. Notably, TRAFFIC's database highlights Belgium's export of parrots, sparrows, Red Siskins and cockatoos to Israel and the United Arab Emirates (UAE), pointing towards Belgium's involvement in fuelling the international trade in live birds.



Lanner Falcon *Falco biarmicus*

SEAHORSES

Seahorse *Hippocampus spp.*

19,370
Hippocampus specimens were seized by Belgium

3.1.2.7 Seahorse bodies

EU-TWIX

Between 2007 and 2016, a total of 65 seizure records involving **19,370 specimens and an additional 80 kg of *Hippocampus* spp. bodies** were reported by Belgium. Seizures only occurred between 2007 and 2013, with only one seizure reported in 2007 involving 80 kg of specimens. This was the only seizure reported by weight. In 2009 a total of 9,000 specimens were seized internally within a shop in Belgium (Figure 45).

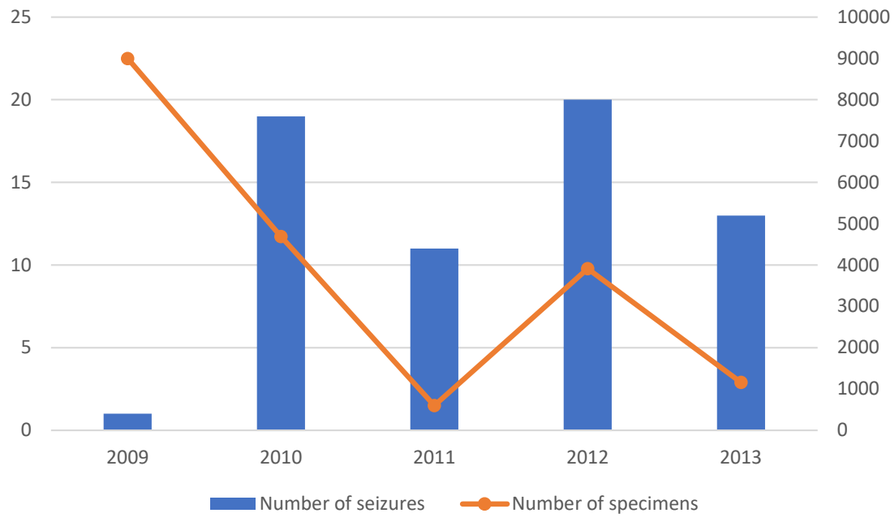


Figure 54

Number of seizure records and number of specimens of Hippocampus *spp. bodies seized between 2009 and 2013 as reported by Belgium.*
Source: EU-TWIX database

A dried seahorse

Based on the number of seizure records, 92% of seizures were made in transit through Belgium (10,217 specimens). A further 6% of seizures were on import (154 specimens) and 2% were internal (9,000 specimens).

A total of 91% of countries of export, irrespective of whether the seizures were on import or in transit, were African countries, with Guinea the leading country of export (44 records). For specimens in transit, 95% were destined for China (57 records involving 10,179 specimens) (Figure 54). The seizure conducted in 2007 involving **80 kg of *Hippocampus spp.* bodies involved specimens in transit en route to Hong Kong SAR**.

Additional information also confirms the ongoing illegal trade of *Hippocampus* spp. implicating Belgium. In 2017, the Brussels Criminal Court sentenced three defendants of Chinese nationality to 15 months in prison for the illegal trade of Hippocampus spp. specimens.

During a baggage check at Zaventem airport on 20th April 2017, Customs officers seized 2,063 dried *Hippocampus* spp. that were in transit to China.

