



**World Bank FLEG  
Ulaanbaatar Wildlife Trade Survey  
(10MN: Wildlife Trade Regulations; Contract # 7145574)**

**Wildlife Conservation Society Report**

**May 2008**

**Andrew M. Parkinson, MSc**  
Environmental Consultant  
Ulaanbaatar, Mongolia  
Email: [fishmongolia@gmail.com](mailto:fishmongolia@gmail.com)

**Odonchimeg Nyamtseren**  
WCS Wildlife Trade Consultant  
Ulaanbaatar, Mongolia  
Email: [odonchimeg.wcs@gmail.com](mailto:odonchimeg.wcs@gmail.com)

**Tuvshinjargal D.**  
WCS Wildlife Trade Survey Coordinator  
Ulaanbaatar, Mongolia

**Amanda Fine, VMD, PhD**  
WCS Mongolia Country Program Director  
Ulaanbaatar, Mongolia  
Email: [afine@wcs.org](mailto:afine@wcs.org)

# WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

## World Bank FLEG

### Ulaanbaatar Wildlife Trade Survey

(10MN: Wildlife Trade Regulations; Contract # 7145574)

### Wildlife Conservation Society Report

<b>INTRODUCTION</b>	<b>3</b>
<b>ACTIVITY 1: ULAANBAATAR MARKET SURVEYS</b>	<b>5</b>
2.1 SURVEY DESIGN AND METHODOLOGY	5
2.2. SURVEY RESULTS	8
2.2.1 RAW MATERIALS AND FOOD MARKETS SURVEY	9
2.2.2 HOSPITALS SURVEY	27
2.2.3 SHOP SURVEY	29
2.2.4 RESTAURANT SURVEY	30
2.2.5 CHOIBALSAN MARKET SURVEY	31
<b>ACTIVITY 2: “RIDE ALONG” WITH ENFORCEMENT OFFICIALS</b>	<b>33</b>
3.1 CONFISCATION OF MUSK DEER POD IN BAYANZURKH MARKET OF UB	34
3.2 CONFISCATION WOLF SKINS IN EMEELT MARKET	34
3.3 CONFISCATION OF RED FOX SKINS IN TSAIZ MARKET	35
3.4 CONFISCATION OF PALLAS’ CAT	36
3.5 INSPECTION IN TSAIZ MARKET	36
3.7 PATROL IN NARANTUUL INTERNATIONAL MARKET	38
3.8 REPORT BY J. BADAMKHAND, MUNICIPAL STATE INSPECTION AGENCY	38
<b>ACTIVITY 3: ASSESSMENT OF RESULTS</b>	<b>40</b>
4.1 CURRENT SITUATION AND TRENDS IN ILLEGAL WILDLIFE TRADE (KH. BADAM)	40
4.2 MONGOLIAN LEGAL ARTICLES PROHIBITING WILDLIFE TRADE (KH. BADAM)	40
4.3 PENALTIES FOR ILLEGAL WILDLIFE TRADE (KH. BADAM)	41
4.4 CONCLUSIONS OF MR. BADAM’S ASSESSMENT	41
<b>DISCUSSION AND CONCLUSIONS</b>	<b>44</b>
<b>APPENDIX 1 – SURVEY QUESTIONS</b>	<b>46</b>
<b>APPENDIX II: LEGAL STATUS OF DETECTED WILDLIFE SPECIES</b>	<b>52</b>

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### Objective:

The objective of this study was to collect information about wildlife trade violations in Mongolia and to identify the strengths and weaknesses of the existing wildlife trade law enforcement system. The geographic focus of this work was Ulaanbaatar city “markets” and the raw materials markets around Ulaanbaatar. The purpose of these market surveys was not just to quantify the trade or identify the most active traders, markets, and transportation routes but to give us the understanding we need to develop a long-term strategy for preventing illegal wildlife trade in Mongolia.

Ulaanbaatar is the seat of Mongolia’s government, media markets, and civil society, as well as the center of the wildlife trade. Some of the country’s largest raw materials markets are located to the east and west of the city; road inspection points, the train station, and the airport are all strategic sites for enforcing trade regulation. For these reasons, Ulaanbaatar is an ideal site for launching an effort to support improved enforcement of wildlife trade regulations.

### Introduction

This survey of wildlife trade in Ulaanbaatar markets is intended to build on the momentum generated by the widely acclaimed *Silent Steppe* report (Wingard & Zahler 2006) which was the first comprehensive study to shed light on the illegal wildlife trade crisis in Mongolia. The *Silent Steppe* report revealed the staggering scale of illegal wildlife harvest and trade within Mongolia, both for domestic and export markets, and demonstrated that wildlife trade is the major driver in the rapid and significant declines in a suite of economically important wildlife species.

