

Methodological Annex
to the World Wildlife Crime Report:
Trafficking in protected species

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This document is divided into two parts. The first discusses the preparation of the World WISE database and the aggregation technique. The second discusses the case studies, including the methodology for the field research, product conversion rates, and price data.

Assembling the World WISE database

The way that each country records its crime data, including its seizure incidents, was independently devised. The domestic laws pertaining to wildlife also vary greatly between countries, so both the format and the content of wildlife seizure records are diverse. The creation of global crime databases is greatly facilitated by the existence of global agreements, which can include definitions and, over time, standardised formats for recording violations. There is no global agreement on wildlife crime, so there is no standard template under which wildlife seizure incidents are recorded.

As a result, World WISE was assembled from a number independent databases that were not designed to be compatible. Fortunately, however, the CITES system has been highly influential in the way that Parties record their seizure data, and many of the same abbreviations and recording conventions appear in both CITES permit databases and wildlife seizure databases. The extent of this convergence varies between countries, so the amount of adaptation required to integrate each national or regional database into World WISE varies. But the basic categories, captured in the CITES Trade Database reference guide, are frequently followed in seizure records:

http://trade.cites.org/cites_trade_guidelines/en-CITES_Trade_Database_Guide.pdf

DESCRIPTION OF TRADE TERMS

BAL	Baleen	GAB	Gall bladders	ROO	Roots
BAR	Bark	GAL	Gall	SAW	Sawn wood
BEL	Belts	GAR	Garments	SCA	Scales
BOC	Bone carvings	GEN	Genitalia	SCR	Scraps
BOD	Bodies	GRS	Graft rootstocks	SEE	Seeds
BON	Bones	HAI	Hair	SHE	Shells (applies to egg and mollusc shells)
BOP	Bone pieces	HAN	Handbags	SHO	Pairs of shoes
BPR	Bone products	HAP	Hair products	SID	Sides
BUL	Bulbs	HEA	Heads	SKE	Skeletons
CAL	Calipee	HOC	Horn carvings	SKI	Skins
CAP	Carapaces	HOP	Horn pieces	SKO	Leather items
CAR	Carvings	HOR	Horns	SKP	Skin pieces
CAV	Caviar	HOS	Horn scraps	SKS	Skin scraps
CHP	Chips	HPR	Horn products	SKU	Skulls
CLA	Claws	IVC	Ivory carvings	SOU	Soup
CLO	Cloth	IVP	Ivory pieces	SPE	Scientific specimens
COR	Raw corals	IVS	Ivory scraps	STE	Stems
COS	Coral sand	LEA	Leather	SWI	Swim bladders
CST	Chess sets	LEG	Frog legs	TAI	Tails
CUL	Cultures	LIV	Live	TEE	Teeth
DER	Derivatives	LOG	Logs	TIC	Timber carvings
DPL	Dried plants	LPL	Large leather products	TIM	Timber
EAR	Ears	LPS	Small leather products	TIP	Timber pieces
EGG	Eggs	LVS	Leaves	TIS	Tissue cultures
EGL	Eggs (live)	MEA	Meat	TRO	Trophies
EXT	Extract	MED	Medicine	TUS	Tusks
FEA	Feathers	MUS	Musk	UNS	Unspecified
FIB	Fibres	OIL	Oil	VEN	Veneer
FIG	Fingerlings	OTH	Other	VNM	Venom
FIN	Fins	PEA	Pearls	WAL	Wallets
FLO	Flowers	PIE	Pieces	WAT	Watchstraps
FOO	Feet	PKY	Piano keys	WAX	Wax
FPT	Flower pots	PLA	Plates	WHO	Whole
FRA	Spectacle frames	PLY	Plywood	WOO	Wood products
FRN	Items of furniture	POW	Powder		
FRU	Fruit	QUI	Quills		

UNITS

BAG	Bags	FLA	Flasks	PCS	Pieces
BAK	Back skins	GRM	Grams	PND	Pounds
BOT	Bottles	HRN	Hornback skins	SET	Sets
BOX	Boxes	INC	Inches	SHP	Shipments
BSK	Belly skins	ITE	Items	SID	Sides
CAN	Cans	KIL	Kilograms	SKI	Skins
CAS	Cases	LTR	Litres	SQC	Square centimetres
CCM	Cubic centimetres	MGM	Milligrams	SQD	Square decimetres
CRT	Cartons	MLT	Millilitres	SQF	Square feet
CTM	Centimetres	MTR	Metres	SQM	Square metres
CUF	Cubic feet	MYG	Micrograms	TON	Metric tons
CUM	Cubic metres	OUN	Ounces		
FEE	Feet	PAI	Pairs		

Unfortunately, there appears to be a lot of variation in the way these codes are applied..