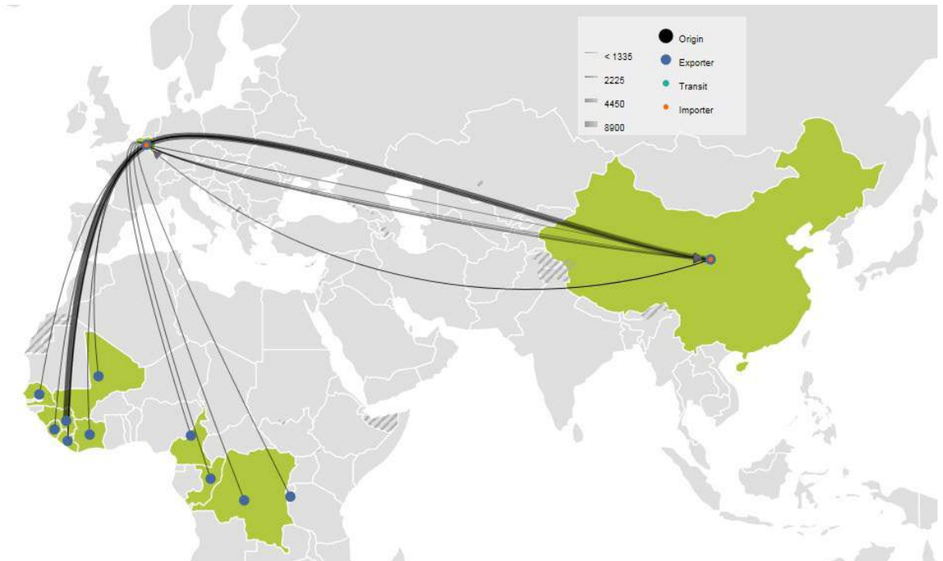


Figure 55

Export origins and destinations of seizures of Hippocampus *spp. bodies in transit through Belgium between 2007 and 2016, based on number of specimens. Note: this figure does not include one seizure in 2007 reporting only weight of the specimen.*
Source: EU-TWIX database

Based on the number of seizure records, 98% of seizures were made in airports or mail centres (involving 10,121 specimens and 250 specimens, respectively). One seizure involving 9,000 specimens was conducted in a market/shop. Notably, most seizures occurred due to lack of CITES documentation, with one case where the CITES document was counterfeit/had been falsified.

CONCLUSION

While US seizure data and TRAFFIC's database do not indicate seizures of *Hippocampus* spp. bodies, EU-TWIX data and external information on seizures taking place in 2017 confirm the ongoing illegal trade in this commodity, primarily as a transit point for specimens coming from the African continent and destined for China.

3.1.2.8 Other

EU-TWIX

Between 2007 and 2016, a total of 83 seizure records involving 705 specimens, 9,745 kg and 669 m^3 of other commodity groups were reported to the EU-TWIX database. A total of 76% of seizure records were of species of fauna, and 24% were species of flora, with seizures of Acipenseriformes spp. and Psittaciformes most frequent, followed by seizures of insects including spiders Araneae and butterflies Lepidoptera (Figure 56).

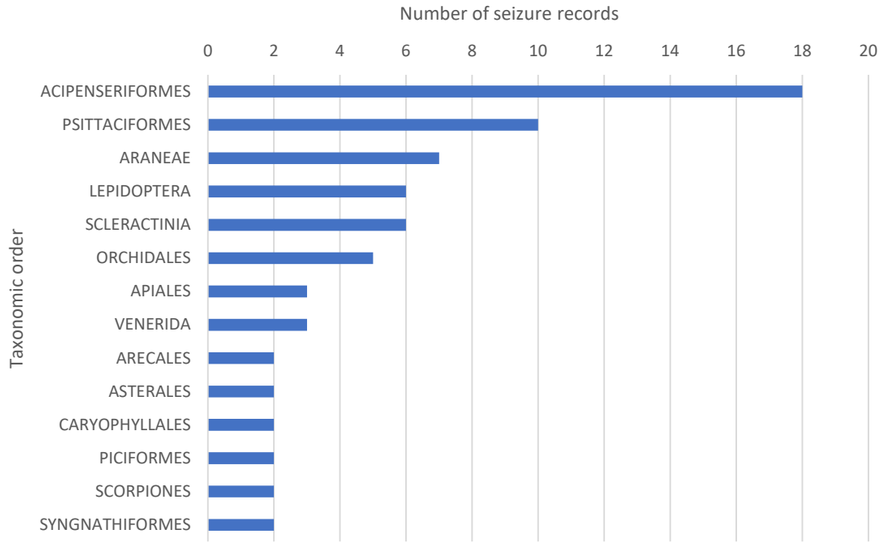


Figure 56

Main taxonomic orders of other commodity groups seized by Belgium between 2007 and 2016, based on number of seizure records.
Source: EU-TWIX database

Seizures of caviar were reported in 17 seizure records which involved 59 specimens and 9.2 kg. All of these seizures occurred due to lack of CITES documentation. Caviar seizures were also reported by the USA in the CITES trade database; the USA reported a total of three seizure records involving ca. 2.61 kg of sturgeon Acipenseridae spp. reported as caviar (2.38 kg) and eggs (0.24 kg) between 2007 and 2016 (see Section 3.1.3.4). The seizures were as follows:

- **In 2009**, Belgium re-exported 0.24 kg of eggs of *Acipenser baerii*, which originated from France. The specimens were reported for personal purposes;
- **In 2013**, Belgium exported 2 kg of *A. gueldenstaedtii* caviar for commercial purposes;
- **In 2015**, Belgium also exported 0.38 kg of *A. ruthenus* caviar for commercial purposes.

