



AN OVERVIEW OF SEIZURES OF
CITES-LISTED
WILDLIFE

IN THE EUROPEAN UNION

JANUARY TO DECEMBER 2021

TRAFFIC



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Coral reef

Illegal wildlife trade is one of many threats faced by coral reefs around the world

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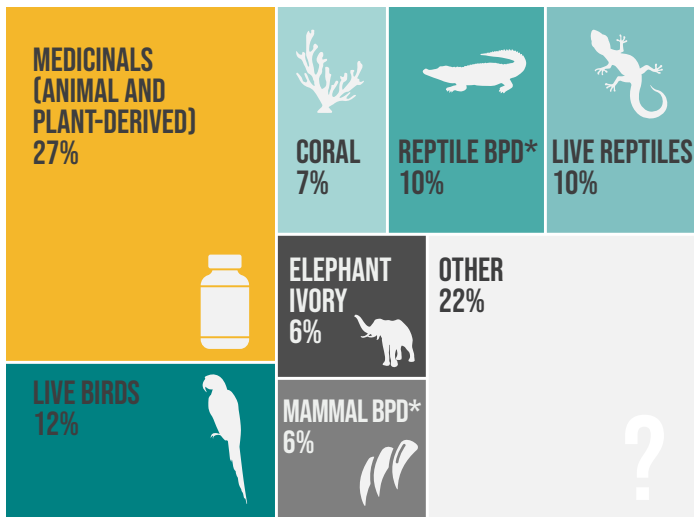
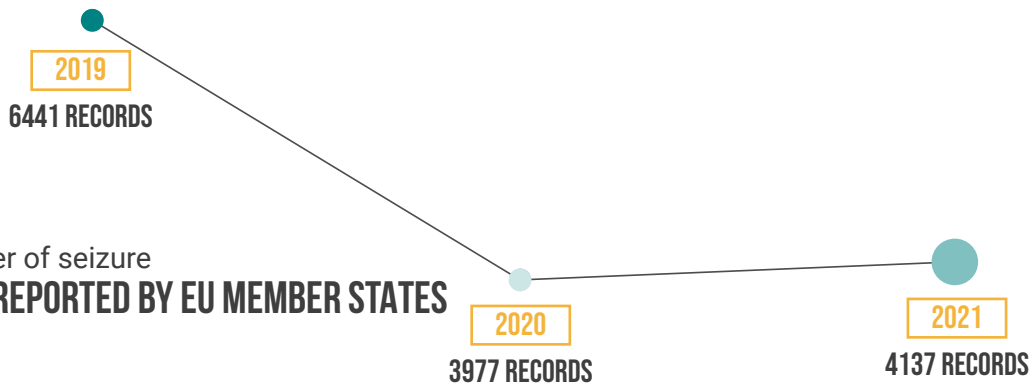
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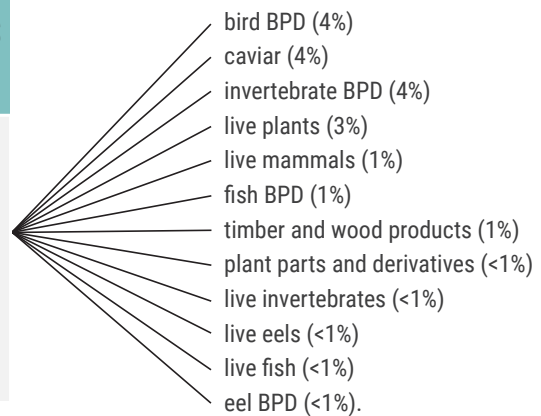
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OVERVIEW: 2021 EU CITES-RELATED SEIZURES AT A GLANCE



The main commodity groups seized in the EU in 2021 based on the NUMBER OF RECORDS



The main commodity groups seized in 2021 based on the NUMBER OF SPECIMENS



REPORTED VALUE OF ILLEGAL WILDLIFE SEIZED IN THE EU

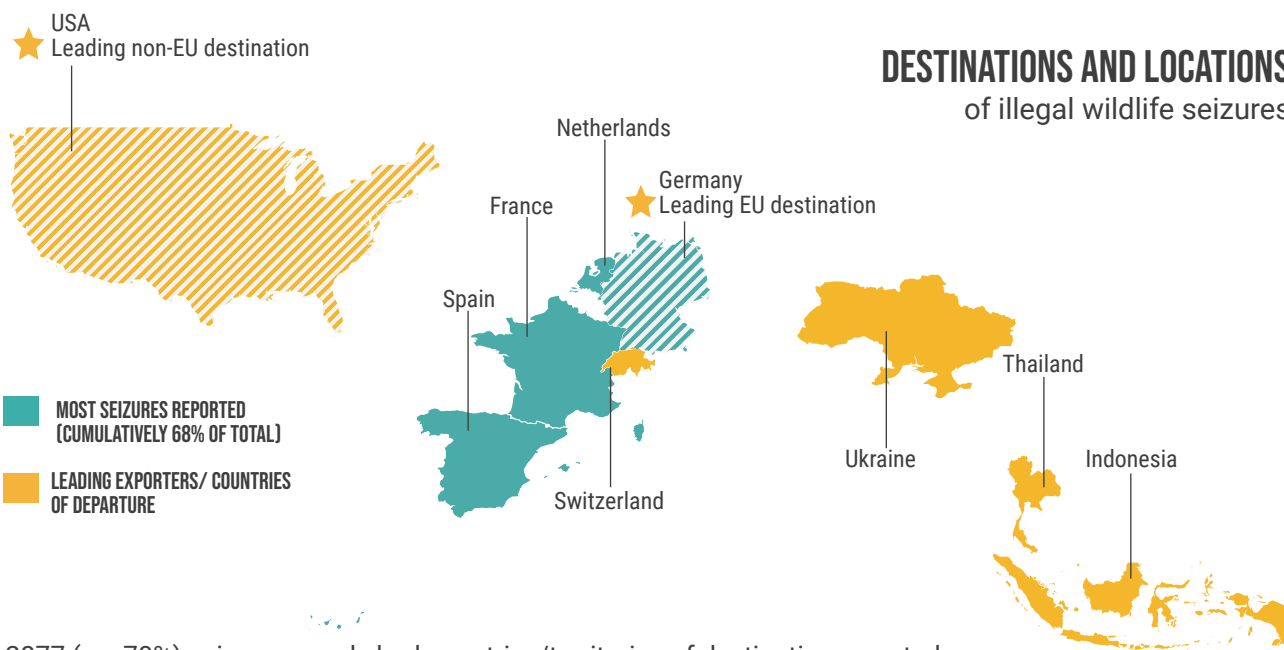
based on estimated values reported for only 25% of all records (1036 out of 4137, with no information on value provided for the rest of the seizures)



*BPD = bodies, parts and derivatives

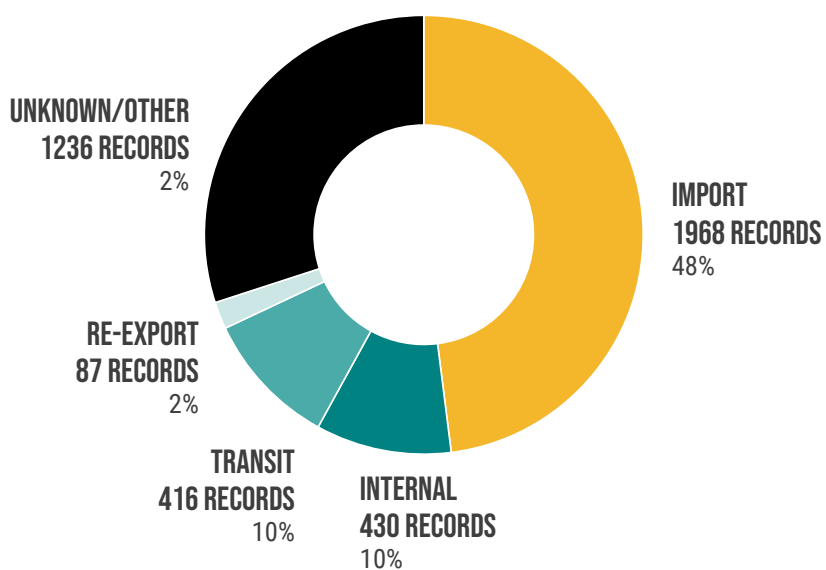
**This report does not attempt to extrapolate the available value information to the whole 2021 seizures dataset, nor does the figure represent the actual illegal wildlife trade market in the EU as the available data are minimal.

*** See page 9 for more information regarding this value.



2877 (ca. 70%) seizure records had countries/territories of destination reported
 2502 (87%) of these were destined for EU Member States
 373 (ca. 13%) records were destined for non-EU countries or EU overseas territories

THE POINT OF SEIZURE (direction of trade)



31%
SEIZURE RECORDS MADE AT
MAIL CENTRES



19%
SEIZURE RECORDS MADE AT
PRIVATE PREMISES



INTRODUCTION

THIS BRIEFING AIMS TO PROVIDE AN OVERVIEW OF ALL CITES-RELATED SEIZURES REPORTED BY THE MEMBER STATES OF THE EUROPEAN UNION¹ (EU) FOR THE 12-MONTH PERIOD FROM JANUARY TO DECEMBER 2021.



This briefing is based on all seizures reported by the EU Member States which have taken place both at EU external borders (postal centres, airports, maritime ports, and land boundaries) and at internal locations within an EU Member State (e.g. private premises, market/shops, fair/exhibition/show/auction houses).

The quantitative analysis of these seizures ('Reported CITES-related Seizures involving the EU' and 'Brief Comparison to 2020') and examples of seizures ('Details of Key CITES-related Seizures Reported by the EU Member States in 2021') are based on seizure records submitted in the 2021 CITES Annual Illegal Trade Reports (including information on prosecutions) submitted to the EU-TWIX² database by the EU Member States. Of the 27 EU Member States, 24 provided data on seizures that occurred in 2021³.

In 2020, approximately two-thirds of the typical number of seizure records of species protected under CITES were reported by law enforcement authorities in the EU, in part due to the COVID-19 pandemic (3977 seizure records reported by 24 EU Member States in 2020 compared to 6441 seizure records reported by 25 EU Member States in 2019). Following this significant decrease in the number of seizure records reported by the EU Member States in 2020, the total number started to increase again in 2021, totalling 4137 seizure records. Although this increase was notable, 36% fewer seizure records involving species protected under CITES were reported by law enforcement authorities (compared to pre-COVID-19 pandemic levels in 2019).

The emergence and spread of the COVID-19 pandemic resulted in worldwide travel restrictions and widespread lockdowns, border closures, temporary closures of physical shops, and limitations on direct contact with other individuals for much of 2020 and 2021. The year 2021 remained challenging

for the airline industry, with the stagnation of international air travel particularly in the first half of 2021. Nonetheless, the air industry showed considerable recovery with gradual improvement from June 2021 amid the reopening of short-haul markets. Progress in vaccinations and improved testing efficiency helped lift domestic lockdowns and reopen some international markets⁴. The United Nations Conference on Trade and Development (UNCTAD) estimated that maritime trade was projected to increase by 4.3% in 2021, in tandem with the recovery in merchandise trade⁵. Indeed, global trade continued to recover and grow strongly in 2021 and compensated some, but not all, of the accumulated losses from the steep declines seen in the first half of 2020 of a similar magnitude to the Global Financial Crisis (2008)⁶.