Subsequent to the *Silent Steppe* report, the World Bank sponsored the Wildlife Conservation Society (WCS) to conduct two further activities in Improving Hunting Management and Wildlife Trade Enforcement in Mongolia. The first activity was designed to examine the current legal basis for hunting management and wildlife trade enforcement in Mongolia with the goal of creating the foundation for effective inter-agency wildlife management and effective trade enforcement. “Gaps” and conflicts in existing laws and regulations governing wildlife management were identified, several new approaches to enforcement were suggested, and extensive revisions and additions to the Mongolian Law on Hunting were developed.<sup>1</sup> The second follow-up activity was a pilot project that provided wildlife law enforcement training to protected area rangers and border guards in the Nomrog Strictly Protected Area of Dornod Aimag. The activity addressed the enforcement of hunting and wildlife trade law within a border region and strictly protected area, and provided the opportunity to assess the effectiveness of a unique collaborative “inter-agency” approach to wildlife protection.

The Wildlife Trade Survey in Ulaanbaatar Markets was designed to complement these earlier activities, and together these studies will help WCS and policy makers to devise and implement strategies to address the problem of illegal trade in wildlife. The findings of these wildlife trade surveys will be reviewed with respect to Mongolia’s existing legal framework for controlling the wildlife trade, and the focus will be on identifying

---

<sup>1</sup> James Wingard, N. Odonchimeg & P. Odgerel, *Improving Wildlife Trade and Hunting Legislation* [Final Report] (2006), at 30.

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

strategies for improving wildlife trade law enforcement, particularly in Ulaanbaatar. In particular the study will highlight trade in forest species.

The objective of these market surveys was to collect baseline information on wildlife trade within Ulaanbaatar; not only to quantify levels and types of wildlife trade, but also to help us understand the supply chain (*trade chains*) in more detail, and to identify the strengths and weaknesses of the current enforcement regime. Survey results provide a baseline, and indicators, against which the success or failure of future strategies can be measured. The trade chain concept can be used to identify where the links in the trade chains can be broken through well-designed and implemented enforcement activities.

Through cooperation with enforcement agencies, this market survey project enabled WCS to foster a productive working relationship with enforcement agency staff, such as the Police, Veterinary Inspectors, and State and Ulaanbaatar Municipal Specialized Inspection Agencies. Hopefully such cooperation can contribute to the future success of enforcement strategies. By reporting serious cases of wildlife trade that were uncovered during the survey, WCS was able to follow the actions taken by enforcement agencies and assess effectiveness of the enforcement systems.

The wildlife trade survey of Ulaanbaatar markets was implemented over a three-month period from the beginning of December 2007 through to the end of February 2008. Project staff, in collaboration with the student survey team and consultants, designed a comprehensive, realistic and achievable survey. The survey methodology was based on the WCS Lao PDR program methodology, but was adapted and extended to the unique situation and conditions of wildlife trade in Mongolia, and in particular to the Ulaanbaatar markets.

# WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

## **Activity 1: Ulaanbaatar Market Surveys**

*How much and what kind of wildlife is traded in Ulaanbaatar's raw material and food markets, restaurants and hospitals?*

### **2.1 Survey Design and Methodology**

Our first objective was to assess how much and what kind of wildlife is traded in Ulaanbaatar's markets, including the raw material and food markets, restaurants and hospitals that are considered to be the principle nodes of wildlife trade in the city. The survey was conducted over a three-month period during winter, from December through February. This period is known to be the peak period for trading raw materials, including wildlife.

The survey team was selected from the 'Ecology Knowledge' Club of the National University of Mongolia. Eleven students, seven male and four female, were formed into four teams, each named after a Mongolian wildlife species:

- *Shonkor* (falcon): survey team for the raw material market - 4 students
- *Khulan* (wild ass): survey team for the food markets - 3 students
- *Tul* (taimen): survey team for restaurants and shops- 2 students
- *Tarvaga* (marmot): survey team for the hospital - 2 students

The teams included students from the first through fourth years at the Mongolian National University, Medical University, Agricultural University and Eco-Asia Institution. In addition, one Masters degree student participated. Students were chosen to undertake the survey in order to involve them in wildlife trade investigation and conservation activities as well as to help develop their own skills and interest in conservation. Involving students in the survey has been an effective way to gather and process a large amount of information on wildlife trade.

The student team was led by D. Tuvshinjargal, President of the Ecology Knowledge club, and supervised by WCS Wildlife Trade Specialist N. Odonchimeg. Students participated in the design of the survey and training provided by Kh. Badam (former Senior Environmental Inspector, recently retired from the State Specialized Inspection Agency).

Training for survey teams covered the following areas:

- General information on environmental legislation, especially in regard to hunting law and wildlife trade
- Agencies and persons who have rights to inspect and impose penalties, their rights and responsibilities, co-operation and coordination
- Previous violations, type, impact, actions taken
- Inspection activities, methods and coordination
- Reporting procedures
- Confiscation procedures
- Illegal wildlife trade, CITES

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

- Identification of wildlife and its parts
- Introduction of supply chain concepts



Figure 1. Student Survey Team Training at the WCS Office, Ulaanbaatar.

The selected markets included representative raw materials markets, domestic (food) markets, restaurants and hospitals: Emeelt and Tsaiz raw material markets; Narantuul, Bayanzurkh, Mercury food markets; Trauma Hospital and Burns Center; and selected Mongolian, Western, Chinese and Korean Restaurants. The survey sites were not selected randomly but chosen either as they are considered representative of Ulaanbaatar in general, or because they are the known centers for wildlife trade and will give the best picture of what wildlife trade is being conducted in the city. This was therefore a targeted survey and investigation, not a random sample of markets.