According to EU-TWIX, only two seizure records involving **timber** were reported (see Section 3.1.3.2). Both of these seizures occurred due to lack of CITES documentation:

- **In 2007,** a total of 9,700 kg of sawn wood of the species *Swietenia macrophylla* were seized on export in Belgium at a maritime port destined for the USA; and
- **In 2013** a total of 669 m^3 of logs of the species *Pericopsis elata* were seized at a market/shop in Belgium. The specimens had been exported from Cameroon.

Furthermore, seizures of live specimens between 2007 and 2016 accounted for 12 seizure records involving 198 specimens. These seizures occurred either due to lack of CITES documentation and/or the illegal sale of specimens. These involved the following seizures:

- Seven seizure records involved species of live spiders *Brachypelma* spp. (27 specimens), all of which were seized internally at a show, exhibition and/or in a private house;
- In 2014, one seizure record was reported and involved a total of 45 live Emperor Scorpions *Pandinus imperator*. The specimens were seized at an airport while in transit from Cameroon en route to Austria;
- In 2015, one seizure record was reported involving 30 *Hippocampus* spp. live specimens which were seized at a mail centre in transit from Guinea en route to China[34];
- In 2015, one seizure record reported involving 10 live Anderson's Crocodile Newt *Echinotriton andersoni* at a mail centre, which had been imported from Japan; and
- In 2009, one seizure record involving 82 live corals and 4 *Tridacna* were found in the mail which had been imported from Indonesia.

Seizures of corals by the USA were also reported in the CITES trade database. Between 2007 and 2016, a total of 21 seizure records involving **41 corals** (reported as raw specimens) having been re-exported from Belgium were reported to the CITES trade database. Note, all seizures were reported

[34] *According to the Belgian CITES Management Authority there was an error as to the reporting of this seizure. The specimens were reported as live specimens when they were in fact 30 Hippocampus spp. bodies (Belgian CITES MA, pers. comm, 2018).*

as number of specimens and took place in 2012, 2013 and 2016 with specimens to be used for commercial purposes. A range of different species of corals were involved including those from the families Acroporidae spp. (eight specimens), Fungiidae spp. (eight specimens), Tubiporidae spp. (seven specimens), Pocilloporidae spp. (five specimens) and Helioporidae spp. (five specimens). The remaining eight specimens were from the families Pectiniidae spp., Caryophylliidae spp. and Mussidae spp. Most specimens originated from the Philippines (80%) followed by Malaysia (15%), with the remaining specimens having the country of origin listed as unknown.

According to EU-TWIX data, the majority of seizure records of other commodity groups (12 seizure records, 71%) involved seizures on import with specimens having been exported from Ukraine (11 seizure records) and Russia (one seizure record). Two seizures were also intercepted in transit, with specimens having been exported from Turkey and Ukraine en route to other EU Member States, Germany and Spain. All specimens seized on import and in transit were shipped by post.

Corals including Blue coral *Heliopora coerulea*

DISCUSSION

Dja National Park, Cameroon

Nile Crocodile *C. Niloticus*

4 DISCUSSION

The analysis of legal and illegal trade data for the period 2007–2016 confirmed Belgium as an important trade hub for wildlife commodities within the EU. Legal trade data indicate Belgium is primarily an importing/destination region of wildlife commodities for the domestic/EU market, with imports of reptile meat and timber products dominant across this ten-year period. There were a number of important trading partners identified; Cameroon, the DRC and Zimbabwe in Africa, and China, Hong Kong SAR and Japan in Asia were key (re-)exporters of wildlife commodities to Belgium between 2007 and 2016.

Belgium is also being used as a major intermediary in the illegal transport of CITES-listed commodities such as plants, plant-derived medicinal products, ivory, seahorse bodies and reptiles, which are mainly coming from West and Central Africa and going to China. More recent information also appears to confirm the ongoing illicit trade of some of these commodities in 2017, such as live turtles and seahorse bodies (however an in-depth analysis of 2017 trade data was beyond the remit of the study and is therefore not provided in this report). Traders are known to be using air transport and postal systems to smuggle wildlife commodities into and through Belgium, as indicated through the illegal trade data analysis, however traders are also known to change their modus operandi to evade detection and circumvent controls (EC, 2016a). Some of these methods, which have also been identified at the EU and domestic levels, could include concealing goods in shipping containers arriving at sea ports, hiding specimens in vehicles being transported by road and painting/mis-labelling specimens as non-CITES listed species (Mundy-Taylor, 2013; EC, 2016c; EC, 2017b).