Restrictions (either a continuation of 2020 restrictions or new restrictions in response to new variants) continued to impact law enforcement action, which likely contributed to the reduced seizure rates compared to pre-COVID-19 pandemic times.

The COVID-19 pandemic was likely also impacting the number of personnel able to carry out enforcement actions. The COVID-19-related staff sickness or self-isolation resulted in a reduced workforce and therefore reduced capacity to detect and report illegal wildlife trade.

It is important to note that any change in the number of seizures reported over the years and any patterns in illegal wildlife trade observed from the seizure data may be due to varying levels of enforcement effort, which could differ over time in many EU Member States. These do not necessarily indicate shifts in demand or changes in illegal wildlife trade dynamics. Conclusions should be drawn with this in mind.

REPORTED CITES-RELATED SEIZURES INVOLVING THE EU

THE EU MEMBER STATES REPORTED A TOTAL OF 4137 SEIZURE RECORDS IN 2021, WITH GERMANY⁷ (CA. 25%), FRANCE (CA. 22%), SPAIN (CA. 11%), AND THE NETHERLANDS (CA. 11%) ACCOUNTING FOR 68% OF TOTAL SEIZURE RECORDS IN 2021 (FIGURE 1).

MEMBER STATE	2021 SEIZURE RECORDS	MEMBER STATE	2021 SEIZURE RECORDS	MEMBER STATE	2021 SEIZURE RECORDS
Germany	1031	Czech Republic	70	Ireland	3
France	909	Malta	66	Slovenia	2
Spain	436	Denmark	53	Romania	1
Netherlands	430	Sweden	38	Greece	1
Italy	277	Lithuania	29	Luxembourg	0
Belgium	226	Estonia	22	Cyprus	0
Portugal	177	Latvia	15	Slovakia	0
Poland	148	Bulgaria	14	TOTAL	4137
Hungary	90	Croatia	14		
Austria	80	Finland	5		

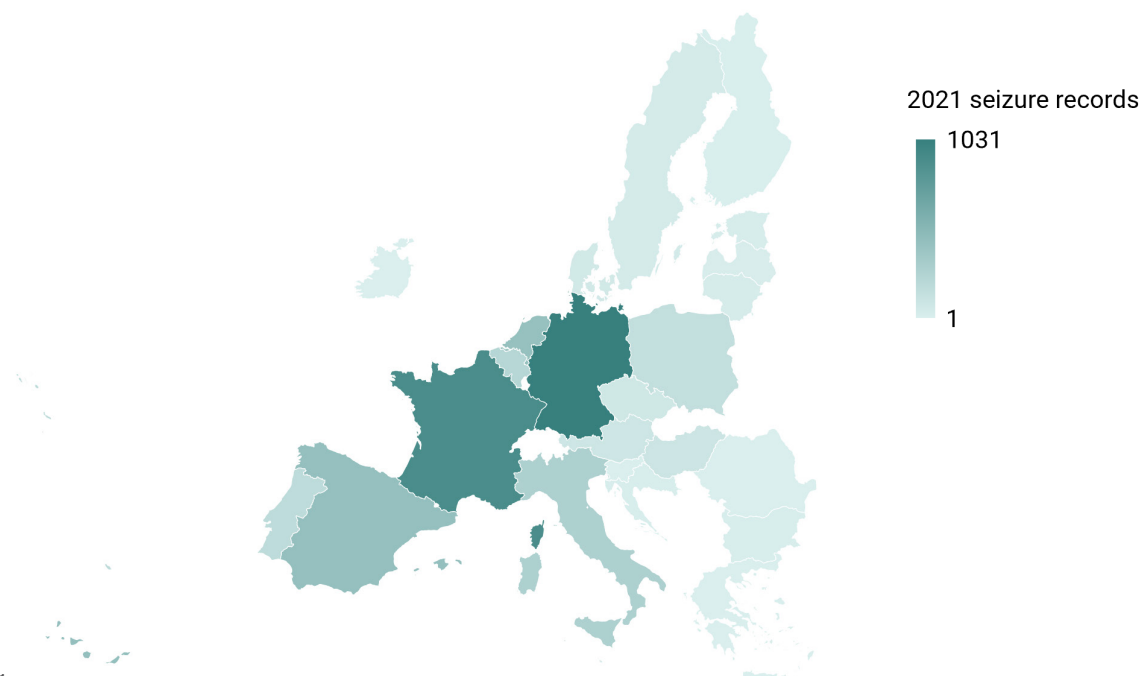


FIGURE 1

Distribution of seizure records across the EU Member States, based on the number of total seizure records in 2021 (excluding Cyprus, Luxembourg, and Slovakia, which reported no seizures in 2021). Note: in Slovakia, seizures made in 2019 and 2020 did result in prosecution in 2021). Source: EU-TWIX database.

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

The main types of commodities seized in the EU in 2021 were, in order of the number of reported seizure records (see **Figure 2**):

- i. **Medicinals**^{8,9}, derived from plants and animals, including both medicinal products (medicinal products are also understood to include health/food supplements, cosmetics, and aromatic plants [not necessarily used as medicine]) and parts/derivatives for medicinal use¹⁰ (**1117 seizure records** involving **335 108 specimens** (pieces, packets, pills) and an additional ca. **14 162 kg and 1538 l**). A total of 83% of seizures involving medicinals were derived from plants (**932 seizure records**, involving **259 138 specimens**, and an additional ca. **5318 kg**). A total of **75 970 animal-derived medicinal items** (and an additional ca. **8844 kg** and ca. **1531 l**) were reportedly seized across **185 seizure records**; medicinals accounted for 27% of total seizure records in 2021 (compared to 30% of records in 2020 and 29% in 2019).
- ii. **Live birds** (528 seizure records; 989 specimens); 13% of total seizure records in 2021 (compared to 9% in 2020 and 5% in 2019).
- iii. **Reptile bodies, parts, and derivatives** (444 seizure records; 1130 specimens and an additional ca. 221 kg); 11% of total seizure records in 2021 and 2020 (compared to 10% in 2019).
- iv. **Live reptiles and amphibians** (437 seizure records, 2539 specimens, and an additional ca. 2 kg); 11% of total seizure records in 2021 (compared to 10% in 2020, and 6% in 2019).
- v. **Live coral and coral rock** (283 seizure records, 4286 specimens, and an additional ca. 149 kg) and **coral parts and derivatives** (eight records, 57 specimens, and an additional 30 kg; 7% of total seizure records in 2021 and 2020, compared to 14% in 2019).
- vi. **Elephant ivory** (257 seizure records, 1452 specimens, and an additional 165 kg); 6% of total seizure records in 2021, 2020, and 2019.
- vii. **Mammal bodies, parts, and derivatives** (249 seizure records; 1318 specimens and an additional ca. 170 kg); 6% of total seizure records in 2021, and 2020, and 5% in 2019.

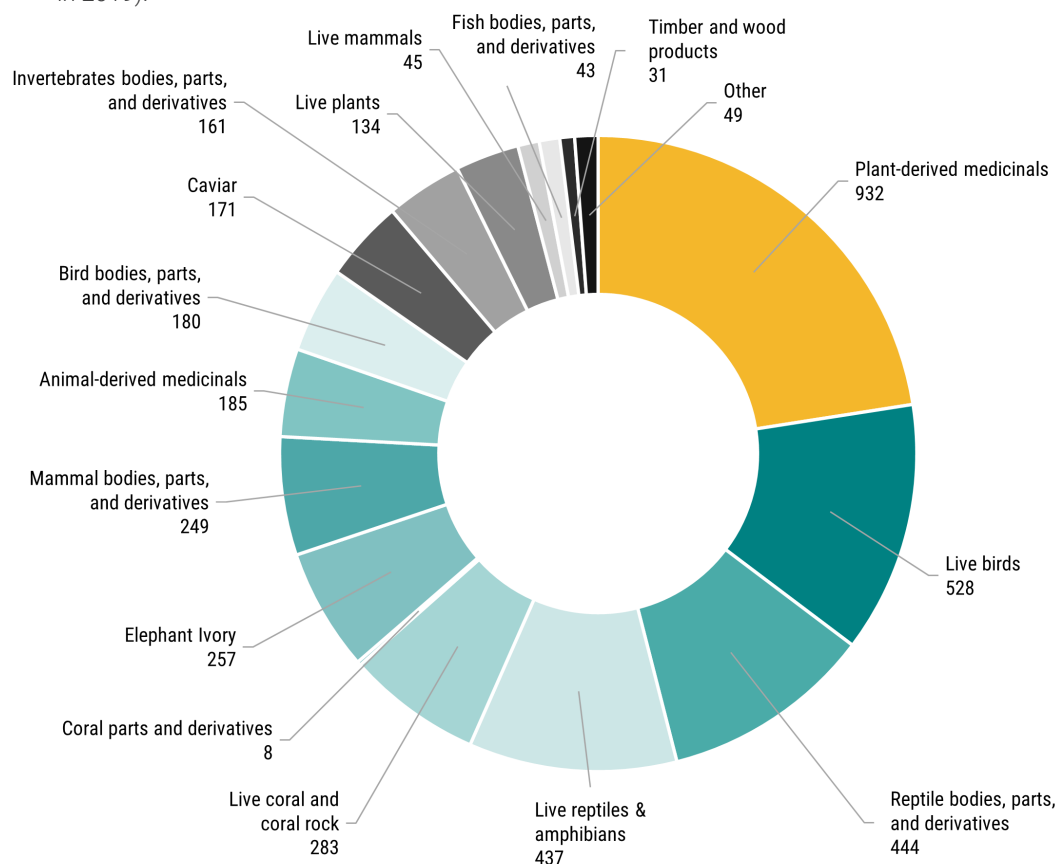


FIGURE 2
Distribution of all seizure records reported by the EU Member States across commodity groups, 2021 (based on the number of seizure records) Source: EU-TWIX database.

Note: "Other" includes the following commodity groups: Plant parts and derivatives (31 seizure records), live invertebrates (nine seizure records), live eels (eight seizure records), eel bodies, parts, and derivatives (eight seizure records), and live fish (seven seizure records). Source: EU-TWIX database.

Important individual seizures reported by the EU Member States across key commodity groups are set out in **Section 3**.

Point of seizure (direction of trade):

According to the EU-TWIX database, in 2021, nearly **48%** (1968 seizure records) were reportedly **seized on import**, followed by **internal seizures (10%)**; 430 seizure records), seizures in **transit (10%)**; 416 seizure records), and seizures on **(re-)export (2%)**, 87 seizure records). For the rest (28%; 1140 seizure records), the direction of trade was reported as unknown/ no information was provided, or other (2%, 96 seizure records).

Value of illegal wildlife trade involving the EU (based on estimated values provided for 25% of total seizure records in 2021):

Of the 4137 seizure records in 2021, the value of commodities seized was reported for 1036 seizure records, estimated at a minimum of EUR2.39 million. This reported value decreased from EUR3.1 million in 2020 and EUR4.7 million in 2019. This report does not attempt to extrapolate the available value information to the whole 2021 seizures dataset, nor does the figure represent the actual illegal wildlife trade market in the EU as the available data are minimal. There may also be differences in the types of monetary values provided by the EU Member States. For example, the reported value may represent commodities involved in legal or illegal markets and may

reflect a commodity's value at different points along the trade chain (e.g. at the point of supply to traders or the end-market value for consumers).