As presently constituted, a share of the seizure records are unusable. Some of these appear to be simple mistakes, but others show the recording official did not understand the use of the nomenclature. Units are sometimes employed that do not properly capture the quantity seized. For example, timber seizures may be associated with a count, and it is unclear what "six timber" represents. Some records simply did not make sense, documenting the seizure of horns of animals without horns, for example. Some product

codes were deemed too vague to be useful – “derivatives”, for example – and these seizures were also discarded.

As a result, Excel conversions formulae were generated to combine useable categories and to convert compatible units. For example, ounces, milligrams, and tons were converted into kilograms. In the species analysis, as will be discussed below, the most common product categories were converted into common units, often whole animal equivalents. For the sake of simplicity, many product codes in national records were amalgamated. For example, when the species was sturgeon, “eggs” and “caviar” were deemed equivalent.

Both EU TWIX and WCO CEN promote templates for recording seizure incidents among their members, or adapt discordant information before integrating it into their databases. The fields captured in World WISE capitalise on this pre-digestion. The CITES Biennial reports are more variegated, usually submitted in the format in which they were originally captured. These records have the additional utility of demonstrating the information that CITES parties gather in the normal course of business.

Aggregation technique

As argued in the report, to speak about “wildlife crime” as a whole, it is essential to aggregate the many different products and many different species that are commonly seized. World WISE contains seizures of some 7000 species, and many of these can appear as a range of different products. To discuss trends in wildlife crime, or to perform comparisons between species products, some standard unit is essential. The most important function of this unit is to assign relative weight to the many products detected. Some seizures matter more than others, due to a combination of the quantity of material seized and the significance of the species per quantity. As argued in the report, since organised crime is committed for material benefit, the most appropriate unit to use is monetary value.

Assigning this value to tens of thousands of seizures is an exercise of considerable complexity, and refining this valuation is an ongoing project. In the present report, the use of this aggregation information was consequently limited to identifying the most prominent illegal wildlife markets for further investigation in the case studies. Looking at the variation in the value of these markets across time was also useful in demonstrating the volatility of the seizure record. For the case studies, aggregated value was not used, and trends were examined by aggregating the seizure to a common unit, usually their live equivalents. These conversion formulae are discussed in the case study discussions below.

Of course, wildlife commodities do not have a fixed monetary value. The true value of a seizure depends on the point in the supply chain the seizure was made. Further, the black market prices of the thousands of wildlife species-products contained in World WISE are not available. This would seem to pose an insurmountable barrier to valuating each seizure for comparative purposes.

Fortunately, some countries do record the declared values of legal imports and exports of a wide range of wildlife species-products. Since the point is to create a standard unit for comparison, rather than to accurately pinpoint real market value, it makes sense to use a single reference market. It would be best if this reference market were large, with many data points to reference, representing both a significant hub for legal trade and a significant source of wildlife seizures. All these qualities were met in the data captured by the Law Enforcement Management Information System of the United States Fish and Wildlife Service (LEMIS). LEMIS was the source of 42% of the seizure incidents covered in World WISE as of October 2015, the single largest source of data, and LEMIS price data extend to almost 850,000 usable data points between 2006 and 2013.

These price data have their weaknesses. The “Declared U.S. Dollar Value” is the amount in United States dollars declared by the trader at the point of export from or import to the United States. Often, this information is derived from the invoices associated with the shipment, so the value may represent what the importer paid the overseas supplier, or what the exporter charged the overseas purchaser. The declared value does not, therefore, typically represent the retail value of the traded wildlife, and there may be incentives for under-pricing. In addition, authorities do not routinely verify or validate these values to confirm their accuracy beyond comparing them to other documentation included with the declaration. In those cases where the wildlife was not declared, such as wildlife that was unlawfully imported or exported and subsequently interdicted by the U.S. Fish and Wildlife Service or another agency, an estimated value for that wildlife was assigned or a value of "0" was entered as the declared value. Zero-value imports were excluded from the analysis.