In order to give some consistency and comparison between wildlife trade surveys in other Asia region countries, WCS Mongolia Program staff studied the WCS Lao PDR Country Program experiences. This was an approach recommended by Katherine Scharf in her report for WCS, *Strategies for enforcement of wildlife trade regulations in the raw materials markets of Ulaanbaatar, Mongolia* (2007).

During the course of the survey the restaurant survey team expanded their activities to include souvenir and other retail shops selling wildlife products. The raw materials and food markets survey was expanded to investigate advertisements of wildlife trade in two newspapers.

Survey questions were based on the WCS Laos wildlife survey methodology, although methods were adapted to the context of the Mongolian markets, and additional questions were added to provide more detail on the supply chain. The survey sought to gather data on species being traded; the specific parts and products traded and their usage; quantities and prices; origin of the wildlife; whether the trade was open or hidden; and information

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

on the seasonality of trade, for example fluctuations in quantities or values for certain species. A full description of the survey questions can be found in Appendix I. The survey team developed a work plan to implement the surveys twice a week in the raw materials and food markets, once a week in restaurants and souvenir shops and once every ten days at the hospitals. A vehicle was provided for the surveys at the raw materials market, and the vehicles used were switched to avoid raising suspicions of the dealers.

The data collected were entered into an excel spreadsheet; with the application of filter and sort functions this creates a simple database and permits detailed analysis of the results. The same database can be used for future surveys, and data can be exported to more sophisticated database programs such as MS Access.

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### 2.2. Survey results

The survey teams completed a total of 160 surveys in markets, shops, restaurants and hospitals, and through the investigation of newspaper and other advertisements.

Market Name	Market Type	Number of Surveys
Emelt	Raw Materials	14
Tsaiz	Raw Materials	12
Narantuul	Food Market	14
Bayanzurkh	Food Market	15
Mercury	Food Market	15
Souvenir Shops	Retail	19
Restaurants	Retail	32
Newspaper	Advertisements	14
Hospital	Truama, Burn Center	18
Other	Advertisements (TV)	7
<b>Total</b>		<b>160</b>

*Figure 2. Number of surveys conducted in each market or location.*

The survey revealed trade in 51 species of wildlife and fish, including two species listed in CITES Appendix I, seven species listed in CITES Appendix II, twelve species registered in the Mongolian Red Book; six species classified as endangered, and 8 species classified as rare according the Mongolian Law on Fauna. Trade included horns, skins, meat, organs, and other raw materials. The majority of recorded trade is considered to be illegal according the laws of Mongolia, except for wild boar and certain fish species. See Appendix II for the legal status of each wildlife species. Significant trends and observations are reported in the following results.

### 2.2.1 Raw Materials and Food Markets Survey

The survey teams made a total of 65 visits to raw materials and food markets, and made enquiries into wildlife trade advertisements in 14 editions of the marketplace newspapers. In total 676 observations of trade in wildlife were recorded and entered into the database. An observation refers to one record of a wildlife species being available or advertised for sale, the parts or product, and information including price and quantity.