The following page shows a summary of key trends highlighted in the analysis on the current state of the legal and illegal wildlife trade in Belgium. Special attention is paid to certain aspects of the trade that could be of focus to CITES Management and Enforcement Authorities and non-governmental organisations (NGOs) in the future. It should be noted that any trends in illegal trade observed may in part be due to varying enforcement efforts which generally differ over time. Based on the available data sources used in this report, it is not possible to verify which species and commodities are intended for Belgium's domestic market due to the EU's single market and free movement of goods. For example, Belgium could be an important market for live reptiles with the imports entering the EU via another EU Member State. These could then move freely in the EU and end up with consumers in Belgium. Therefore, supplementary market surveys are required to obtain a more complete understanding of the situation in Belgium. Furthermore, the methodology followed in this report does not allow for analysis of certain trade trends in rare species that appear in small numbers in trade, for which even low levels of trade could be detrimental. More in depth analyses and market surveys investigating these specific commodity groups could reveal more information for such rare species.

DISCUSSION: REPTILE MEAT

1.6%
of imports of reptile meat were re-exported

trade
in reptile meat requires further investigation

CITES trade data indicated Belgium as a top EU importer of reptile meat for the domestic (EU) market, with trade dominated by *Crocodylus niloticus* coming from Zimbabwe. Notably, the importance of this commodity being imported into Belgium increased over this ten-year period.

While seizure data do not suggest reptile meat to be an important commodity in illegal trade, attention may be warranted. There is little understanding of the market for reptile meat in Belgium or in the EU, including consumer behaviour, demand and the main outlets providing this commodity for consumption. According to CITES trade data, Belgium is not a significant re-exporter of reptile meat, as reported re-exports were only 1.6% of the size of reported imports. However, due to the EU's single market and free movement of goods, there is no record of whether the reptile meat imported into Belgium is destined for intra-EU trade. Due to the significant demand for protected reptile species for consumption in Belgium/the EU, Belgium should consider conducting further research to understand better the dynamics of the market, which could include market and consumer demand surveys for this commodity.

DISCUSSION: TIMBER AND PLANT PRODUCTS

top
importer of sawn wood and among the highest for bark

illegal
timber trade is occuring, increased attention is needed

Belgium's legal imports of bark and timber are among the highest in the EU. Between 2007 and 2016. Belgium was primarily responsible for importing significant quantities of wild-sourced *Prunus africana* bark, as reported by weight, mainly from Uganda. The bark is known for its medicinal value and believed to treat a range of ailments. Owing to Belgium's significant reported imports of *P. africana* in some years between 2007 and 2016 and the high number of seizures recorded, it is recommended to investigate further the market and explore whether imports are destined for the domestic market

in Belgium and/or more elsewhere in the EU. It would also be important to understand through consumer research and market surveys the demand for these plant-derived medicinal products and others including *Hoodia* spp., *Aloe ferox* and *Saussurea* spp. in Belgium/EU which could inform future campaigns. Under EU law, medicinal products which are labelled as containing Annex listed species under the EU Wildlife Trade Regulations are taken as containing that particular species and may be seized without any DNA testing beforehand. As the illegal trade data analysis reveals the majority of seizures of plant-derived medicinals occurred due to lack of CITES documentation, awareness raising campaigns targeting consumers and retail outlets regarding the use, trade and potential seizure of CITES-listed species in medicinal products should be initiated.