Compared to the 1104 seizure records where a value for items seized was reported in 2019 (17% of the total seizures reported in 2019; out of a total of 6441 records), 21% of seizure records reported an estimated value of seized commodities in 2020 (850 out of a total of 3977), and 25% in 2021 (1036 out of 4137).

The number of seizure records with a reported value also varied significantly across the commodity groups. For example, the EU Member States reported values for 151 seizure records of live birds, while only one value was reported for live fish seized in 2021. As a result, the reported values of the different types of commodities in the 1036 seizure records (e.g. Figure 3) only represent those with available information.

Within the available value (EUR) information submitted in 2021, animal-derived medicinals were the commodity with the highest reported value totalling EUR499 315 (Figure 3). These data were based on information provided in 36 seizure records. Other commodities with a high reported total value were timber and wood products; reptile bodies, parts, and derivatives; live mammals; caviar; live reptiles; and plant-derived medicinals (Figure 3).

nearly 48% of seizures were reportedly made on import into the EU



Common Snowdrops are listed on CITES Appendix II

High value commodities



Timber and wood products totalling ca. **EUR188 217**, based on values given in 17 seizure records



Reptile bodies, parts, and derivatives totalling ca. **EUR472 747**, based on 101 seizure records



Live mammals totalling ca. **EUR81 220**, based on values given in 10 seizure records



Animal derived medicinals totalling ca. **EUR499 315**, based on 36 seizure records



Caviar totalling ca. **EUR109 775**, based on 93 seizure records



Live reptiles totalling ca. **EUR217 538**, based on 125 seizure records



Plant derived medicinals totalling ca. **EUR176 494**, based on 50 seizure records

FIGURE 3

Top commodities seized by value (EUR), based on 1036 seizure records where the EU Member States reported the value of the commodity seized in 2021.

Type of locations where seizures took place:

In 2021, the EU Member States reported the type of location where a seizure took place for 3504 seizure records; 85% (compared to 94% of records in 2020).

Most seizures were made at **mail centres** (1299 seizure records, 31%), followed by **private premises** (780 seizure records, 19%), **airports** (639 seizure records, 15%), and **inland**

(286 seizure records, 7%). The remaining seizures were intercepted in other locations, including markets/shops (3%), maritime ports (2%), land boundaries (2%), roads/highway/public parking (1%), fairs/exhibitions/shows/auction houses (1%), and zoological gardens (< 1%). In 633 seizure records (15%), the type of location was left blank or was unknown.

31% of seizures were made at mail centres



Blue and gold macaw Ara ararauna

CASE STUDY: LIVE BIRDS

In 2021, the second most frequently seized commodity type, after medicinals, was live birds; accounting for **528 seizure records, involving 989 live birds** (13% of total seizure records in 2021, representing an increase from 9% of records in 2020, and 5% in 2019).

Live birds were predominantly seized at internal location types (ca. 76%). Of these location types, live birds were mainly detected at **private premises** (49%) and **inland** locations¹¹ (18%) and were mostly reported by France, Spain, Portugal, and Belgium.

Parrots (order Psittaciformes, App. I,II/Annex A,B) were the most reported taxa in seizures (77% of total live bird seizure records in 2021). While 90 different species of live parrot were seized in 2021, the **Grey Parrot** *Psittacus erithacus* (App. I/Annex A) was the most seized species (15% of live bird seizures).

One significant seizure involved 97 live parrots, including **Blue-fronted Amazon** *Amazona aestiva*, **Blue-and-gold Macaw** *Ara ararauna* (both App. II/Annex B), **Scarlet Macaw** *Ara macao*, and **Grey Parrot** *Psittacus erithacus* (both App. I/Annex A), amongst others, seized from **private premises** in France. The specimens were detected due to intelligence gathering and seized from a private collector due to a lack of CITES permits, invalid CITES permits, and false information provided to obtain CITES documents.

Another significant seizure was reported by Hungary. As part of a larger seizure involving parrots and rheas, Hungarian police, in cooperation with the CITES Management Authority and the National Food Chain Safety Office, conducted a house search of the premises of an exotic bird and dog breeder in July 2021 as part of an ongoing investigation. Authorities found several unmarked birds and the breeder was unable to present the appropriate documents. As a result, 44 live parrots (including **Grey Parrot** [App I/Annex A], **Blue-and-yellow Macaw**, **Red-and-green Macaw** *Ara chloropterus* and **Eclectus Parrot** *Eclectus roratus* [both App II/Annex B] as well as 13 **Greater Rhea** *Rhea americana* App II/Annex B) were seized. Several boxes of unregistered medicines, falsified veterinary documentation (e.g., dog passports), and microchips were found at the premises.

Aside from seizures involving parrots, the **Common Kestrel** *Falco tinnunculus* (App. II/Annex A) was the most commonly reported bird of prey species (Falconiformes; App I,II,III/Annex A,B,C) seized in 2021. This species was involved in 25% of seizures of bird of prey species.

90 species of parrot were seized in 2021

Common Kestrel was the most frequently reported bird of prey seized

COUNTRIES/TERRITORIES OF DEPARTURE OF ILLEGAL WILDLIFE TRADE/EXPORTERS

A total of **2526 seizure records** (ca. 61%) had countries/territories of export (or 'departure of illegal wildlife trade') reported; **EU Member States** (excluding their overseas territories) were the **country of export for 184 seizure records** (ca. 7% of total records with a known country of export; involving 17 EU Member States), while non-EU countries/territories were reported as the country of departure/export for **2342 seizure records** (92% of records with a known country of export).



THAILAND was the reported exporter for **379 seized shipments** (15% of records

with a known country of export in 2021, compared to 20% in 2020); a total of 78% of these records in 2021 involved **plant-derived medicinals** (296 records comprising 18 385 specimens and an additional ca. 214 kg and ca 1 l), mainly containing Cacti *Cactaceae* spp. (App. II/Annex B) (91% of plant-derived medicinals exported from Thailand; 269 records, 15 764 specimens, and an additional ca. 211 kg). **Live plants** (37 records involving 623 live plants and an additional 0.03 kg; 10% of total shipments/records exported from Thailand) and **reptile bodies, parts, and derivatives** (21 records comprising 75 specimens; 6% of the total exported shipments/records from Thailand) were the other main commodity types seized from Thailand.



THE USA was the reported exporter in **349 seizure records** (13% of records

with a known country of export in 2021): approximately 77% of these records involved **plant-derived medicinals** (269 records involving 174 561 specimens and an additional ca. 6 kg and 2 l), mainly containing parts and derivatives of **African Cherry** *Prunus africana* (App. II/Annex B).



UKRAINE was the reported exporter in **152 seizure records** (6% of records with a

known country of export in 2021): the majority of these records involved **caviar** (64 records involving 63 specimens and an additional ca. 31 kg; 42% of Ukrainian exported records), including from the Beluga Sturgeon *Huso huso* (App. II/Annex B), and **animal-derived medicinals** (60 records involving 19 392 specimens and an additional 18 kg; 39% of Ukrainian exported records), mainly **Japanese Seahorse** *Hippocampus japonicus* (App. II/Annex B), originating from Indonesia and seized by Polish Customs; and **medicinal leeches** (*Hirudo medicinalis* and *H. verbena*, both App II/Annex B) seized by Poland and Estonia.



INDONESIA was the reported exporter in **110 seizure records**: 67% of records

involved **reptile bodies, parts, and derivatives**, comprising 74 seizure records involving 323 specimens mainly consisting of **small leather products made from python** *Python* spp. (App. II/Annex B). Additionally, 20 seizure records involved **coral** (18%, 2355 specimens), mainly consisting of live corals, with species including *Euphyllia yaeyamaensis* (no common name; App. II/Annex B), as well as 12 seizure records which involved **plant-derived medicinals** (4135 specimens and an additional 0.19 kg).



SWITZERLAND was the reported exporter in **99 seizure records**: 72% of these records involved **plant-**

derived medicinals (72 records involving 24 954 specimens) mainly consisting of **Costus Root** *Saussurea costus* (App. I/Annex A) originating mostly from India (ca. 99%).

FIGURE 4

Top three commodity types for the top five countries/territories of export or departure of illegal wildlife trade as reported by the EU Member States, according to the number of seizure records, 2021.

Source: EU-TWIX database.



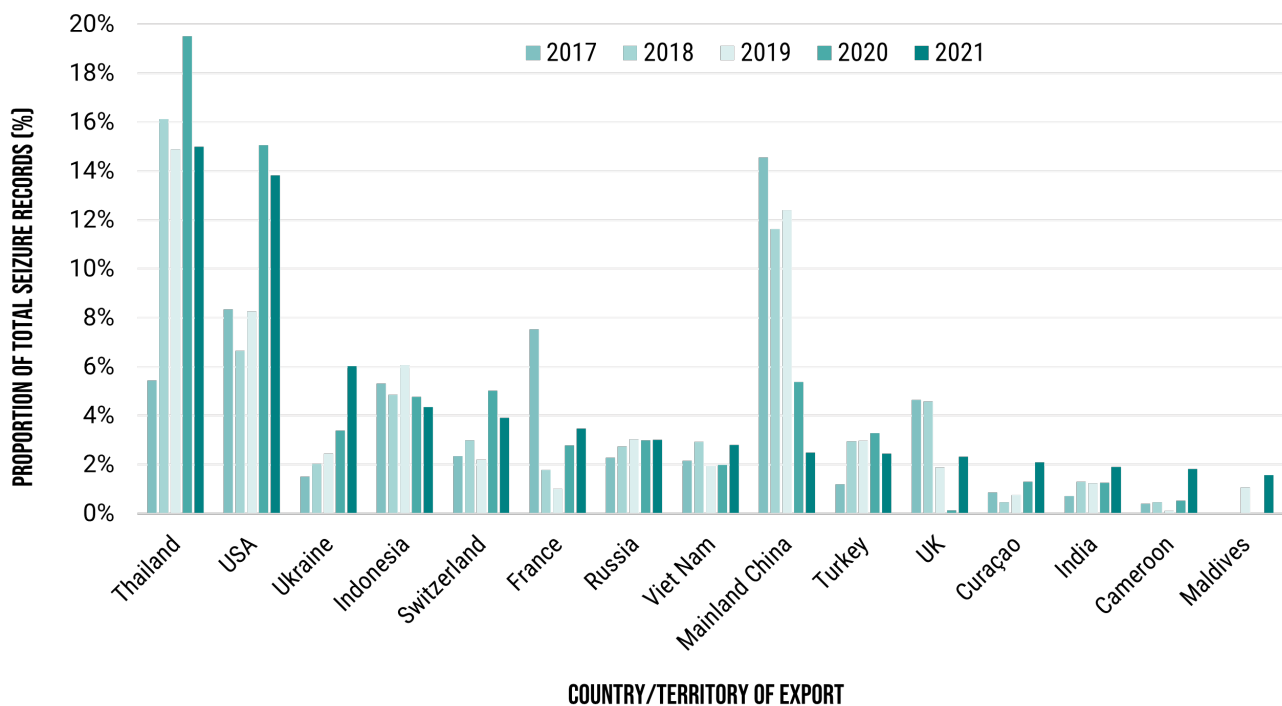


FIGURE 5

Top 15 countries/territories of export or departure of illegal wildlife trade as reported by the EU Member States, according to the number of seizure records, 2021. Data from 2017, 2018, 2019, and 2020 are included for comparison. Source: EU-TWIX database.