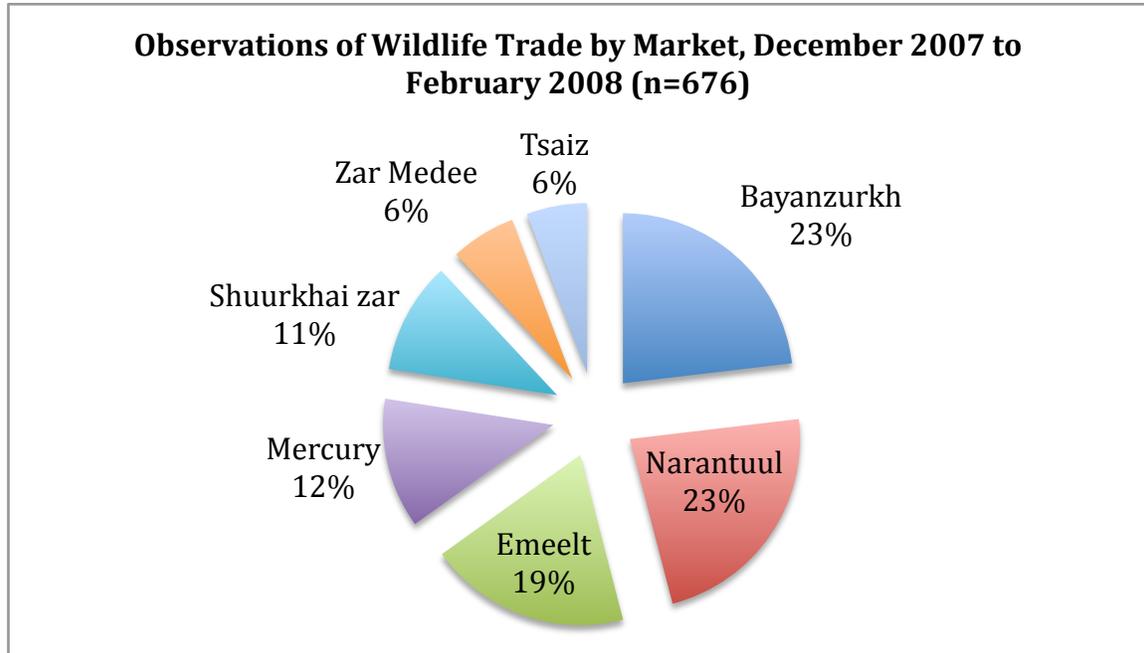


Figure 3: Observations of Wildlife Trade by Market

Narantuul, Bayanzurkh and Emeelt markets show the highest numbers of observations of wildlife trade. Food markets (Bayanzurkh, Narantuul and Mercury) account for 58% of observations, raw materials markets (Tsaiz and Emeelt) for 25%, and newspapers for 17%.

#### Raw Materials Markets

Ulaanbaatar's two major raw materials markets are Emeelt and Tsaiz. Raw materials refer to all kinds of livestock and animal products including: unprocessed cow, sheep and goat skins; meat from domestic livestock; raw cashmere and wool; and wildlife. These markets are located outside of the city limits of Ulaanbaatar, mainly as a livestock disease control and hygiene measure. Tsaiz is located in a former military barracks compound at Nalaikh to the east of Ulaanbaatar, while Emeelt is a relatively new market and settlement located on the main road to the central and western aimags, west of the city.

The market at Emeelt consists of numerous large compounds, about one hundred meters square, with rows of ten to twenty storage units within each compound. Compounds may be wholly owned and operated by trading companies, but more often individual storage

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

units are rented to brokers, known as ‘changes’. Some compounds also have buildings that house processing facilities. Emeelt is the location of a large abattoir and cold storage warehouses supplying Ulaanbaatar markets with meat. Emeelt has a number of veterinary laboratories for disease inspection and to provide certification for raw materials. There is also a police post staffed by three policemen.

Tsaiz is a smaller market with dealers utilizing storage warehouses of the former military barracks, within one large compound. This market serves as the exchange for raw materials coming from the Eastern Aimags, and often materials are transferred from Tsaiz to Emeelt for consolidation or processing.

Raw materials arrive at the markets by truck, typically a Russian Zil-130, or Korean light truck, from the aimags and are then purchased by the dealers who consolidate loads and orders either for domestic processors or for export to China. These loads of raw materials include wildlife. Some processing of wildlife occurs at Emeelt. These are legitimate, and regulated markets for livestock meat and raw materials, but unfortunately the markets also provide the opportunity and cover for significant illegal wildlife trade.



*Figure 4. Tsaiz Market in Nalaikh District*

Significant wildlife trade is occurring at both Emeelt and Tsaiz. Much of the trade is at least partially hidden but it is possible to gain information by making inquiries to the traders. Surveys showed three main types of trade occurring:

1. Wildlife commodities originating from rural areas are transported to Ulaanbaatar, mainly in trucks bringing raw materials such as livestock skins. These are purchased by traders who have direct contact with Chinese buyers. The Chinese traders will then consolidate loads for transport by road across the border to China. There is evidence that the Chinese buyers bring in a large amount of Chinese currency (Yuan) to sponsor this trade and place orders with, or provide advances too, local traders in order for them to procure wildlife commodities on their behalf. Chinese nationals can be observed working at Emeelt market.

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

2. Some larger dealers may have more leverage to work independently of Chinese sponsors, purchasing raw materials including wildlife and its parts at wholesale prices, and may be able to move the goods to China independently or with the assistance of Chinese traders to take goods across the border.
3. The third type of trade that is observed is for domestic processing either for export or domestic markets. Traders purchase wildlife, and transfer them to 'processing facilities', sometimes little more than a shed, where they divide the animals into parts, such as skins or furs, meat and organs (brain, liver stomach, gall bladder etc). These parts are then sold in domestic markets or exported. This kind of processing was particularly evident for wolves, of which nearly every part of the animal has a use.

Surveys revealed both hidden and open trade:

- Hidden trade includes: deer ovary, Mongolian gazelle, wild boar, taimen, grey wolf, musk of the musk deer, snow leopard, lynx, marmot skins, various horns and antlers, bear bile, bill of Dalmatian pelican; and all kinds of skins and furs.
- Open trade includes red fox, corsac fox and hare skins. Also, all kinds of animal-originated oils such as badger, bear, and marmot oils, wolf brains, Altai snowcock meat, and all kinds of fish except taimen and sturgeon, are being traded openly.

### **Food Markets**

Three major food markets in Ulaanbaatar were chosen for the wildlife trade survey. These were Narantuul, Bayanzurkh, and Mercury. Narantuul International Market, sometimes referred to as the 'black market' is Ulaanbaatar's largest domestic market selling fabric, cheap Chinese clothing, carpets, gers, tools, antiques, saddles and tack, pots and pans, furniture, and food. It serves Ulaanbaatar residents, businesses, and rural residents and herders who travel to the city to purchase goods and supplies. Much of the Narantuul Market is outdoors or under the cover of large open-sided sheds. At Narantuul market wildlife is also advertised on notice boards; these advertisements were included in the surveys.