Belgium was also consistently the top importer of sawn wood within the EU, predominantly involving wild-sourced *Pericposis elata* from Cameroon and the DRC. With Belgium's legal imports of timber products being so significant across this time-period, attention should be paid to potential illegal trade of timber. There have been substantiated concerns as to the illegal harvest of *Pericopsis elata* in the DRC (Greenpeace, 2015) and therefore Belgium should remain alert to this issue. Seizure records involving timber at the EU level are low and an analysis of EU-TWIX data between 2007 and 2011 revealed there were insufficient data to discern any notable trends (Mundy-Taylor, 2013). According to seizure data between 2007 and 2016, seizures of timber implicating Belgium are rare, however shipments of *P. elata* have been confiscated on occasion indicating that illegal trade is occurring. For example, in 2013, Belgium reported an internal seizure involving logs of *P. elata* that had originated from Cameroon. These specimens were confiscated during a targeted operation due to a lack of CITES documentation. This disparity between the high quantity of legal imports of timber, which indicate Belgium's key role in the timber trade, and the low number of seizures involving timber warrants attention. A priority should be to determine whether low levels of seizures are reflective of low levels of illegal trade or of low enforcement effort. Belgian authorities should remain alert to shipments entering the country from the DRC as there have been concerns as to the legitimacy of the DRC's exports of timber. In 2014, the CITES Secretariat issued a Notification to the Parties stating they were aware of a large number of fake or falsified permits apparently issued by the DRC. The Secretariat also reported that Parties which had sent requests to the DRC's CITES Management Authority to verify the validity of permits had sometimes received irregular or contradictory responses, and in some cases from non-authorised persons (CITES, 2014). According to the Belgian CITES Management Authority, all officers check the validity of the export permits issued by the DRC for Afrormosia with the CITES Secretariat, as a result of the 2014 CITES Secretariat Notification. The Belgian CITES MA also require "l'avis d'acquisition légale" and "le numéro d'abattage des tiges" in addition to the CITES export permit (Belgian CITES MA, *pers. comm.*, 2018).

According to the Belgian CITES Management Authority, CITES training sessions have been given to Customs officers at Liege and Charleroi airports in the past, and in May 2018, CITES training was also given to Police officers. However, to ensure Belgium is not being used as an illegal trade hub for protected timber species, as well as the transport of timber further into Europe, enforcement officers should receive adequate training to undertake targeted controls on these shipments and improve detections skills. Belgium should make use of available timber identification guides and other relevant training material (e.g. Sweden funded the revision of "CITES and Timber", a handbook of the most common CITES-listed species of wood in international trade as well as information on CITES and other relevant international legislation [EC, 2017d]) and liaise with other EU Member States that have experience in addressing illegal trade in CITES-listed timber species. Belgium is home to one of the EU's major sea ports, Antwerp, and therefore enforcement officers should focus their efforts on possible illegal timber imports there. The Belgian CITES Management Authority should also make use of an amendment made to Commission Regulation (EC) No 865/2006 on 15th January 2015. In

Stripped bark at Mount Cameroon

Article 7: a clause (paragraph 6) was introduced stating that national CITES authorities are permitted to question the validity of export and re-export permits from third countries to ensure that specimens were obtained in accordance with the legislation on the protection of the species concerned (EC, 2015). This clause enables authorities to investigate the legality of shipments before issuing the CITES import permits. This provides a powerful tool for CITES authorities to ensure Belgium is importing legal shipments of CITES-listed timber.

Furthermore, as Belgium is a significant import hub of *P. elata*, investigations into the use of *P. elata* should be conducted to better understand whether Belgium's imports are then being worked into objects such as furniture or whether they are destined for third countries. These investigations should be implemented through market surveys or stakeholder interviews. It should be noted that the CITES Appendix II listing of *P. elata* only refers to logs, sawn wood and veneer sheets and is not applicable to furniture, and consequently legal trade of these items would not be recorded in the CITES trade database.

Several countries have been identified as major trading partners with Belgium for other plant products and should be considered for, inter alia, future collaboration and joint enforcement efforts. For example, Tunisia was a key trading partner for live artificially propagated *Opuntia ficus-indica*, a species of cactus, of which all legal trade has been ceased from 2009 onwards. It may be worth investigating with Tunisian officials/enforcement officers as to why this halt in trade occurred. This could determine whether there was a change in demand or simply whether a company involved in the artificial propagation of the species stopped operations.

Furthermore, collaboration with Cameroon and the DRC should also be considered due to their role in the trade of wild-sourced raw *P. elata*. Efforts should be made to set up joint training and enforcement actions/operations, particularly targeting sea ports, to investigate the potential illegal shipping of timber into Belgium. Joint international law enforcement operations tackling illegal wildlife trade are known to yield successful results and draw on skills from police, Customs, border agencies, environment, wildlife and forestry officials. Operation Thunderbird in 2016, a global operation tackling the illegal trade in wildlife and timber, resulted in the identification of approximately 900 suspects and 1,300 seizures of illicit wildlife products worth an estimated USD 5.1 million (INTERPOL, 2018). During this operation, more than 300 tonnes of wood and timber were seized as well as significant quantities of birds, reptiles, pangolin scales, ivory, medicinal products and various other derivatives of flora and fauna. Between 1st and 31st May 2018, another international operation, codenamed Operation Thunderstorm, saw 1,974 seizures and the identification of approximately 1,400 suspects, triggering arrests and investigations worldwide. During this operation, several tonnes of wood and timber were seized, along with, inter alia, 43 tonnes of wild meat, 27,000 reptiles and 1.3 tonnes of ivory. Belgium has played an active role in these operations and should continue to do so in the future in their efforts to tackle illicit wildlife trade.