COUNTRIES/TERRITORIES OF DESTINATION OF ILLEGAL WILDLIFE TRADE/IMPORTERS

A total of **2877 seizure records** (ca. 70% of total seizure records in 2021) had countries/territories of destination reported. The **EU Member States were the destination of 2502 seizure records (87% of total records with a known destination)¹²**, and the remaining 373 seizure records (ca. 13% of total records with a known destination) were destined for non-EU countries (or the EU overseas territories).

Of the 2502 seizure records destined for the EU Member States, **Germany was the most reported destination country** (811 seizure records), followed by the Netherlands (333 seizure records), France (331 seizure records), Belgium (227 seizure records), and Poland (132 seizure records). These five countries were reported as the destination for 73% of the total seizures of wildlife destined for the EU.

Of the 373 seizure records **destined for non-EU countries** or territories, **the USA was the leading destination for commodities seized**

upon export/(re-)export from the EU or while in transit in the EU, accounting for 63 seizure records (ca. 2% of total seizure records; Figure 5).

A total of 33% (21 seizure records) of the 63 shipments **destined for the USA were mammal bodies, parts, and derivatives**. These seizures mostly involved **bones and skulls derived from primates** (App. I,II/Annex A,B), totalling 110 specimens. Species included White-nosed Guenon *Cercopithecus nictitans* and the Moustached Monkey *C. cephus* (both App. II/Annex B). Approximately 95% of seizure records involved exports from Cameroon, seized in transit by French Customs at Roissy, and transported by express courier.

In addition, the **UK, Switzerland, Guadeloupe, and mainland China** were frequent destinations for commodities seized upon export/(re-)export from the EU or while in transit in the EU:

UK – 51 seizure records, mainly involving **reptile bodies, parts, and derivatives** (55%) and plant-derived medicinals (20%).

Guadeloupe – 24 seizure records, mainly involving **live reptiles** (75%) (*Pythonidae* and *Boidae* spp. App I,II/Annex A, B).

Switzerland – 33 seizure records, involving the **plant-derived medicinal** (ca. 61%) *Gastrodia* Rhizome *Gastrodia elata* (App. II/Annex B).

Mainland China – 22 seizure records, mainly **elephant ivory** (40%) and reptile bodies, parts, and derivatives (20%).

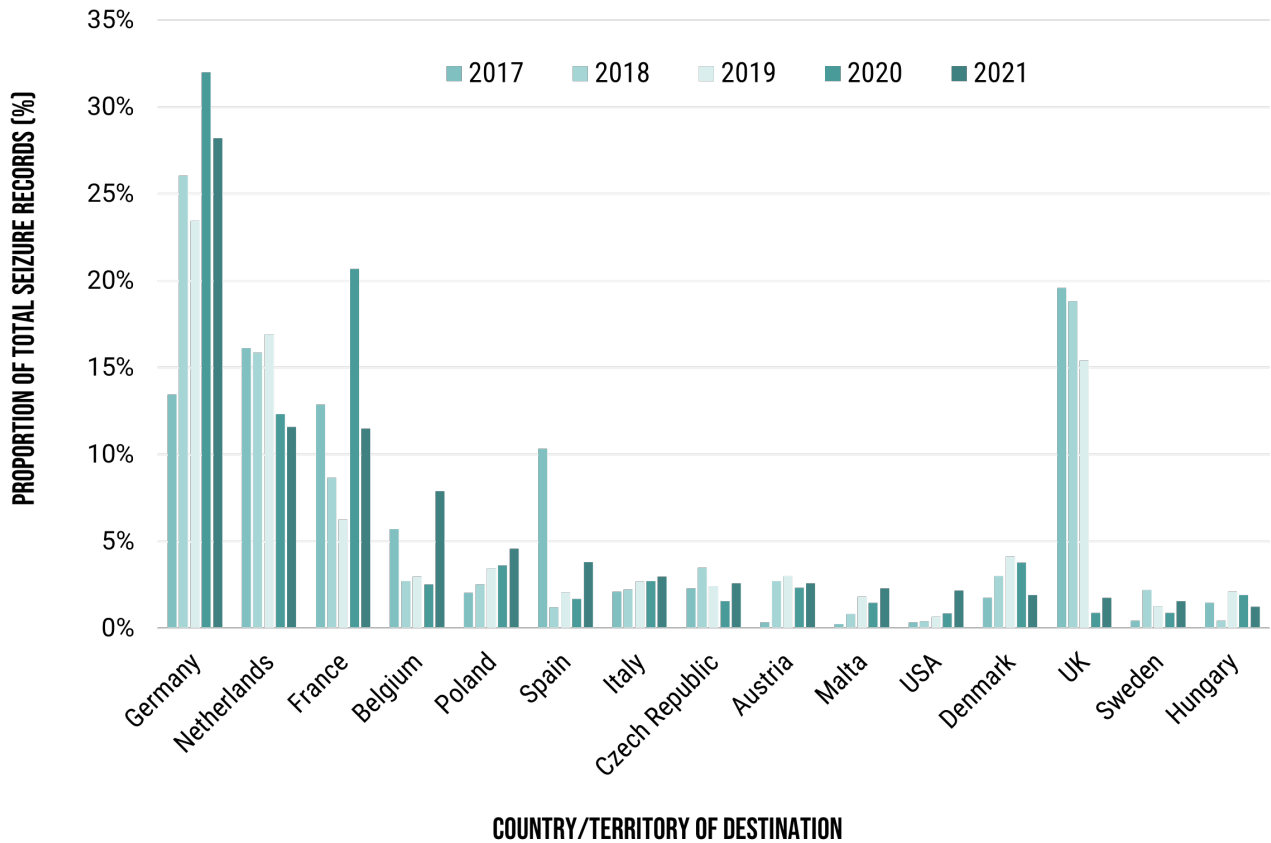


FIGURE 6
Countries/territories of destination of illegal wildlife trade (including their overseas territories) as reported by the EU Member States, according to the number of seizure records, 2021. Data from 2017, 2018, 2019, and 2020 are included for comparison. Source: EU-TWIX database.



Mexican Alligator Lizard *Abronia graminea* (CITES Appendix II/ EU Annex B) seized in the Netherlands

INTERNAL CITES-RELATED SEIZURES IN THE EU

In 2021, a total of 430 internal seizure records were reported by 14 EU Member States (Belgium, Bulgaria, Croatia, Czech Republic, France, Hungary, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Romania, and Spain), (compared to 658 internal records reported by 11 EU Member States in 2020. The main commodity types seized internally within the EU in 2021 (in order of importance based on the number of reported seizure records) were **live reptiles and amphibians** (29%), **live birds** (24%), and **bird bodies, parts, and derivatives** (18%)¹³.

A total of **844 live reptiles and amphibians** were reported as seized internally, across **130 seizure records in 2021**. In terms of the number of seizure records, these seizures mainly involved live **turtles/tortoises** *Testudinidae* spp. (62%; App. I,II,III/Annex A,B,C) and **Pythons** *Pythonidae* spp. (14%) (App. II/Annex B), while *Testudinidae* spp. (412 individuals) and **Axolotls** *Ambystoma mexicanum* (App. II/Annex B) (301 individuals) were most frequently seized, in terms of the number of individuals involved. **Italy** reported a high proportion of these seizures (78 records involving 522 specimens), mostly detected at **private premises**.

Eleven EU Member States reported 105 internal seizure records involving a total of **148 live birds**, 66% of records were parrots (Psittaciformes), and 20% were birds of prey (Falconiformes). The **Green-cheeked Parakeet** *Pyrrhura molinae* (App. II/Annex B)

and the **Grey Parrot** *Psittacus erithacus* (App. I/Annex A) were the most seized species (each comprising 25% of total internal parrot seizures). The **Eurasian Buzzard** *Buteo buteo* (App. II/Annex A) was the most seized bird of prey species (24% of total internal bird of prey seizures). **Belgium and Italy** were the primary reporting countries of the internal trade of live bird seizures, reporting 53% and 15% of internal seizures of live birds, respectively. For example, the Belgian CITES Inspectorate reported the commercial internal seizure of 26 live parrots including Eclectus Parrot *Eclectus roratus* (App II/Annex B), Green-cheeked Parakeet *P. molinae* (App II/Annex B) and Grey Parrot *P. erithacus* from a market/shop as a result of targeting. The specimens were not concealed and were confiscated due to a lack of CITES permits. The parrots were valued at approximately EUR42 000. The trader was fined EUR11 400, and the specimens were taken to a rescue centre.

There were 77 reported internal seizure records involving **bird bodies, parts, and derivatives (BPD)**, involving 144 specimens. Birds of prey (typically bodies) made up 62% of these seizure records, namely the **European Honey Buzzard** *Pernis apivorus* (four records, involving 15 specimens), **Northern Hobby** *Falco subbuteo* (three records, involving nine specimens), and **Eurasian Sparrowhawk** *Accipiter nisus* (four records, involving four specimens). **Malta** reported 77% of these internal seizures of bird BPD, involving 121 specimens, all seized at private premises and all wild-caught.

Axolotl *Ambystoma mexicanum*



METHODS OF TRANSPORT

The most frequently reported location, where seizures occurred, was **mail centres** (31% of total records), with a total of 98 595 specimens and an additional ca. 319 kg and ca. five l seized across **1299 records**. **Germany reported the highest number of seizures at mail centres** with 854 seizure records (63% of which occurred at mail centres in Frankfurt am Main Airport and 22% at Leipzig Airport). **The Netherlands** reported the second-highest number of seizures at mail centres (185 seizure records), with 76% of these seizures occurring at Schiphol International Airport and 22% at The Hague Mail Centre. **Belgium** followed with 93 seizure records at mail centres, 83% of which took place at Machelen mail centre and 14% at Zaventem Airport. **Plant-derived medicinals were the most frequently seized commodity group at mail centres** (60% of total records at mail centres), followed by reptile bodies, parts, and derivatives (17%), live plants (4%) and elephant ivory (3%). Detection methods included **routine inspection** (75%) and **Customs document checks** (15%).

Transport via mail (primarily **airmail** (33% of records with a reported mode of transport) and **express carrier** (20%)) were the **most commonly reported mode of transport**

of intercepted goods in the EU in 2021, accounting for 1314 seizure records (53% of the 2447 seizure records with details reported on transport mode). In addition to airmail, air transport also included transport by **air passengers** (20% of records with details reported on transport mode) and **air freight** (5%). However, there were gaps in reporting as in 1690 seizure records (40%), the transport details were reported as unknown or blank.

A total of **639 seizures** took place at an **airport**, involving a total of 228 570 specimens and an additional 202 kg and 0.2 l (15% of total records). **The most commonly reported commodities seized at airports were live coral and coral rock** (28%; 179 records). **The Netherlands reported the highest number of seizures at airports**, with a total of 157 seizure records (nearly all of which were made at Schiphol International Airport). Germany reported the second-highest number of seizures at airports (148 seizure records), 51% of which were made at Frankfurt am Main Airport and 15% at Munich Airport).

airmail was the top reported mode of transport of intercepted wildlife goods



Various ivory carvings

DETAILS OF KEY CITES-RELATED SEIZURES REPORTED BY THE EU MEMBER STATES IN 2021

Table 1 contains details of crucial seizure records reported by the EU Member States from January to December 2021. Seizures were selected based on the following criteria:

- seizures involving particularly large quantities of a commodity type; and
- seizures highlighting important illegal wildlife trade trends involving the EU (e.g., in terms of countries or species involved).