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank



Figure 5. Advertisements of wildlife for sale at Narantuul Market.

Mercury Market is an indoor market, consisting of two halls; the first hall accommodates traders selling a wide range of mostly imported goods. The second hall holds the fresh vegetable, fish and butchery stalls. Mercury serves central Ulaanbaatar residents, both Mongolian and foreign, and many restaurant businesses purchase their food materials here. Bayanzurkh Market is an outdoor market serving Ulaanbaatar residents, selling a wide range of goods including food.



Figure 6. Furs for sale at Narantuul Market

There is considerable retail trade for wildlife and wildlife parts to domestic consumers occurring in these markets. There are numerous species of fish, wildlife-derived oils, bear paw, Altai snowcock meat, all parts of wolf, musk of the musk deer, and Mongolian

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

gazelle meat. Bayanzurkh is a center for trade in wildlife parts and products for medicinal use, while the only wildlife for sale at Mercury market is fish. In these markets customers, both individuals and restaurants, are able to order certain wildlife; the clearest example is for taimen, which is not displayed openly but is easily available on request.

### Newspaper Advertisements

Newspaper advertisements provide an additional market place for illegal trade in wildlife, and so were included in the raw materials and food markets survey. The two main newspapers publishing trading advertisements are Shuurkhai Zar and Zar Medee. Advertisements are either 'for sale' or 'wanted to buy' and specify the specific wildlife species, parts or products available or wanted, along with mobile phone numbers.

### Observations of Wildlife Trade by Species

Trade was observed in 27 species of mammal, at least 4 species of bird, 1 reptile, and at least 13 species of fish (some fish and birds were not clearly identified to the species level). Trade in fish made up the largest number of observations. The next most observed trade in wildlife is in wolves, followed by red fox and marmot; although they are also sought after for meat and medicinal use, these are the main fur-bearing species, perhaps indicating that trade in furs for export is a major driver of the illegal wildlife trade. The fur-bearing species – wolf, red fox, marmot, corsac fox, pallas' cat, lynx, sable, steppe polecat, beech marten, snow leopard – make up 40% of the total observations. Forest species include lynx, brown bear, red deer, sable, wild boar, roe deer, squirrel, musk deer, badger, wolverine, and wolf.

### Gray Wolf, *Canis lupus*



*Figure 7. Frozen wolves at Emeelt Market*

The survey team recorded 104 observations of trade in wolf in the markets and newspaper advertisements. This is the largest number of observations of any mammal species, and the second largest category after all fish species combined. This was mostly

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

open trade with only one observation, of a dealer claiming to have 50 wolves, considered to be hidden trade.

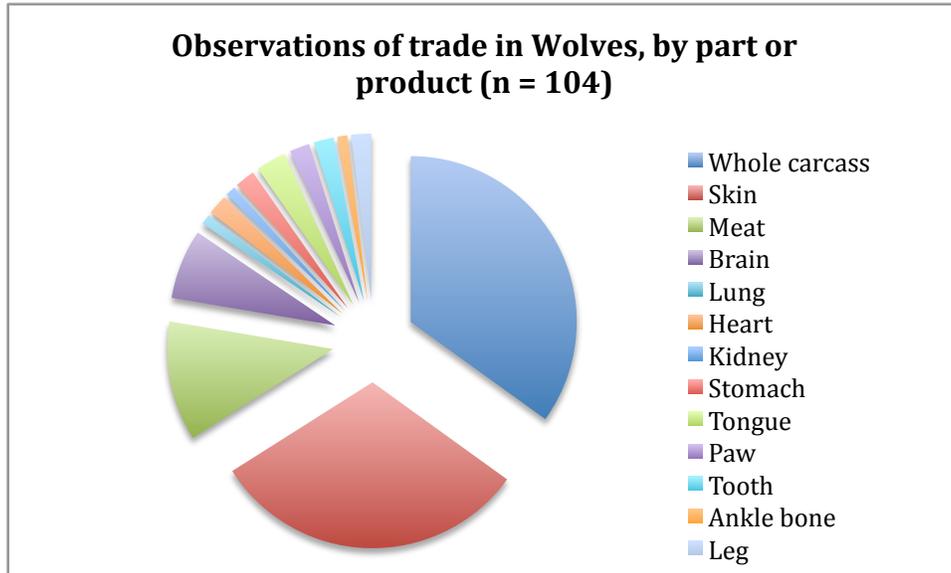
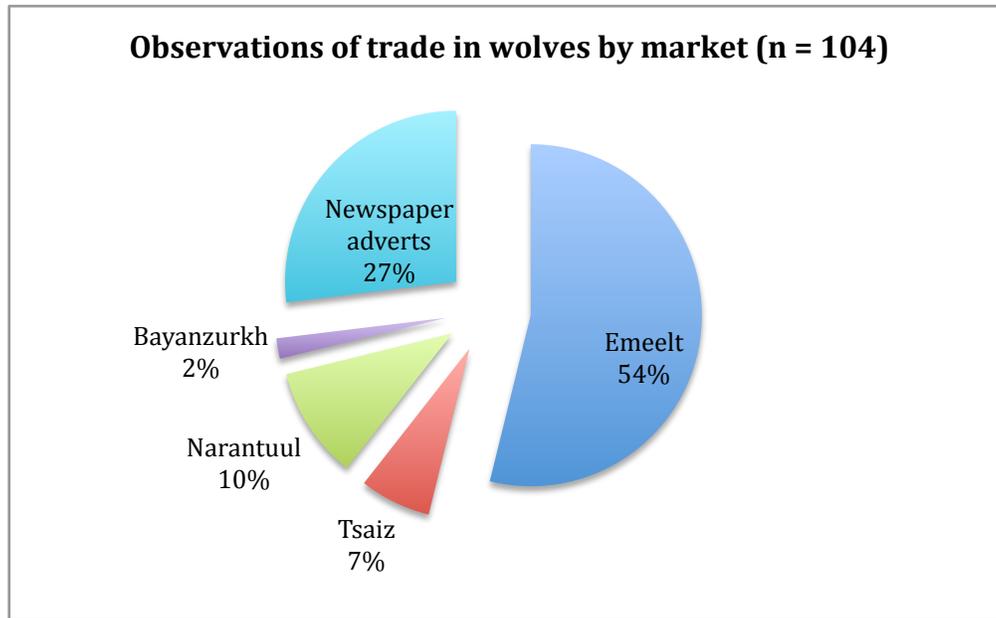