These Declared U.S. Dollar Value data provided in the United States CITES annual reports for the years 2006-2013 were used. Both import and export price data were included in the analysis. The purpose of the trade was limited to breeding, commercial, personal and hunting trophies, excluding all trade related to circuses and traveling exhibitions, botanical gardens, zoos, reintroduction into the wild, enforcement, medical, scientific and educational purposes. After applying all these filters to the dataset, 842,667 relevant price records were used for the calculation of average price estimates. Price per taxon per year (2006-2013) was corrected for inflation by using a conversion factor to express prices as estimates of U.S. dollars in 2013.

Genus and higher taxonomic levels were used so that prices would be based on a greater number of records, thus providing a more robust price estimate. Calculations done at the genus level provided value data for a higher proportion of seizure records. This larger sample comes at a cost, however, as within the genera there can be considerable variation in the value assigned to specific species. For example, the rarer species of parrot can be worth many times their more common relatives. To estimate the monetary value of the illegal trade in CITES-listed species, the price value for each genus/unit/term combination was used for a corresponding individual seizure. Price values were subsequently calculated for 5000 taxonomy/unit/term combinations.

The methodology to derive an appropriate value index that can truly represent the data is highly dependent on the distribution of the data. Using mean value to represent the sample assumes a normal distribution, where mean mode and median are the same. Looking at a range of different commodities, a variety of different distributions were observed. Deriving an index for all products would require that all recorded values be taken into account. Additionally, it is also necessary to use a methodology to derive the value index that can be applied to all the different types of distribution seen in the declared value data.

The following issues were considered in deriving the value index.

1. The simple mean (without taking into account frequency) loses its property of being a representative value when the frequency distribution does not follow a normal curve,
2. The median is unresponsive to extreme values,
3. The product whose values are declared may not be homogenous resulting in wide variations in the valuation data.
4. It can be safely assumed that any specific product appears in the illegal segment of the trade with same probability as it occurs in the legal segment.

The methodology used to derive the value index is as follows:

- Let commodity x have n number of reported declared values; $\{v_1, v_2, \dots, v_n\}$
- Assuming that each report involves several units of the commodity $\{x_1, x_2, \dots, x_n\}$,
- the value assigned to each report is: $\{x_1 * v_1, x_2 * v_2, \dots, x_n * v_n\}$
- Thus, the value of all the reported amounts of the commodity x is: $\sum_{i=1}^n x_i * v_i$
- The value index for commodity x used for this report is the weighted average

$$vx = \frac{\sum_{i=1}^n x_i * v_i}{\sum_{i=1}^n x_i}$$

This method takes into account each reported value and assigns weight to the valuation according to the amount of the commodity associated with each report.

Case studies

Rosewood fieldwork

For the rosewood case study the broader furniture and tropical hardwood furniture trades, as well as the rosewood trade data was reviewed. A global literature review on the illicit rosewood trade in Madagascar, Southeast Asia, and Central America was carried out. Extensive fieldwork in West Africa was performed.

An initial analysis of the trade data and literature indicated that quite a bit of work had already been done on the illegal rosewood trade in Southeast Asia and Madagascar. Central America, another source of CITES-listed rosewood, had been less studied, but also seemed to be a lesser source of illicit supply, based on the seizure record. What had

not been yet documented was a growing market for illegal rosewood from West Africa, in particularly *Pterocarpus erinaceus*.

To better understand this market, fieldwork was conducted over the course of three months (November 2014 to January 2015) in five ECOWAS countries: Benin, Burkina Faso, Mali, Nigeria, and Togo. This fieldwork consisted of interviewing forestry officials, gathering official documents and trade documents, interviewing loggers and log traders, and observing logging areas. This work complemented earlier field research conducted by the same researcher in Gambia and Guinea-Bissau.