TABLE 1

Details of selected seizures reported by the EU Member States for 2021 arranged by commodity type (the country which reported the seizure records is shown in bold, and the EU Member States involved in the trade route are shown in CAPITALS).

EXPORT/ COUNTRY OF DEPARTURE	TRADE ROUTE		SPECIES AND QUANTITY SEIZED	DETAILS
	TRANSIT	DESTINATION		
MEDICINALS				
Thailand	→	BELGIUM	One commercial seizure involving 109 boxes , each containing five sachets of medicine containing cacti Cactaceae spp. (App. I,II/Annex A,B) weighing a total of ca. 24 kg , transported via air mail	Detected during routine inspections at Maelen Mail Centre , Belgium, with no CITES permit. No charges were brought against the consignee but a warning was issued (June 2021)
Canada	→ THE NETHERLANDS →	POLAND	One commercial seizure involving 1728 pills containing African Cherry Prunus africana (App II/Annex B)	Seized at a mail centre in Schiphol International Airport, as part of Customs document checks . The goods were confiscated due to no accompanying CITES permit (March 2021)
India	→	FRANCE	One seizure of 4000 kg of Costus Root Saussurea costus (App. I/Annex A). The shipment was valued at EUR55 854	A fine of EUR 300 was imposed on the offender (July 2021)

TRADE ROUTE			SPECIES AND QUANTITY SEIZED	DETAILS
EXPORT/ COUNTRY OF DEPARTURE	TRANSIT	DESTINATION		
USA	→ THE NETHERLANDS →	Russia	One commercial seizure involving 142 380 pills containing Dendrobium Dendrobium nobile mixed with <i>Hoodia gordonii</i> (both App II/Annex B). The shipment was worth an estimated EUR 33 700	Intercepted in transit at Schiphol International Airport , as a result of Customs document checks and seized due to no CITES permits (June 2021)
American Samoa	→	FRANCE	One seizure involving ca. 28 kg of Agarwood Aquilaria malaccensis (App. II/Annex B). The shipment was valued at EUR1740	Intercepted at Roissy by French Customs (July 2021)
USA	→ FINLAND →	ESTONIA	One tourist seizure involving 58 bottles of medicine derived from American Ginseng Panax quinquefolius (App. II/Annex B). The medicine was transported in personal baggage .	The shipment was seized at Tallinn Airport , Estonia, detected through risk assessment and X-ray (April 2021)
Indonesia (origin)/Ukraine (re-) export)	→	POLAND	49 seizure records totalling 18 654 specimens of medicines containing Japanese Seahorse Hippocampus japonicus (App II/Annex B)	Shipments transported by road were the predominant mode of transport. <i>No further details were provided</i> (2021)
Belarus	→	LITHUANIA	One commercial seizure involving four jars of medicine containing seahorse Hippocampus spp. (App II/ Annex B), (re-) exported by car	Detected inside a vehicle at Alytus, Lithuania, due to random checks (February 2021)
USA	→	GERMANY	Two commercial seizures involving 1389 kg and 7429 kg of cosmetics derived from Siberian Sturgeon Acipenser baerii (App II/Annex B)	Detected by a routine inspection at the Port of Hamburg (maritime) in a shipping container (June 2021)
Brazil	→	FRANCE	15 seizure records with Brazil as the country of export, totalling 672 specimens and an additional 1502 l and ca. 5 kg of cosmetics containing sturgeon, one of which involved 'shampoos containing caviar'	Nearly all the cosmetics were exported to France by express carriers and intercepted on import at locations such as Roissy and Tremblay (Between May and November 2021)
Viet Nam/ Thailand	→ Qatar →	THE CZECH REPUBLIC	Three seizure records involving Cobra-derived medicinals Elapidae spp. (App. II/ Annex B): 1) one bottle of medicine containing the Indochinese Spitting Cobra Naja siamensis (App II/Annex B); 2) 20 tubes of King Cobra Ophiophagus hannah (App II/Annex B); 3) 45 tubes (in total weighing 4.5 l) containing King Cobra	The first two records originated from Viet Nam and were detected at Prague Airport in personal luggage . The third record was exported from Thailand, transported in a 'postal express-courier parcel' , and seized at Prague Airport Mail Centre . All three seizures were detected during routine inspections and seized due to no CITES permits (2021)
Russia	→	ESTONIA	Three seizure records of medicine containing bear Ursidae spp. (App. I,II/ Annex A,B): 1) 126 tubes ; 2) 0.075 kg (one tube); 3) 0.01 kg (one tube), all transported via road	Detected by Customs in Tallinn at a land boundary , mostly as a result of risk assessment . No CITES permits accompanied the specimens (2021)
Zambia	→ THE NETHERLANDS →	United Kingdom	One seizure involving 10 bottles of crocodile oil Crocodylia (Alligators, Caimans, Crocodiles; App. I,II/Annex A,B), transported via express carrier	The package was intercepted at Schiphol International Airport and detected due to Customs document checks (May 2021)

TRADE ROUTE			SPECIES AND QUANTITY SEIZED	DETAILS
EXPORT/ COUNTRY OF DEPARTURE	TRANSIT	DESTINATION		
Turkey	→ BULGARIA/ ROMANIA →	GERMANY	One commercial shipment of 3740 live Northern Medicinal Leeches <i>Hirudo medicinalis</i> (App. II/Annex B), intercepted in a truck at the border checkpoint at the Danube bridge (between Bulgaria and Romania)	The goods were detected in personal baggage during a routine inspection . The truck driver was fined EUR50 (March 2021)
Unknown	→	ITALY	One seizure involving two rhino horns <i>Rhinocerotidae</i> spp. (App I,II /Annex A,B). The shipment was valued at EUR160 000	Detected in a public car park at Verona Airport (October 2021)
REPTILE BODIES, PARTS, AND DERIVATIVES				
Togo/Mali/ Democratic Republic of the Congo/Unknown	→	FRANCE	Three seizure records involving a total of 19 Chameleon bodies <i>Chamaeleonidae</i> spp., including five bodies of African Chameleon <i>Chamaeleo africanus</i> (App II/Annex B). The shipment was valued at EUR1300	Transport of the Chameleons included air passengers (Roissy) and maritime containers (Le Havre). The offenders were fined EUR320 and EUR330 (2021)
Democratic Republic of the Congo (origin of Nile Crocodile meat)/ Comoros (exporter) Cameroon (exporter of Nile Monitor meat) Unknown	→	FRANCE	Across four seizure records, a total of 115 kg of turtle/tortoise meat derived from <i>Testudinidae</i> spp. was seized by the French Gendarmerie. A further ca. 65 kg of reptile meat was seized by French Customs, across five seizure records , including 15 kg from Nile Crocodile <i>Crocodylus niloticus</i> (App I/ Annex A) estimated to be worth EUR600, and 2.5 kg of Nile Monitor <i>Varanus niloticus</i> (App. II/Annex B) meat	No further details were provided (2021)
LIVE REPTILES AND AMPHIBIANS				
	→ CROATIA (internal) →		One internal seizure involving 152 live Indian Star Tortoises <i>Geochelone elegans</i> (App I/Annex A), valued at EUR 18 360. The tortoises were transported by car . The tortoises were hidden inside bags, under lettuce . The carrier was sentenced to imprisonment (length not specified) under the Criminal Code	Detected inside a vehicle on the highway Dusina, as a result of risk assessment based on intelligence and X-ray (June 2021)
Tanzania	→ Ethiopia & AUSTRIA →	THE CZECH REPUBLIC	One seizure involving 74 Chameleons of the genus <i>Chamaeleo</i> spp. (App I,II/ Annex A,B; 72 alive, two dead on arrival) at Vienna Airport	The animals were smuggled in the luggage of a Czech citizen, hidden in socks and plastic boxes , and were estimated to have a combined black-market value of approximately EUR37 000 (January 2021)
	→ ITALY (internal) →		One internal seizure of 300 live juvenile <i>Axolotls <i>Ambystoma mexicanum</i></i> (App. II/Annex B)	Detected at private premises in Italy, due to routine inspection and seized due to illegal origin and no CITES permits (February 2021)
	→ SWEDEN (internal) →		One commercial seizure (six records) involving one Rhinoceros Iguana <i>Cyclura cornuta</i> (App I/ Annex A), one Mindanao Water Monitor <i>Varanus cumingi</i> , one Water Lizard <i>Varanus salvator</i> , one Quince Monitor <i>Varanus melinus</i> , one Biak Tree Monitor <i>Varanus kordensis</i> , one Peacock Monitor <i>Varanus auffenbergi</i> (all App II/Annex B), and 18 Hermann's Tortoises <i>Testudo hermanni</i> (App II/Annex A)	All individuals were detected at a market/shop following intelligence/investigation and seized due to illegal sale/ offering/keeping/trans-ported for sale (May 2021)

TRADE ROUTE			SPECIES AND QUANTITY SEIZED	DETAILS
EXPORT/ COUNTRY OF DEPARTURE	TRANSIT	DESTINATION		
LIVE BIRDS				
	→ HUNGARY (internal) →		44 live parrots (including Grey Parrot <i>Psittacus erithacus</i> [App. I/Annex A], Blue-and-yellow Macaw <i>Ara ararauna</i> , Red-and-green Macaw <i>Ara chloropterus</i> , and Eclectus Parrot <i>Eclectus roratus</i> [both App. II/Annex B]) as well as 13 Greater Rhea <i>Rhea americana</i> (App. II/Annex B)	Specimens were seized due to an ongoing investigation , confiscated, and taken to a zoological institution (February 2021)
	→ FRANCE (internal) →		One seizure of 97 live parrots , including Blue-fronted Amazon <i>Amazona aestiva</i> , Blue-and-gold Macaw <i>Ara ararauna</i> (both App. II/Annex B), and Scarlet Macaw <i>Ara macao</i> , Grey Parrot <i>Psittacus erithacus</i> (both App. I/Annex A)	Detected at private premises due to intelligence gathering . Seized because of a lack of CITES permits, invalid CITES permits, and false information provided to obtain CITES documents (March 2021)
	→ MALTA (internal) →		One seizure of three wild-caught Common Kestrel <i>Falco tinnunculus</i> (App. II/Annex B) for personal purposes	Detected due to a physical inspection in private premises (October 2021)
	→ ITALY (internal) →		One seizure involving seven unmarked live captive-bred Red-billed Mesia <i>Leiothrix lutea</i> (App. II/Annex B)	Detected at private premises following an investigation . Seized due to a lack of CITES permits (November 2021)
BIRD BODIES, PARTS AND DERIVATIVES				
	→ FRANCE (internal) →		One seizure record involving eight wild-caught trophies of birds of prey and owls (e.g., Long-eared Owl <i>Asio otus</i> [App. II/Annex A] and Peregrine Falcon <i>Falco peregrinus</i> [App. I/Annex A]). The specimens were destined for personal purposes and microchipped	Detected at private premises following internet monitoring . The specimens were seized due to invalid CITES permits (January 2021)
Cameroon	→ FRANCE →	USA	Seven seizure records involving 15 bird bones , including 14 bird of prey bones (e.g., African Goshawk <i>Accipiter tachiro</i> and Great Sparrowhawk <i>Accipiter melanoleucus</i> (App. II/Annex B) and one Common Barn-Owl <i>Tyto alba</i> (App. II/Annex A) bone	Transported via express carrier (February 2021)
Suriname	→	THE NETHERLANDS	One commercial seizure involving eight feathers from the Red-and-green Macaw <i>Ara chloropterus</i> (App. II/Annex B)	The specimens were detected in a mail centre at Schiphol International Airport and seized due to a lack of CITES permits (September 2021)
	→ MALTA (internal) →		One seizure case involving 65 wild-caught specimens of bird bodies for taxidermy involving various birds of prey (e.g., European Honey-buzzard <i>Pernis apivorus</i> , Eurasian Marsh-Harrier <i>Circus aeruginosus</i> , Eurasian Kestrel <i>Falco tinnunculus</i> [all App. II/Annex A]), owls (e.g., Common Barn-Owl <i>Tyto alba</i> and Short-eared Owl <i>Asio flammeus</i> [all App. II/Annex A]), passerine birds (e.g., European Goldfinch <i>Carduelis carduelis</i> App. III/Annex C) and storks (e.g., Little Egret <i>Egretta garzetta</i> [App. II/Annex A])	Seized from a private premises following a physical inspection . No CITES permits accompanied the specimens (September 2021)