Figure 8. Observations of trade in gray wolf, *Canis lupus*.

Trade is in whole carcasses, skins, meat, organs and parts including brain, heart, lungs, kidney, stomach, tongue, paws and fangs. Almost all parts of the wolf have some use and are traded. The majority of observed trade is in frozen whole wolf carcasses and skins.

Survey teams made 36 observations of trade in whole wolf carcasses and a total of 237 complete wolf carcasses were counted; compared with 32 observations of trade in skins and 77 skins counted. The survey teams were unable to quantify the exact number of wolves or skins in most cases. Actual quantities of wolves are suspected of being far higher than the number actually counted or reported.

The reported origin of wolves included Arkhangai, Bulgan, Khentii, Khovd, Khovsgol, Selenge, Uvs, Umnogovi, Uvurkhangai and Zavkhan Aimags.



*Figure 9. Observations of trade in wolves by market.*

At Tsaiz only whole wolves or skins were observed, while at Emeelt meat, organs and parts were also available, although the main trade was in whole wolves and skins. In the domestic markets, no wolves were observed at Mercury market, while at Bayanzurkh only meat and organs were available. Some skins, parts such as canine teeth and ankle-bones, meat, and organs, especially brains, were available at Narantuul.

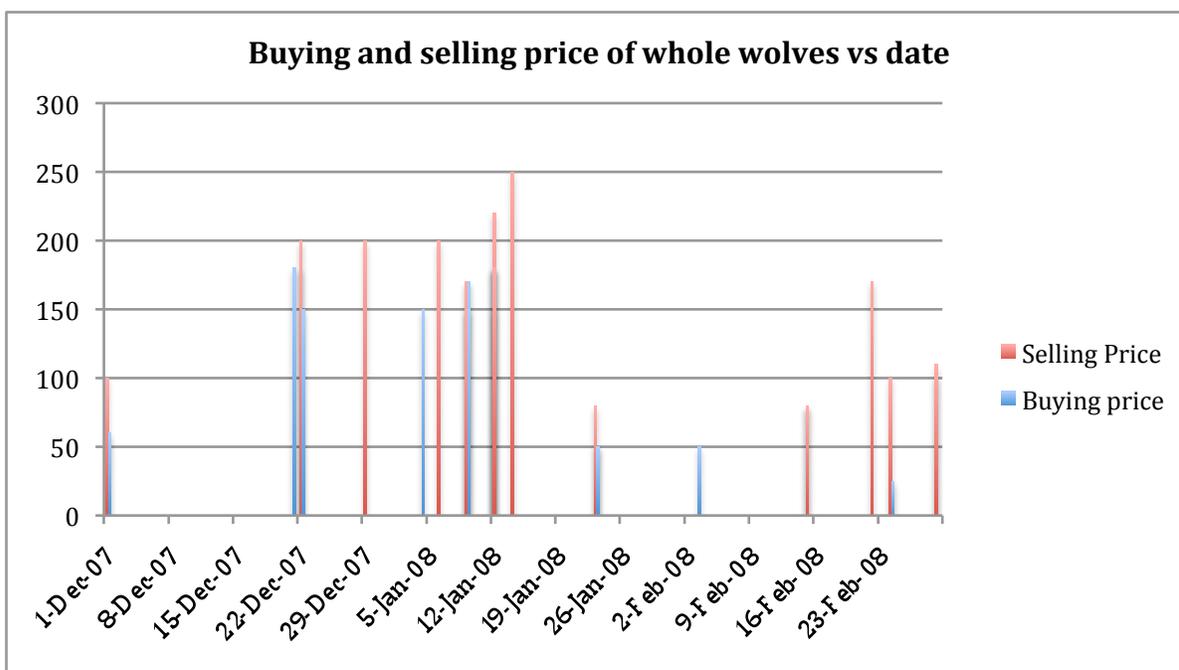
Emeelt is shown to be the centre of the trade in wolves and survey teams observed a wolf processing facility here. A significant number of wolves are also being bought and sold through newspaper advertisements. Only a small amount of wolf parts, meat and organs appear to be entering the domestic markets, suggesting export trade.