BENIN	
05.12.14	Three senior officials from relevant ministries in Cotonou
07.12.14 – 08.12.14	Interviews and observations with several community members, a logging teams, and a sawmill around Dako and Dassa
09.12.14	Three senior officials from relevant ministries in Cotonou
10.12.14	Interview with an import controller in Cotonou
11.12.14	Two interviews with line enforcement agents in Cotonou
12.12.14	Three interviews with line government managers in Cotonou
16.12.14	Interview with the research officer, Cotonou
17.12.14	Five interviews with forestry officials in Cotonou

BURKINA FASO	
26.01.15	Interview with senior Environment official in Ouagadougou
27.01.15	Interview with export promotion official in Ouagadougou
28.01.15 – 29.01.15	Interviews with seven officials in Ministries of Environment, Trade, and Forests in Ouagadougou
29.01.15	Interviews with three forestry researchers in Ouagadougou
30.01.15	Interviews with three senior customs officials in Ouagadougou
02.01.15	Interviews with two forest officials in Gaoua
04.01.15 – 05.02.15	Interview with two forestry officials in Bobo-Dioulasso

MALI (Bamako)	
14.01.15	Interviews with two officials in Environment and Police
15.01.15	Interview with Ministry of Commerce official
16.01.15	Interviews with four senior officials in Trade and Parks
21.01.15	Interview with customs official
22.01.15	Interview with export promotion official
23.01.15	Interviews with two top forestry official
23.01.15	Interview with environmental research official
23.01.15	Interview with factory owner

NIGERIA	
10.11.14	Interview with UN official, Abuja
11.11.14	Interview with Environment official, Abuja
12.11.14	Interviews with several log dealers in Kabba and Lakoja
13.11.14	Interviews with three forestry officials in Jos

14.11.14	Interview with NGO worker, Abuja
17.11.14	Interview with ECOWAS forestry official in Abuja
19.11.14	Interview with Port and Customs authority, Calabar
19.11.14	Interview with forestry officials Cross River State and Taraba State, Calabar
21.11.14	Interview with business leader, Port Harcourt
25.11.14	Interview with National Drug Law Enforcement Agency, Lagos
26.11.14- 28.11.14	Interviews with three log exporters and observations in Chinatown, Lagos
29.11.14	Observations at Shagamu and Akure log markets
01.12.14	Three interviews with export officials and private sector around Lagos ports

TOGO (Lomé)	
18.12.14	Interviews with two top Ministry of Environment officials
19.12.14	Interview with Department of Forests official
19.12.14 & 22.12.14	Two interviews with tribunal judge
22.12.14	Interview with two forestry statistics officials
22.12.14	Interview with police officer in container port

To better understand the primary species in trade and to identify the main non-CITES species in trade, and analysis was conducted of import and export records, as well as the range of the affected species. In some cases, the primary species in trade was easy to identify, such as *Pterocarpus erinaceous* from West Africa. In others, a number of data sources were consulted to identify the most utilized species.

Rosewood seizures and estimates are expressed in a variety of terms, including weight, volume, log counts, and container counts. It can be difficult to compare between units, or to envisage what these large amounts mean in real terms. For this reason, the following rules of thumb are offered, although they are too imprecise to provide the basis for official estimates.

Rosewood logs are an organic product, and so vary considerably in size. There are differences in average size between species and there are differences within species depending on the age of the trees and the area of harvest. As illegal harvesting continues, the average size of the logs generally decreases, as younger trees are also targeted.

With these caveats in mind, it is still possible to come up with some general figures based on a review of seizures where the weight, the volume, and the number of logs were recorded. Rosewood is valuable for furniture in part because it is so dense – most species will not float, at least when freshly cut, indicating they are denser than water. But the difference is not great, and as a rule of thumb, one cubic meter generally weighs slightly more than one metric ton.

To manufacture fine furniture, the straightest part of the trunk is needed (so called “bar wood”), limiting the number of logs that can come from single tree. In addition, most

rosewood species have an outer ring of “sapwood”, which is lighter in color and rarely used in furnishings. This is often pared away before shipping. Since tree size varies between species and across time, it is difficult to generalise how many logs can be drawn from a single tree or how many trees it takes to produce a cubic meter of saleable wood.

In Madagascar, for example, a log may represent anything from half of a younger tree to one quarter of an older tree. Since timber stocks have been heavily exploited, the trees are often young and of small diameter, so it takes about eight logs of six metres length to make a cubic metre or ton. In contrast, with West African “kosso” only three or four logs are required.

In Madagascar, in 2009, the number of rosewood trees in protected areas was estimated at 3-5 trees per hectare. Thus, one metric ton of logs equals about one hectare of land cleared of its rosewood trees in that country. In contrast, kosso is a “gregarious” tree and so grows at much greater densities.