TRADE ROUTE			SPECIES AND QUANTITY SEIZED	DETAILS
EXPORT/ COUNTRY OF DEPARTURE	TRANSIT	DESTINATION		
LIVE CORAL AND CORAL ROCK				
Indonesia	➔	POLAND	One commercial seizure involving 357 live <i>Euphyllia</i> spp. coral and coral rock (mainly belonging to the order Scleractinia (App. II/Annex B)	The specimens were transported via air. No further details were provided (May 2021)
Venezuela	➔	CZECH REPUBLIC	One tourist seizure of 164 live Scleractinia coral and coral rock. The specimens were transported via air mail in personal baggage	The specimens were intercepted at Prague Airport following a routine inspection and seized due to a lack of CITES permits (October 2021)
Tanzania/ the Maldives/ Barbados	➔	HUNGARY	14 tourist seizures involving 135 wild-caught specimens of live coral/ coral rock of the order Scleractinia intercepted on import	Detected at Budapest Liszt Ferenc International Airport following random checks. Seized due to lack of CITES permit (2021)
ELEPHANT IVORY				
	➔ ITALY (internal) ➔		Four seizures involving 42 ivory carvings, including 16 pre-Convention ivory carvings valued at EUR9000 that were illegally displayed for commercial sale by an antique dealer	All specimens were detected at markets/shops and seized due to a lack of CITES permits (2021)
Egypt	➔ GERMANY ➔	USA/ Sweden/ Israel	Eight shipments involving 70 ivory jewellery items were intercepted at mail centres (Leipzig and Frankfurt) in postal parcels	All items were detected due to routine inspections or risk assessment and seized due to a lack of CITES permits (2021)
Egypt/ Turkey/ United Arab Emirates/ Lebanon	➔	GERMANY	Eight seizures involving 36 pieces of ivory jewellery that were intercepted at Leipzig Airport Mail Centre	The items were detected through X-ray scanning and sniffer dogs (2021)
MAMMAL BODIES, PARTS, AND DERIVATIVES				
Cameroon	➔ FRANCE ➔	USA	12 seizures involving a total of 32 bones derived from different species of primates (e.g., Eastern Black-and-white Colobus <i>Colobus guereza</i>, and Red-tailed Monkey <i>Cercopithecus ascanius</i> [App. II/Annex B])	All specimens were shipped via express carrier (February 2021)
Russia	➔	BELGIUM	One commercial seizure of bear <i>Ursidae</i> spp. meat (species not specified) in the form of pâté (weighing 0.2 kg)	The item was shipped via air mail and intercepted due to a routine inspection. No CITES documents accompanied the specimen (April 2021)
Democratic Republic of the Congo	➔ BELGIUM ➔	Russia	One seizure in transit involving 34 claws and 92 teeth of Leopard <i>Panthera pardus</i> (App. I/Annex A)	Shipment seized at Zaventem Airport Mail Centre due to a lack of CITES permits (September 2021)
Democratic Republic of the Congo/ Cameroon/ Ghana	➔ Not applicable/ Ethiopia/THE NETHERLANDS ➔	BELGIUM	Six seizure records involving ca. 12 kg of primate meat (including Potto Gibbon <i>Perodicticus potto</i> [App. II/Annex B]). All specimens were transported by air passengers in personal baggage and intercepted due to targeting	Some of the specimens were already smoked , while others were also packaged with antelope meat. No CITES permits accompanied the specimens (2021)
Ukraine	➔	POLAND	One seizure on import of 11 tusks of Walrus <i>Odobenus rosmarus</i> (App. III/Annex B)	The tusks were shipped via air mail and intercepted due to a physical inspection (September 2021)

TRADE ROUTE			SPECIES AND QUANTITY SEIZED	DETAILS
EXPORT/ COUNTRY OF DEPARTURE	TRANSIT	DESTINATION		
LIVE PLANTS				
Madagascar	→	THE NETHERLANDS	One commercial shipment of 800 kg of seeds of Majesty Palm <i>Ravenea rivularis</i> (App II/Annex B). The seeds, transported in air freight , were valued at EUR16 000	Detected at Schiphol International Airport . These seeds were sold by a South African vendor and accompanied by a forged Malagasy CITES export permit . It was not possible to determine whether the contents of the consignment were all Majesty Palm seeds due to the advanced state of decomposition (covered in mould) on arrival (December 2021)
THE NETHERLANDS	→	South Korea	One commercial seizure of 24 500 live Common Snowdrops <i>Galanthus nivalis</i> (App. II/Annex B)	The specimens were originally exported from the Netherlands without a CITES export permit. The shipment was then returned to the Netherlands by South Korean Customs in air freight, detected due to a tip-off (December 2021)
Thailand	→	FRANCE	A total of 539 live cacti <i>Cactacea</i> spp. and an additional ca. 0.03 kg, seized across 20 records , including one seizure of a Star Cactus <i>Astrophytum asterias</i> (App I/Annex A)	No further details were provided (2021)
PLANT PARTS AND DERIVATIVES				
Unknown	→	FRANCE	One seizure of 2500 artificially propagated flowerpots involving cacti <i>Mammillaria</i> spp. (App. II/Annex B). The specimens had been transported by air through air mail and were intercepted at a market/shop	No further details were provided (February 2021)
Mainland China	→	ITALY	One commercial seizure of 88 cacti flowers (App. II/Annex B) found in a postal parcel in a mail centre	The specimens were intercepted due to targeting . No CITES documents accompanied the specimens (July 2021)
TIMBER AND WOOD PRODUCTS				
India/Pakistan	→	GERMANY	Three seizure records involving North Indian Rosewood <i>Dalbergia sissoo</i> (App II/Annex B): 1) 1000 wood products ; 2) 25 veneers (weighing 112.5 kg); 3) 1233 kg of wood products . All rosewood was transported in container ships	Detected due to routine inspection and seized due to no CITES permits (April and September 2021)
The Gambia	→	SPAIN	Two shipments, each containing 20 280 kg of logs without bark, derived from African Barwood <i>Pterocarpus erinaceus</i> (App II/Annex B), were transported in a container	Seized at a maritime port in Puerto Palmas De Gran Canaria, Spain (June 2021)
Tanzania	→ THE NETHERLANDS →	SPAIN	One shipment containing a statue of a person with a spear made from African Blackwood <i>Dalbergia melanoxylon</i> (App II/Annex B) weighing 41 kg	Detected at Schiphol International Airport . (January 2021)
LIVE EELS				
Unknown	→	PORUGAL	One seizure involving ca. 61 kg of European Eels <i>Anguilla anguilla</i> (App. II/Annex B)	Seized in Coimbra. <i>Details on transport and detection were not reported</i> (January 2021)

TRADE ROUTE			SPECIES AND QUANTITY SEIZED	DETAILS
EXPORT/ COUNTRY OF DEPARTURE	TRANSIT	DESTINATION		
EEL BODIES, PARTS, AND DERIVATIVES				
	→ LITHUANIA (internal) →		Two seizures involving a total of 29 bodies of European Eel <i>A. anguilla</i> (App. II/Annex B)	The offenders (Lithuanian citizens) received fines of EUR300 and EUR210 respectively. The damage to nature was calculated at a cumulative value of EUR13 920 (May and October 2021)
UK/THE NETHERLANDS (country of origin for one record)	→ POLAND →	Unknown	Three seizures of European Eel <i>A. anguilla</i> meat (including smoked meat) totalling 13 kg	All seizures were made at a land boundary (January and July 2021)
FISH BODIES, PARTS, AND DERIVATIVES				
Unknown	→	FRANCE	Across 16 seizure records (mostly commercial), 20 rostrums from sawfish <i>Pristis</i> spp. (App I/Annex A) were seized, including the Common Sawfish <i>Pristis pristis</i> and Narrow Sawfish <i>Anoxypristis cuspidate</i> (both App I/Annex A), which had a cumulative value of EUR3910	Detected mainly at markets/shops following an investigation or tip-off . The associated offenders were typically antique dealers (2021)
Democratic Republic of the Congo	→	BELGIUM	One seizure of one specimen of Smooth Hammerhead Shark <i>Sphyrna zygaena</i> (App II/Annex B) meat weighing ca. 7 kg	The meat was discovered during a random check of the baggage of an air passenger at Zaventem Airport. The species in question was confirmed by DNA analysis (August 2021)
STURGEON CAVIAR/PRODUCTS CONTAINING STURGEON				
Russia	→ AUSTRIA →	SLOVAKIA/AUSTRIA	Two seizures, each involving 1.5 kg of sturgeon caviar <i>Acipensiformes</i> (App. I,II/Annex A,B). Transported by air passengers	Both offenders were fined EUR1500 (January 2021)
Mainland China (origin) Ukraine (export)	→ GERMANY →	ITALY	One tourist seizure of 3 kg of sturgeon caviar , transported by air passenger	The caviar was seized at Florence Airport , due to no CITES permits and illegal possession (December 2021)
Switzerland	→	BULGARIA	One shipment of three packs (each 100 g) of smoked sturgeon meat as well as three tins of sturgeon caviar (each 100 g)	Detected in air freight due to random checks , at Sofia Airport. Sent to a Bulgarian private company (July 2021)
LIVE FISH				
PORTUGAL	→	ITALY	One commercial seizure involving 65 live specimens of Perch-like fish <i>Perciformes</i> , transported in air freight (App I,II/Annex A,B) (species not specified)	Detected in premises in Rome, following an investigation/intelligence (August 2021)
Indonesia/ Mainland China/ Unknown	→	ITALY	Three seizure records, involving three specimens of Arowana <i>Scleropages formosus</i> (App I/Annex A), one valued at EUR 5000	Detected in private premises and inland and seized due to no CITES permits and illegal possession (April and December)