DISCUSSION: **IVORY**

transit hub

for ivory trafficking from Africa to Asia

Both the African Elephant *Loxodonta africana* and the Asian Elephant *Elephas maximus* are included in the CITES Appendices and are subject to strict international controls with regards to commercial trade. Despite this, seizure data indicate Belgium as a transit hub for elephant ivory being shipped from Africa to Asia, predominantly from Guinea to China, through mail centres and postal depots. According to Europol, EU Member States which handle flights coming from Africa to Asia, such as France, Belgium, the UK and Germany are more commonly used as wildlife trafficking transit hubs (Mundy-Taylor, 2013; Sina *et al.* 2016; EC, 2017b). Several Member States have taken further action to target this illicit trade; for example, the UK has been involved in targeted inspections of postal parcels on export to China to tackle the issue. This resulted in a significant number of seizures taking place with a large portion of the ivory seized having been purchased via the internet (EC, 2016c; EC 2017b). Belgium should continue to prioritise enforcement efforts focusing on ivory with regards to shipments in transit, including those sent through the mail, from Africa to China. Furthermore, attention should also be paid to the online trade as the importance of Belgium's virtual market place for the sale of ivory and suspected ivory has already been raised (IFAW, 2014).

Another aspect that warrants attention is the trade of Hippopotamidae spp. carvings and teeth, following a shift in demand for hippo products in response to more stringent controls on elephant ivory trade. According to CITES trade data, Belgium is involved in the legal import of Tanzanian hippo carvings and teeth that were re-exported from Hong Kong SAR. The country was also seen to re-export some of these specimens outside the EU. Illegal trade data also reveal seizures of hippo carvings, which were mainly seized in transit from Africa to other EU Member States. While CITES trade data seem to indicate that trade of hippo products has decreased in recent years, it is important that Belgium monitors the situation.

Asian Elephant *Elephas maximus*

DISCUSSION: **CAVIAR**

85%

of the 27 species of sturgeon and paddlefish face extinction

imports

have increased between 2007–2016, indicating growing demand

CITES trade data confirm Belgium's role in the caviar trade, primarily as an importing and (re-) exporting region. Notably, imports of sturgeon caviar seemed to increase between 2007 and 2016 which may indicate a growing demand for the product on the domestic market. Seizure data also provide evidence that illegal trade of caviar is ongoing in Belgium, particularly of caviar being seized on import from the Ukraine and Russia.

Caviar is a high-end commodity sold in food outlets, department stores and specialist shops. It is globally in high demand, particularly wild-sourced caviar which is perceived to be of better quality (Harris, 2018 in prep). Sturgeon stocks have been overexploited because of illegal fishing and habitat degradation. Currently, 85% of the 27 species of sturgeon and paddlefish are on the brink of extinction (WWF, 2017). Despite the introduction of CITES regulations in 1998 in response to this overexploitation and the rapid growth of aquaculture production, the high price and rarity of certain sturgeon and paddlefish species means illegal trade is ongoing (WWF, 2017). Criminal networks are known to operate in the smuggling of wild-sourced caviar from countries surrounding the Caspian Sea (van Uhm and Siegel, 2016). Due to Belgium's involvement in the caviar trade, investigating the domestic market by conducting online and physical market surveys to better understand the dynamics of the market and consumer demand would provide useful information.

DISCUSSION: **OTHER AREAS OF PRIORITY**

Illegal shipments of wildlife commodities sent from Africa to Asia through the EU are of significant concern to EU Member States (EC, 2016a). As indicated in the analysis, Belgium is frequently used as a hub in the transport of such shipments, involving a variety of commodities such as ivory, reptile and mammal bodies, parts and derivatives and seahorse. Notably, China is the main country of destination for most wildlife commodities, and therefore Belgium should prioritise targeted enforcement efforts of shipments of wildlife commodities from Africa to China.