The wolf processing facility observed at Emeelt belongs to Mr Bold, who came to the attention of the survey teams during the regular surveys. He is around 35 to 40, and is possibly one of the biggest dealers in wildlife and wildlife parts at Emeelt. What makes Bold stand out from the other dealers is that he is processing and dividing wildlife into parts for sale. His place of work is a two story red-brick building in a compound that also houses eight storage units. He has apparently been conducting this business for 3 or 4 years, and was seen trading wildlife during every survey.

**WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**



*Figure 10. Mr. Bold's wolf processing facility at Emeelt.*



*Figure 11. Price of wolves, December 2007 to February 2008  
y-axis units: thousand Tugriks ('000 MNT)*

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

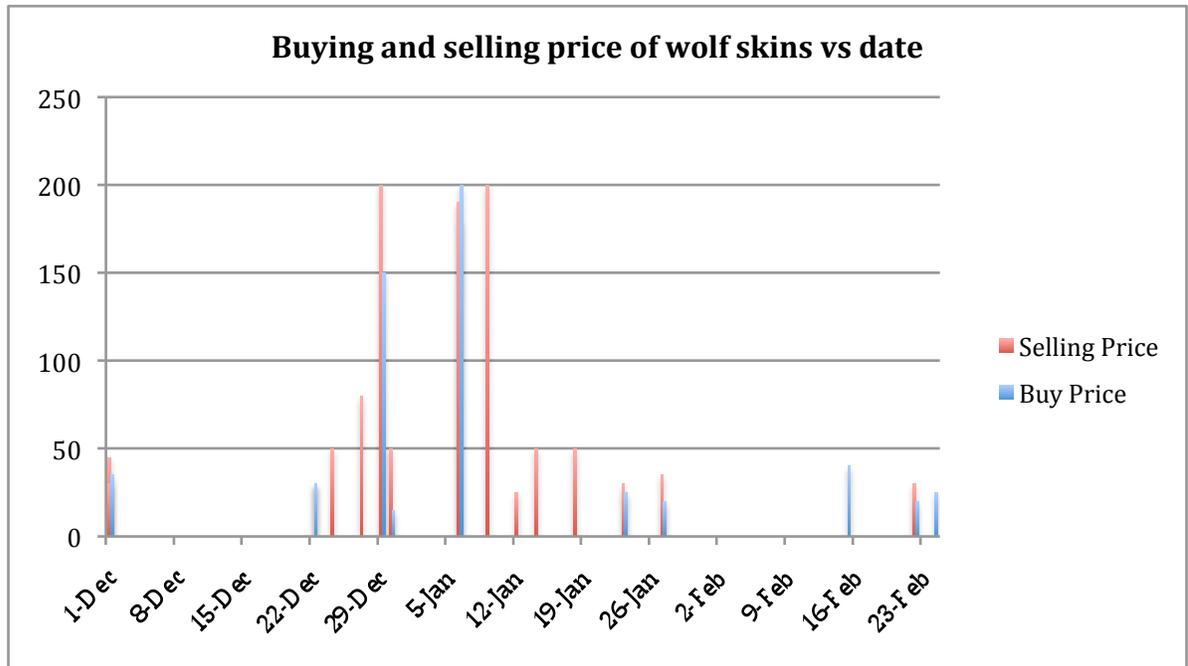


Figure 12. Price of wolf skins, December 2007 to February 2008.

*y-axis units: thousand Tugrigs ('000 MNT)*

Whole wolf carcasses are purchased for 25,000 MNT to 180,000MNT (\$20 to \$150), and skins for 20,000 MNT to 200,000 MNT (\$17 to \$170). This large price range is explained by the seasonality of the trade. Prices started low in early December, and the highest prices were seen in early January, dropping again in February. Likewise the price of wolf skins peaked in late December and early January. Fluctuations and peak in prices are explained as the dealers are buying up wolves and skins to complete export orders before certain border points open in January.

Trade in wolves is open, and information is easily gathered, carcasses are openly displayed and dealers are willing to allow visitors to see their stores of skins. This indicates both that enforcement is low, and that traders do not consider trade in wolves to be a serious offence even if they realize it is illegal at all.

### **Fish**

By far the largest number of observations and quantities of wildlife trade were in fish species, with 249 observations. The trade occurs in the domestic food markets of Bayanzurkh, Mercury, and Narantuul.