TRADE ROUTE			SPECIES AND QUANTITY SEIZED	DETAILS
EXPORT/ COUNTRY OF DEPARTURE	TRANSIT	DESTINATION		
LIVE INVERTEBRATES				
Unknown	→	PORTUGAL/ FRANCE/Unknown	A total of eight live tarantulas <i>Theraphosidae</i> spp. (App. II/Annex B) across seven seizure records reported by Portugal and France . Species included Mexican Red-knee Tarantula <i>Brachypelma smithi</i> and Curly-haired Tarantula <i>Brachypelma albopilosum</i> (both App II/Annex B). Tarantulas intercepted in Portugal were transported via mail and commercial seizures	All tarantulas were seized from private premises and mostly detected due to intelligence/ investigation, aided by phone tapping in one instance (April and June 2021)
INVERTEBRATE BODIES, PARTS, AND DERIVATIVES				
Antigua and Barbuda/ St Lucia/ Martinique	→	Guadeloupe/ Martinique/ FRANCE	Three seizure records involving Queen Conch <i>Strombus gigas</i> (App II/Annex B): 1) ca. 418 kg ; 2) ca. 136 kg ; 3) ca. 4 kg	Fines imposed included EUR50 and EUR2700 (September and November 2021)
Maldives	→ United Arab Emirates/ GERMANY →	HUNGARY	Two tourist seizure records involving a total of 73 shells of giant clams <i>Tridacninae</i> spp. (App II/Annex B), transported in personal baggage	Detected due to random checks at Budapest Liszt Ferenc International Airport (February 2021)
Unknown	→	CROATIA/ unknown	Four commercial seizures involving a total of 998 Date Mussel bodies <i>Lithophaga lithophaga</i> (App. II/Annex B), with values ranging from EUR946 to EUR7173	Detected due to risk assessment and routine inspection, and in premises (December 2021)



Red-tailed monkeys Cercopithecus Ascanius

BRIEF COMPARISON TO 2020

THE IMPACT OF THE COVID-19 PANDEMIC ON TRENDS IN ILLEGAL WILDLIFE TRADE IN THE EU



TRAVEL RESTRICTIONS

Although travel restrictions began to ease in 2021, according to the International Civil Aviation Organisation (ICAO), there was still a decline of 49% of the world's total passengers (a reduction of 2.203 million passengers) in 2021 compared to 2019¹⁴. In Europe, 74% of passenger numbers involved international passengers (and the remaining domestic) in 2019, compared to 58% in 2020, and only 56% in 2021. Nevertheless, European passengers accounted for over half of the world's international traffic/flights in 2021, compared to 46% in 2019.

In the first half of 2020, cargo-carrying ships made fewer arrivals at port (hereafter ship calls), reflecting the fall in shipping demand. By region, Europe also saw the most significant decline in the total number of ship calls, with a drop of 25% in weeks 13–24 of 2020¹⁵. The number of calls subsequently increased in 2021, particularly in Europe, albeit not to pre-COVID-19 pandemic levels¹⁶.



DIVERTED ENFORCEMENT IN REACTION TO COVID-19 PANDEMIC

While enforcement action was generally less impacted by the COVID-19 pandemic in 2021 compared with 2020, physical inspections were still limited, in part due to some social distancing protocols persisting in 2021. The EU Member States reported that enforcement actions were directed at monitoring online platforms as well as domestic trade in some cases, as well as continued intensified enforcement action on postal and courier shipments. One EU Member State noted that enforcement effort was mostly directed toward enforcing COVID-19-related measures, such as quarantine checks in 2021¹⁷. Therefore, it is likely that the COVID-19 pandemic continued to have an impact on the number of personnel able to carry out enforcement actions, which could have resulted in a reduced workforce and reduced capacity to detect and report illegal wildlife trade.



INCOMPLETE SEIZURE INFORMATION

In addition, a high number of seizure records lacked some information, e.g. the direction of trade was not reported for 1140 seizure records (27% of records in 2021 compared to only 19% of records in 2020). However, some observations can be made when comparing patterns between 2020 and 2021, by using a proportional approach to compare seizure data across the years.

CHANGES TO THE SEIZURES OF DIFFERENT WILDLIFE COMMODITY GROUPS OVER TIME

The EU Member States reported a total of **4137 seizure records in 2021**: this was 4% more than the total of 3977 seizure records in 2020, but still 36% less than the total of 6441 seizure records in 2019 (pre-pandemic). The wildlife commodity groups involved and their order of importance (in terms of the number of reported seizure records) were similar in 2021 and 2020, with **medicinals; reptile bodies, parts, and derivatives; live reptiles; and live birds** included in the top reported commodity groups across both years.

One commodity group which was reported to have been seized in greater quantities in 2021 than in 2020 was **live reptiles and amphibians**. As for reptiles, in 2021, there were 428 seizure records, involving 2201 live reptiles (nearly twice as many live specimens than in 2020, where a total of 1290 live reptiles were seized across 373 seizure records). The majority of these seizures involved turtles/tortoises Testudines (69%, 300 seizure records involving 1543 live turtles/tortoises, over 500 more individuals than in 2020). Some of the species included **Mediterranean tortoises** *Testudo* spp. (App I/Annex A; ca. 79%), **star tortoises** *Geochelone* spp. (App I,II/A,B; ca 5%), **Leopard Tortoises** *Stigmochelys pardalis* (App II/ Annex B; ca. 3 %) and **giant tortoises** *Chelonoidis* spp. (App I,II/Annex A,B; ca. 2%). In 2021, 338 live amphibians were seized across nine seizure records, which represents a small increase from five seizure records involving 30 live amphibians in 2020. Most of these individuals (303) were **Axolotls** *Ambystoma mexicanum* (App. II/Annex B). A total of 65% of seizure records of live reptiles and amphibians were reported at an internal location type in 2021, with an increasing proportion of seizures occurring at **private premises** (43% in 2021, 40% in 2020, and 33% in 2019).

In 2021, seizures of **sturgeon caviar** *Acipenseriformes* spp. (App. I,II/Annex A,B) increased from 2.3% in 2019, to 2.6% in 2020, and 4.2% of total seizure records in 2021. There was also a higher number of records, specimens, and mass (kg) reported compared to 2020 (171 records, involving 466 specimens and an

additional 100 kg and 230 l in 2021, compared to 104 seizure records in 2020, involving 31 specimens and an additional 71 kg in 2020). Species included **Beluga Sturgeon** *Huso huso* (10 records, 19 specimens), **Russian Sturgeon** *Acipenser gueldenstaedtii* (five records, 3 kg), **Amur Sturgeon** *A. schrenckii* (one record, 230 l), **Sterlet** *A. ruthenus* (one record, 35 specimens), and **Siberian Sturgeon** *A. baerii* (one record, 0.5 kg) (all App. II/Annex B). The caviar was mainly intercepted on import (65%), although there was a slight decrease compared to the 79% of caviar records seized on import in 2020. **Ukraine** (37%), **Russia** (20%), and **Iran** (4%) were the main countries of export known for caviar in 2021. Caviar seizures were reported mostly by France, Spain, Germany, Austria, and Italy and nearly half of seizures took place at airports, 17% at mail centres, and 2% at land boundaries.

A notable number of seizures of **mammal bodies, parts, and derivatives** (BPD) continued in 2021 (249 seizure records), involving 1318 specimens and an additional ca. 170 kg and less than one litre, constituting 6% of total seizures in 2021. Mammal BPD also constituted 6% of total records in 2020 (involving 233 records, 1575 specimens, and an additional 107 kg). In 2021, there was a **continued trade in big cats** *Felidae* spp. (App I,II/Annex A,B) mostly *Lynx* spp. and *Panthera* spp. [App I,II/Annex A,B]), particularly involving **teeth, claws, skins, and bodies**. There was also an increasing number of records involving **primates** (App I,II/Annex A,B) (from 11% of mammal BPD records in 2019, to 13% in 2020, and 17% in 2021), typically involving **meat and bones**. Other main taxa seized in 2021 included **Grey Wolf** *Canis lupus* (App I,II/Annex A,B) bodies and skins, and marine mammals (typically **Cetacea** [App I,II/Annex A], and **Walrus** *Odobenus rosmarus* [App III/Annex B]) **ivory and meat**.

France was the most frequent reporter of mammal BPD seizures (33%), followed by Spain (23%), and Belgium (11%). Mammal BPD were mostly seized on import into the EU (38%) at airports and mail centres, and at internal locations (private premises, 27%).

live reptiles

seized in greater quantities than in 2020, majority were turtles and tortoises



primate seizures

have proportionally increased over the last three years

While the country of export was unknown in nearly half of mammal BPD seizure records, **Cameroon** was the country of export for 12% of mammal BPD (mostly primates and pangolins *Manis* spp. (App. I/Annex A)), Russia (4%, bears *Ursidae* spp. (App. I,II/Annex A,B)), the Republic of Congo (4%, lion teeth/claws), the Democratic Republic of the Congo (primate meat and leopard teeth/claws), and Suriname (primate and peccary meat) (3% each).

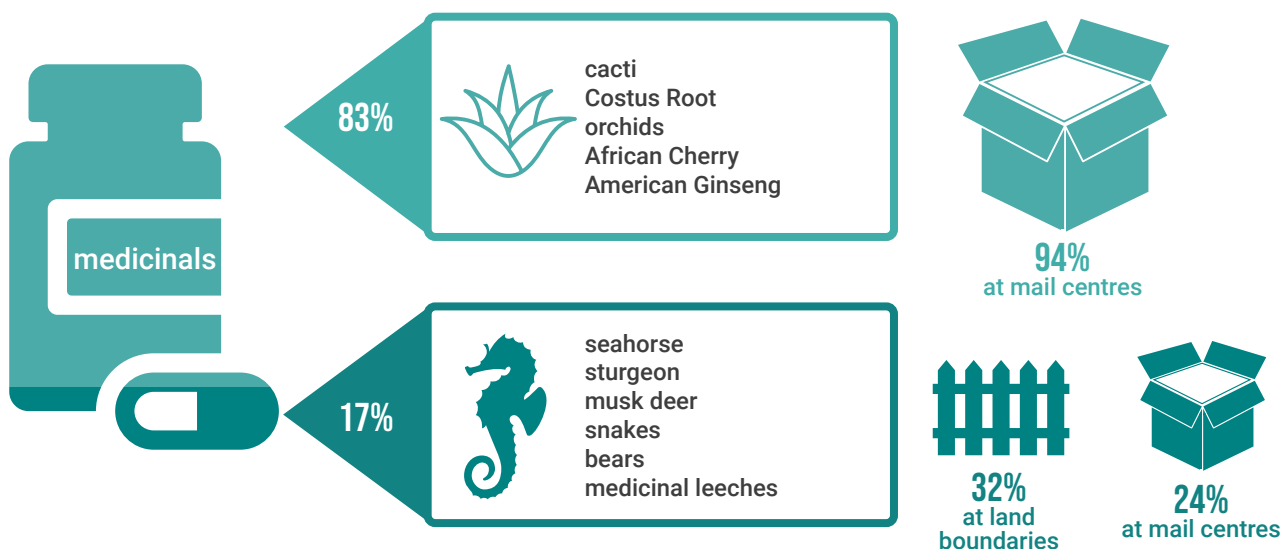
Seizures of **medicinals** remained the most frequently seized commodity type in 2021; accounting for 1117 seizure records (27% of total 2021 records, compared to 30% of total seizures in 2020 (1184 seizure records)). **A total of 83% of medicinals were derived from plants in 2021.** For **plant-derived medicinals**, trade continues to be dominated by medicinal products containing **cacti** *Cactaceae* spp. (App. I,II/ Annex A,B), **Costus Root** *Saussurea costus* (App. I/Annex A), **orchids** *Orchidaceae* spp. (App. I,II/ Annex A,B), **African Cherry** *Prunus africana* (App. II/ Annex B), and **American Ginseng** *Panax quinquefolius* (App. II/Annex B). Seizures of African Cherry increased to 25% of total plant-derived medicinals in 2021 (only 10% in 2020). Orchids *Orchidaceae* spp. decreased to 10% of records (16% in 2020). A total of 5% of plant-derived medicinal seizure records involved **Agarwood** *Aquilaria* spp. (App. II/Annex B), compared to 2% in 2020. 85% of seizures were made on import into the EU, with **Thailand**, the **USA**, and **Switzerland** the **main exporters** of plant-derived medicinals. 94% of records were detected at **mail centres**.