Furthermore, while this report does not focus on online trade, the use of this means to trade wildlife illicitly warrants further investigation by Belgium's authorities. An investigation into 348 advertisements on 13 websites in Belgium in 2014 found a total of 296 advertisements offering CITES Appendix I listed species for sale, and 52 advertisements offering CITES Appendix II listed specimens (IFAW, 2014). Ivory and suspected ivory was the most significant commodity on sale, and as mentioned above Belgium's involvement in the ivory trade should continue to be investigated. Live

birds, reptiles and frogs were also found to be offered for sale in significant quantities in the 2014 report (IFAW, 2014), and both the legal and illegal trade analysis in this report have confirmed the ongoing trade of these commodities. Furthermore, according to the Belgian CITES Management Authority, Belgium is an important exporter of live CITES-listed birds (Belgian CITES MA, pers. comm 2018). It is therefore recommended that Belgian authorities investigate the illegal trade of live birds through market surveys and targeted enforcement efforts, particularly as some of the species reported in trade are native to Europe.

Monitoring the trade of live reptiles and amphibians (mainly frogs) in Belgium is also recommended as the EU's involvement as a hub for the domestic trade for these specimens as pets is known to be significant (Sina *et al.* 2016) and the analysis confirms that there is a domestic market in Belgium. Furthermore, while trade data indicate that legal imports of frogs are declining, it would be important to conduct market surveys to better understand the dynamics of the trade. For example, was Belgium being used as a hub to transport frogs internally within the EU, were there any notable changes in legislation or was this decline due to a shift in demand to reptiles instead of amphibians in the domestic/EU market. Advice should be sought from other EU Member States, such as Slovakia, which have experience in conducting these checks on traders and breeders to ensure best practice and that a comprehensive methodology is followed (EC, 2017d). It is also important that awareness raising campaigns, particularly at airports, be conducted in combination with market surveys and stepping up enforcement efforts as tourists often attempt to export/transit CITES listed species without the correct documentation due to lack of awareness. In 2016, Belgium authorities updated and re-launched brochures concerning CITES rules on birds of prey, parrots, reptiles, caviar and tourist souvenirs (EC, 2017d). Such targeted awareness raising efforts are an effective method of communicating CITES legislation to the public and CITES authorities should consider re-launching these brochures in 2018/2019.

The significance of the bushmeat trade within the EU has been confirmed and systematically studied in France and Switzerland. Chaber *et al.* (2010) presented the first systematic study of the likely scale and nature of this international trade, estimating that around five tonnes of bushmeat per week were likely smuggled in personal baggage through Paris Roissy-Charles de Gaulle airport. Wood *et al.* (2014) also quantified systematically the confiscations of bushmeat smuggled into Switzerland for human consumption. They estimated that significant quantities (40 tonnes per annum) are likely entering the country from West Africa. Wood *et al.* (2014) also noted that illegal bushmeat imports are known to occur in the most developed airports. The study identified that Brussels Airport is a major transit point for bushmeat coming from West and Central Africa into Switzerland. This is an important point for Belgian authorities as Antwerp is one of the EU's largest sea ports, as illegal meat entering European ports of entry are routinely destroyed to reduce the risk of disease, detailed information on species involved in the trade is being lost (Wood *et al.* 2014). While seizure data between 2007 and 2016 do not indicate significant bushmeat trade implicating Belgium, the considerable scale of these imports into the EU and the conservation and human health concerns are known (Chaber *et al.* 2010). This warrants further attention by Belgian authorities, including increased enforcement efforts on shipments coming from Africa entering Belgian sea ports. Notably, in 2017 a two-year study was commissioned by DG Environment (Federal Public Service Health) in a view of sampling and analyzing illegal meat seized at Zaventem airport in the luggage of passengers flying from the Sub-Saharian Region. The general objective is to assess the wild species concerned (on basis of DNA analysis) and whether CITES-listed species are involved. This study has been organized with the help of Customs and the Federal Agency for the Food Chain Safety. Results should be available by the end of 2018. (Belgian CITES MA, pers. comm 2018).

While considering these commodities and areas of priority in the next phases and future actions, it is also recommended that analysis of seizure patterns within Belgium is conducted. For several commodities, such as ivory, medicinals, reptiles and caviar, there are some years in which no seizures took place or where there have been significant declines in comparison to previous years. It would be important to understand whether these seizure patterns represent a change in enforcement priority or whether there have in fact been declines in these commodities illegally traded within Belgium. Furthermore, it is also recommended to monitor levels of legal and illegal trade (seizure data) and setting priorities to ensure that the resources available are used in the best way. These priorities should be regularly (e.g. annually or biennially) reviewed with input from CITES Management, Scientific and Enforcement authorities and other stakeholders as relevant. Regular collaboration with other EU Member States is also advised to ensure that their priorities and efforts could strengthen Belgium's enforcement and training efforts. For example, the National Wildlife Crime Unit (NWCU) in the United Kingdom produces intelligence products which include a UK Strategic Assessment on wildlife crime. Knowledge and expertise are drawn from various stakeholders including the UK's CITES Management and Scientific Authorities as well as various Enforcement Authorities, such as Customs officers and police, and relevant NGOs, who deliberate which species and commodities should be prioritised and reviewed every two years. The current priorities of the CITES Priority Delivery Group of the NWCU include, inter alia, ivory, medicinal and health products, reptiles and timber.