Based on seizures where both log counts and container loads were given in Madagascar, it also appears that about 130 logs of assorted diameters fit into a 20 foot container, or over 16 metric tons of rosewood.

Ivory

Two consultants were retained to perform ivory fieldwork. The first was based in Nairobi and the second in the Eastern Central African Republic.

The Nairobi consultant conducted the following interviews in Kenya, Mozambique, Tanzania, and Uganda in February and March 2015:

KENYA (March 2015)	
	Interviews with seven NGO researchers in Nairobi
	Interview with INTERPOL liaison in Nairobi
	Interview with CITES official in Nairobi
	Interviews with two parks officials, Tsavo East National Park
	Interviews with three senior US officials

MOZAMBIQUE (March 2015)	
	Interviews with two international NGO researchers in Maputo
	Interview with in one international NGO worker in Pemba
	Interviews with three local NGO workers in Maputo
	Interviews two local NGO workers in Pemba
	Interviews with two US officials in Maputo

TANZANIA (March 2015)	
	Interviews with one international NGO worker in Stone Town
	Interview with five international NGO workers in Dar es Salaam
	Interview with two senior police officials in Dar es Salaam
	Interviews with two US officials in Dar es Salaam

UGANDA (Kampala) (February and March 2015)	
	Interviews with two international NGO researchers
	Interview with three wildlife officials
	Interview with private sector consultant
	Interviews two local NGO workers
	Interviews with three US officials

Semi-structured interviews were conducted with 19 self-confessed local poachers living in villages along the periphery of the park, including four from Rafai, three from Bangassou, one from Bakouma, one from Kpingo Kpingo, one from Banibongo, one from Lengo, three from Dembia, three from Agoumar, and two from Selim. Some of these poachers had been active in ivory poaching for decades. A group of people in Fode were also interviewed. These interviews took place over 60 days in villages spread out by more 1000 kilometres. In addition to the insights cited, map of the main areas of trade and trafficking were constructed.

Reptile skins

The reptile skin case study was subcontracted to TRAFFIC. Open-ended, semi-structured interviews were conducted from August to October 2015 in Indonesia and Malaysia with individuals who are knowledgeable about the reptile skin trade, such as industry representatives, scientists and conservationists. These interviews sought to develop an understanding of the context surrounding the trade in reptile skins, and thus focused on issues of policy and legal regimes regulating the trade, questions of legality and illegality within the trade and trends within the trade over time. These interviews sought to acquire general knowledge about reptile skin trading, as well as to target the specific expertise of the parties interviewed. Seven people were interviewed in the Indonesia component of the study and six in Malaysia.

Site visits were conducted from August to September 2015 and direct observations were paired with informal ethnographic interviews with people directly involved in reptile skin trading. Interviewees included active and non-active reptile collectors, traders, skimmers, tanners, and exporters. Visits and interviews were focused on learning information about activities within the supply chain, the structure of trade networks, value chains of products in the trade, awareness of legal regimes, and other relevant information. Fourteen skin processing facilities or shops selling reptile products, as well as some commercial areas thought to be selling reptile skins, were visited in Indonesia, and two facilities holding reptiles were visited in Malaysia.

In Indonesia, research was conducted in the greater Jakarta area, the city of Cirebon in West Java, Jember and Banyuwangi in East Java, the island of Bali, and in North Sumatra in Medan and Langkat regency. In Malaysia, research was carried out in Peninsular Malaysia, with sites in the States of Johor and Melaka visited, and supplemented by phone interviews. These geographic areas were selected as the focus, due to the short time-frame of the study.

During interviews notes were taken in real time, extracting key points, figures, and verbatim quotes. Interviews were not recorded and the identities of interviewees are kept anonymous, in order to extract as much data as possible on this sensitive topic. Information was also sought from government agencies involved in the management and regulation of the reptile skin trade, through formal letters of request to the CITES Management Authorities and Scientific Authorities in Indonesia, Cambodia, Singapore, Malaysia and Viet Nam., and a meeting with a representative of the Malaysian wildlife department. Some of the interviewees who were contacted did not respond to enquiries.