For **animal-derived medicinals**, in 2021, trade continued in medicinal products containing **seahorse** *Hippocampus* spp. (App. II/ Annex B) and medicinals containing **sturgeon** *Acipenseriformes* (App. I,II/Annex A,B) (mostly cosmetics and extract) with an increase from 10% of medicinal records in 2019, to 19% in 2020, and 23% in 2021. To a lesser degree, trade persisted in medicinals containing **musk deer** *Moschus* spp., **snakes**, mostly **cobras** *Elapidae* spp., **bears** *Ursidae* spp., and **medicinal leeches** *Hirudinidae* spp. (all App. II/Annex B). The emerging trade in seizures of *Crocodylidae* spp. **crocodile** (App. I/Annex A) **extract and oil** identified in 2020 continued in 2021. Seizures of Saiga Antelope Saiga tatarica (App. I/Annex A) decreased (5% in 2020, to only 1% in 2021), and **no seizures were recorded in 2021 involving medicinals derived from pangolin**. Seizures of medicinal products involving **rhino horn** *Rhinocerotidae* spp. (App. I,I/Annex A,B) increased from < 1 % in 2020 to 5% in 2021 (84 specimens). Approximately 87% of seizures were made on import into the EU, with **Ukraine** the **most frequent exporter of animal-derived medicines** (particularly seahorses, medicinal leeches, and bear); followed by Thailand (cobra *Elapidae* spp.), Brazil (sturgeon), and Russia (bear, and medicinal leeches). **Land boundaries** (32%), and **mail centres** (24%) were the main locations where seizures of animal-derived medicinals took place.

Cameroon was the top country of export for seized mammal BPD, mainly involving primates and pangolins

FIGURE 7

A breakdown of the most frequently seized commodity group, medicinals, and where they were seized.



Seizures of **fish bodies, parts, and derivatives** (BPD) slightly decreased in 2021, from 50 seizure records in 2020 (1.3% of total records) to 43 seizure records in 2021 (1% of total records). There was a significant decrease in the quantities seized (from 283 specimens and an additional 26 947 kg in 2020 to 152 specimens and an additional < 2kg additional mass in 2021). Seizures of fish BPD mainly involving **sawfish** (*Pristidae* spp.) (49% of records – 86 specimens), **sharks** (class Elasmobranchii; App. II/Annex B) (33% – 60 specimens), **Paddlefishes/Sturgeons** (order Acipenseriformes; App. I,II/Annex A,B) (12% – a total of ca. 2 kg) and were mainly detected at **market/shops** (21%), airports (16%), and fair/exhibition/shows/auction house (16%).

Similarly, **bird bodies, parts, and derivatives** (BPD) decreased proportionally in 2021 from 7% of total 2020 records to 4% of 2021 records (involving a total of 180 seizure records involving 873 specimens, compared to 290 seizure records in 2020). However, in 2020, most specimens (2238 specimens, 54 seizure records) involved parrot feathers which could have elevated the total number of specimens, compared to 511 feathers across 34 records in 2021. Bird BPD were mostly seized internally (53% at private premises, 4% inland) and 22% were seized at mail centres. Bird BPD mostly consisted of **bodies/trophies** of Falconiformes (hereafter 'birds of prey') and Strigiformes (hereafter 'owls') (App. II/Annex B), and **feathers from parrots** (App. I,II/Annex A,B). Malta (33%), France (26%), and the Netherlands (14%) were the top reporting countries in 2021 and 2020.

MAIN COUNTRIES OF EXPORT

Thailand remained the top exporter to the EU, with exports from Thailand constituting 15% of total reported EU seizure records in 2021 (compared to 20% in 2020, and 15% in 2019). In 2021, an **increasing proportion of exports from Thailand involved plant-derived medicinals** (from 65% in 2020 to 78% in 2021). Conversely, in 2021, there was a **reduction in exports from Thailand of live coral and coral rock seizures** (8% in 2020, to only one seizure in 2021).

The USA was also a major exporter of illegally traded wildlife to the EU in 2021, making up 13% of total seizure records with a known

country of export. There was a continued **increase in the proportion of US exports of plant-derived medicinals**, constituting 44% of US exports in 2019 (171 records), 69% in 2020 (258 records), and 77% in 2021 (269 records). However, **US exports involving cacti-derived medicinals decreased from 51% of total US exported records in 2020 to only 3% in 2021**.

Ukraine increased in prominence as an exporter to the EU in 2021, from 84 seizure records (3% of records in 2020) to 152 seizure records in 2021 (6% of records in 2021). **Seizures involving caviar increased** from 23% of Ukraine's total seized exports in 2020 to 42% in 2021.

Indonesia and Switzerland each made up 4% of total records with a known country of export in 2021, with no significant changes in the number of EU seizure records since 2020. **Seizures of live coral and coral rock exported from Indonesia increased** from 10% of records in 2020 to 18% in 2021 (compared to 46% of records involving Indonesia as the country of export in 2019). Germany continues to be the main importer of seized exports from **Switzerland**. Since 2020, exports from Switzerland to the EU may have continued to be less disrupted by the COVID-19 pandemic compared to other types of international trade.

In contrast, **mainland China continued to significantly decrease as a country of export for illegal wildlife seized in the EU in 2021**, from 12% of total records with a known exporter in 2019 (580 records), 5% in 2020 (133 records), to only 2% in 2021 (62 records). As the site of the first emergence of the virus, restrictions on trade routes involving mainland China (e.g., border closures with Viet Nam and decreases in air traffic) may have continued to be more severe than in other regions during parts of 2021. For example, in 2021, international departures from China were just 2% of 2019 levels¹⁸.

Mainland China also continued to decrease in prominence as a country of destination for commodities seized upon (re-)export or in transit through the EU, from 2% of total records with a known country of export in 2019 (the leading non-EU destination for goods, accounting for 97 records), to 1.4% in 2020 (42 records), and only 0.7% in 2021 (22 records).

US exports of plant-derived medicinals proportionally increased over the last three years (2019-2021)



sturgeon caviar

more prevalent in Ukraine's total seized exports in 2021 than in 2020

Mainland China

less prominent both as a country of export and destination for seizures made in the EU between 2019-2021



Giant clam (Tridacna sp.)

EMERGING AND CONTINUING TRENDS IN ILLEGAL WILDLIFE TRADE INVOLVING THE EU IN 2021

CONTINUING TRENDS



The continued increasing number of (mainly internal) seizures of **live birds**, particularly **parrots**, as well as **live reptiles and amphibians**, mainly **turtles/tortoises** and **snakes**.



The continuing/stable number of seizures involving **reptile bodies, parts, and derivatives**, particularly **small leather products** and bodies from **alligators/caiman/crocodiles** (Crocodylia; App. I,II /Annex A,B) and **snakes** (Serpentes; App. I,II,III/Annex A, B, C).



The continued seizures of **mammal bodies, parts, and derivatives**, in particular **big cat teeth, claws, skins, and bodies**, and **primate meat**. Seizures of **elephant ivory** were also consistent, with increases in seizures of elephant ivory on import to the EU and transit reported by the EU Member States.



Shipments involving **CITES Appendix II/EU Annex B listing species**, especially those declared as having **no accompanying CITES documents**, continued to be seized, raising the question of why these shipments are non-compliant.

EMERGING TRENDS



The **increasing number of invertebrate bodies, parts, and derivatives**, mainly **Queen Conch** *Strombus gigas* (App. II/Annex B) meat and shells, and **giant clam** *Tridacnidae* spp.(App II/Annex B) shells, with this illegal wildlife trade mostly concentrated in the Caribbean region (EU overseas territories – France and the Netherlands).



A continued **decrease in reported seizures of live glass/eels and eel bodies, parts, and derivatives** (mostly meat and bodies, predominantly made on export from the EU).



Increase in seizures made at **mail centres, private houses, inland locations, and at land boundaries**.



The increasing seizures of **sturgeon caviar** *Acipensiformes* spp. (App. I,II/Annex A,B) mainly intercepted on import into the EU from **Ukraine and Russia**.



Food supplements/cosmetics in **postal parcels** (detected in **mail centres**). **Medicinal products containing Costus Root** *Saussurea costus* (App I/Annex A) were identified as an emerging/significant trend in 2021 by two EU Member States.

ENDNOTES

- ¹ The Member States of the EU in 2021: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.
- ² European – Trade in Wildlife Information eXchange—the system includes a database of CITES seizures in the EU (<https://eu-twix.org/>)
- ³ Cyprus, Luxembourg, and Slovakia reported no seizures in 2021.
- ⁴ <https://www.iata.org/en/iata-repository/publications/economic-reports/air-passenger-monthly-analysis--december-2021/>
- ⁵ https://unctad.org/system/files/official-document/rmt2021_en_0.pdf
- ⁶ <https://www.oecd.org/coronavirus/policy-responses/international-trade-during-the-covid-19-pandemic-big-shifts-and-uncertainty-d1131663/>
- ⁷ The seizure data reported by Germany are related to seizures carried out at border posts only. Internal seizures carried out by the regional or local authorities inside the country are not available in a central database, therefore, such data could not be provided and included in the analysis.
- ⁸ Units used to report medicinals are not consistent across EU Member States: some reported units as packs of tablets others as individual tablets; sometimes no unit was specified, or kg or l was used.
- ⁹ Under the EU law, 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 verification of the species content in the product or DNA testing beforehand. This briefing can therefore not distinguish between those verified as containing Annex listed species from those simply claiming this on the packaging.
- ¹⁰ Including animal parts/derivatives, e.g. bear bile, seahorse bodies, big cats' bone, crocodile oil, rhino horn.
- ¹¹ Note: The seizure location type 'inland' is not defined in the "CITES Guidelines for the preparation and submission of the CITES annual illegal trade report" or the "Guidelines for preparation and submission of CITES seizure data to the EU-TWIX database". Seizure records reported by the EU Member States that occurred at the location type – inland were therefore classified as internal seizures for the purpose of this analysis, due to their reported direction of trade and the assumption that inland seizures take place domestically/nationally.
- ¹² Excluding their overseas territories.
- ¹³ Based on seizure records where the point of seizure/direction of trade was reported as 'internal', (occurring at an internal location within an EU Member States rather than at an external border) as opposed to 'importation', '(re-)exportation', 'transit', 'other' or 'unknown/unreported'.
- ¹⁴ <https://www.icao.int/sustainability/Documents/COVID-19/ICAO%20COVID%202022%2001%2012%20Economic%20Impact%20Toru%20Hasegawa.pdf>
- ¹⁵ <https://www.wtco.com/en-GB/Insights/2021/01/covid-19-impact-on-the-air-cargo-industry>
- ¹⁶ https://unctad.org/system/files/official-document/rmt2021_en_0.pdf
- ¹⁷ This paragraph is based on supplementary qualitative information provided by EU Member States, submitted alongside the 2021 CITES Illegal Trade Reports.
- ¹⁸ <https://www.globaldata.com/media/travel-tourism/international-travel-set-maintain-growth-2022-full-recovery-expected-2025-observes-globaldata/>

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