RECOMMENDATIONS

Poison-arrow Frog *Oophaga pumilio*

PERMITS

1

The CITES Management Authority is encouraged to increase investigations of export and re-export permits from third countries to ensure the legality of shipments entering Belgium, particularly for timber imports, in accordance with Commission Regulation (EC) No 865/2006, as amended on 15th January 2015, to ensure continued robustness of the legal import process.

2

LAW ENFORCEMENT

Belgian enforcement authorities should increase efforts in liaising with other EU enforcement agencies that have experience in dealing with certain commodities in illegal trade, such as the UK's targeted ivory enforcement efforts on consignments destined to China. Best practices, useful training techniques for officers and protocols/guidelines for searching shipments are available the relevant agencies.

TRAINING

3

Regular training should be provided to Customs officers, particularly at points of entry into Belgium, and to all other enforcement staff dealing with CITES, such as national police officers. These training opportunities should be based on best practices from other EU Member States that are also being used as hubs for the illicit trade in wildlife commodities.

4

CONTROLS AT ANTWERP SEA PORT

Targeted controls of CITES-listed timber imports at Antwerp sea port are necessary to ensure traders are not exploiting this entry point. Special attention should be paid to timber products coming from the African continent, particularly the DRC and Cameroon.

NATIONAL CO-OPERATION

5

Co-operation, co-ordination and communication between enforcement and prosecution staff at all relevant institutional and policy levels should be given a higher priority in Belgium to strengthen their operational work by assuring, inter alia, sufficient technical, financial and capacity.

6

Joint operations with key countries of export and destination should be developed, as well as participation in any upcoming INTERPOL and Europol operations.

INTERNATIONAL CO-OPERATION

POSTAL SHIPMENTS

7

Future enforcement operations should further focus on postal shipments en route to China, either being exported from Belgium or in transit through the country. Attention should be paid to shipments originating from Africa.

TRENDS

8

Stakeholders, such as non-governmental organisations, CITES Management and Enforcement Authorities, Research Institutes and other relevant stakeholders should continue monitoring wildlife trade trends in Belgium. Methodologies and data from such monitoring activities should be made publicly available for future reference.

9

MARKET AND CONSUMER DEMAND SURVEYS

CITES Management and Enforcement Authorities, Research Institutes, non-governmental organisations and other relevant stakeholders should continue to conduct wildlife market surveys to understand better trade dynamics and to understand demand for wildlife and their products in Belgium. Initiatives to change consumer behaviour should also be developed further where needed. Key priorities should include: :

- **Carry out further research on crocodile meat imports** into Belgium to better understand the demand for this commodity and where it is consumed - in Belgium or if Belgium is a gateway for crocodile meat entering the EU. Enforcement authorities should consider exploring, e.g. through targeted national operations, if reptile/crocodile meat is also being imported illegally.

- Conduct online and physical market surveys to understand better the dynamics of the pet trade for **live birds, reptiles and frogs in Belgium** to identify priority species in demand in Belgium and possible concerns over the legality or sustainability of the trade (including specimens of reportedly of captive bred source). Regular checks on traders and breeders by enforcement authorities are recommended with a focus on priority species identified.

- **Caviar market surveys to determine the scale of the domestic market**, including the purchasing of samples for DNA/isotope analysis to ascertain whether information provided on the caviar labels match actual source and origin.

- Conduct further research to better understand the extend of and the **demand for bushmeat in Belgium** and develop and implement actions accordingly to cope with the bushmeat trade.

- **Conduct assessments of the scale and nature of trade** in wildlife commodities sold via online marketplaces in Belgium.

AWARENESS

10

CITES Management and Enforcement Authorities, Research Institutes, non-governmental organizations and other relevant stakeholders should raise public awareness regarding rules for purchasing and consuming products containing CITES-listed species, such as leather products and plant-derived medicinals, and their transportation across borders. Collaboration with tour operators and airlines would be useful channels to disseminate such information, as well as targeted signage and updated CITES brochures at airports, seaports, and major train stations.

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To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.
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