In Malaysia, only six interviewees agreed to speak, and most of these were only marginally involved in the reptile skin trade; key players in the reptile skin trade refused to entertain interviews without a formal authorisation letter. Although requests were made to DWNP, delays in responses which came at a time after the field work had been completed meant that the team was not able to obtain the necessary approval within the time frame of the project. Furthermore, the pool of individuals who are involved in or knowledgeable about the reptile skin trade is much smaller in Malaysia than in Indonesia

as there are fewer traders and levels of actors operating in the reptile skin trade, and there are few researchers in Malaysia working on this issue. As a result, information collected about the illegal trade in Malaysia is not as comprehensive as for Indonesia.

Where the shipment was defined in meters of skin, these figures were converted to number of skins using an average length of *Python molurus* (5 m) and *Python reticulatus* (4m). “Farmed” includes a small number of exports declared as “ranched” (sourced as eggs or juveniles from the wild but reared in a controlled environment) as well as those reported “born or bred in captivity”.

Agarwood

No fieldwork was performed for the agarwood case study. Agarwood is a commodity that is frequently sold on-line. Five agarwood traders were contacted through the internet and several were willing to discuss the market at length, as well as reviewing drafts of the chapter produced. In addition, between 17 July and 18 August 2015, one academic in Sri Lanka, three international NGO worker, one German academic, two United Nations officials, a Malaysian oud distiller, an Indonesian oud distiller, an Omani oud and perfume seller, one Indian plant scientist, three Malaysian academics, and an agarwood plantation manager in Myanmar were interviewed.

Oil exports converted to agarwood equivalents at a ratio of 1:143.6. Powder exports are assumed to be resin-infused and so are deemed equivalent to chip or timber exports. See the official conversion figures used by the UAE as cited in Marina Antonopoulou, James Compton, Lisa S. Perry and Razan Al-Mubarak, *The Trade and Use of Agarwood (Oudh) in the United Arab Emirates*. Cambridge: TRAFFIC, 2010.

Pangolin and rhino horn

The field observations cited in the report are referenced to research documented in Daniel W.S. Challender, Stuart R. Harrop, and Douglas C. MacMillan, Understanding markets to conserve trade-threatened species in CITES. *Biological Conservation*, Vol 187, 2015, pp 249–259., including the price data and product conversion ratios.

The conversion rates used for meat were 4.33 kg per *Manis pentadactyla*, 4.96 kg per *Manis javanica*, and 4.96 kg per *Manis culionensis*. For scales, the rate was 573.47 g per *Manis pentadactyla*, 360.51 g per *Manis javanica*, and 360.51 g per *Manis culionensis*. Unfortunately, equivalent research has not been done for African species.

For rhinos, some species have two horns, and some only one. White rhinos, which have two, also have the largest horns, and carry an average of 5.88 kg of horn per rhino. As a result of their size and larger numbers, white rhinos carry 88% of the live rhino horn today. Black rhinos carry 2.65 kg apiece. See D.J. Pienaar, A.J. Hall-Martin, P.M. Hitchins, ‘Horn growth rates of free-ranging white and black rhinoceros’. *Koedoe*, Vol

34, No 2, 1991, pp. 97-105. All Asian species carry less than one kilogram apiece. See Esmond Bradley Martin and T.C.I. Ryan, 'How Much Rhino Horn has come onto International Markets since 1970?' *Pachyderm*, Vol 13, 1990.

Parrots

No fieldwork was conducted on the parrot trade, although a number of experts were consulted by telephone and internet communication. These include research scientists, exotic pet traders, and aviary keepers. Because only the live parrot trade was reviewed, there was no need for conversion ratios.

Caviar

The survey conducted for this study involved contacting by email 90 sturgeon farmers and caviar producers in 30 countries, and personal follow up with 36 producers in Europe and 22 in the rest of the world. Each producer contacted was sent an excel table to complete. The Table was divided in two parts: the figures declared for the previous year and the actual caviar production for the current period plus a forecast in five years' time. Each producer was asked to indicate in the table the numbers of producers in their respective country and the volume of caviar produced in metric tons. In some countries where there were several producers the information was supplied by the National Aquaculture Association. The data were collected from 1 March to 22 April, 2015.

In addition, interviews were held with seven caviar traders in person and by telephone in April and May of 2015, including traders in the United States, Switzerland, China, Italy, the United Arab Emirates, the United Kingdom, and France. The questions posed were mainly related to illegal caviar, whether they had been offered illegal caviar, the origin and species of the caviar its price and quality. Other wide ranging issues concerning the caviar market were also discussed. Only those traders who had something significant to report on the subject of illegal caviar were quoted in the report.