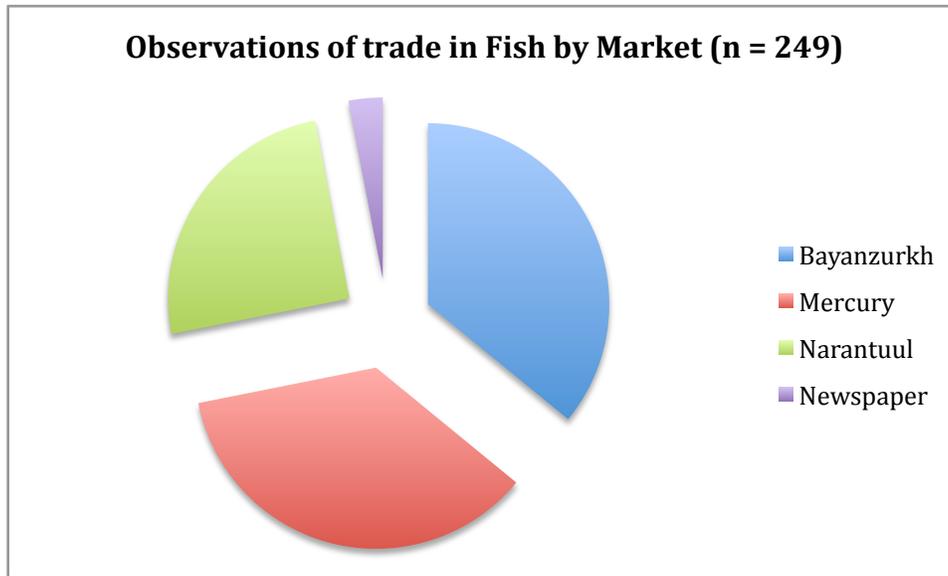


Figure 13. Observations of trade in fish by market.

The most commonly traded fish is Khovsgol whitefish *Coregonus pidschian*, followed by carp mostly *Cyprinus carpio*, catfish *Silurus asotus* and osman, mostly thought to be *Oreoleuciscus potanini*. Pike, Lenok, Taimen, Grayling, Perch and Burbot are also traded. Several families of fish species were not identified to the species level, as identification can be difficult when the fish are frozen. It is possible that some burbot were mis-identified as catfish.

The quantity of fish found in the markets was recorded by both number of fish and kilograms of fish, and in the case of Khovsgol whitefish numbers were reported in tonnes. In total 1,439 fish, 885kg, and 15 tonnes of whitefish were reported. The origin of the fish is mostly from western Aimags: Arkhangai, Khovd, Khovsgol, Uvurkhangai, Selenge, and Zavkhan.

The most commonly traded fish, Khovsgol whitefish, carp and osman are all easily netted from lakes during winter. Most of the trade in fish was open, with the exception of some of the taimen *Hucho taimen* available at Bayanzurkh and Mercury. Here dealers are aware that taimen is a rare species and that trade is illegal, and often keep the taimen hidden. Taimen were found in the markets on 11 occasions, and a total of 21 taimen reported. Reported sizes of taimen ranged from 1 m to 1.4 m, and 10 kg to 14 kg, and price from 3,500 – 10,000 MNT per kg.



*Figure 15. Mongolian Red Book species, taimen (Hucho taimen), on sale openly at Bayanzurkh market.*



*Figure 16. Container truck load of fish, mostly osman, illustrating the scale of trade in fish. This truck was seen by the side of the road, and was being prepared for transport to China.*

**Marmot, *Marmota sibirica* and *Marmota baibacina***

A total of 51 observations of trade in marmot were made. Only eight observations were made in the raw materials markets, two at Emeelt, and six at Tsaiz. The two observations at Emeelt, amounting to a total of 48 skins, were open, but the traders reported that enforcement activity was high, only a few dealers were trading marmots, and that the price had fallen. Trade in marmot skins at Tsaiz was mostly hidden, but with dealers

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

revealing or admitting to have over 2,600 skins. Reported prices of marmot skins were from 3,000 MNT to 3,500 MNT: less than \$3 compared with prices of up to \$10 in 2006.

Observations at the food markets show a different picture of trade in Marmots; 32 observations were made of marmot trade at Bayanzurkh and Narantuul markets, none at Mercury, and eleven advertisements in the papers. Trade at Bayanzurkh and Narantuul was mostly in meat, organs, and marmot oil, and the trade was open.

Newspaper advertisements were mostly selling meat, and oil or organs, one was for a marmot fur coat, and another was a general notice from a buyer willing to buy any marmots on the market.

A national ban on hunting marmots was imposed in 2005; these survey observations show that while illegal hunting and trade in marmot is still occurring, trade in skins is now largely hidden, and for some reason the price of skins has fallen dramatically. The drop in price could be explained in several ways: successful enforcement making the trade less worthwhile; change in fashions or demand by China; collapse in marmot populations; or it could be that the main trading period was over by the time the survey began, and so the price had dropped.

Traditional use of marmot meat, organs, and oil remains strong, and these items are openly traded. Marmot meat and organs are popular as a food and for health benefits, and marmot oil has several traditional uses including as leather conditioner, and to treat burns or frostbite.

### Red Fox *Vulpes vulpes* and Corsac Fox *Vulpes corsac*

A total of 53 observations of red fox and 28 observations of corsac fox trade were recorded and total of 767 red fox and corsac fox, either whole or skins, were observed during the survey. All the observations were of open trade.

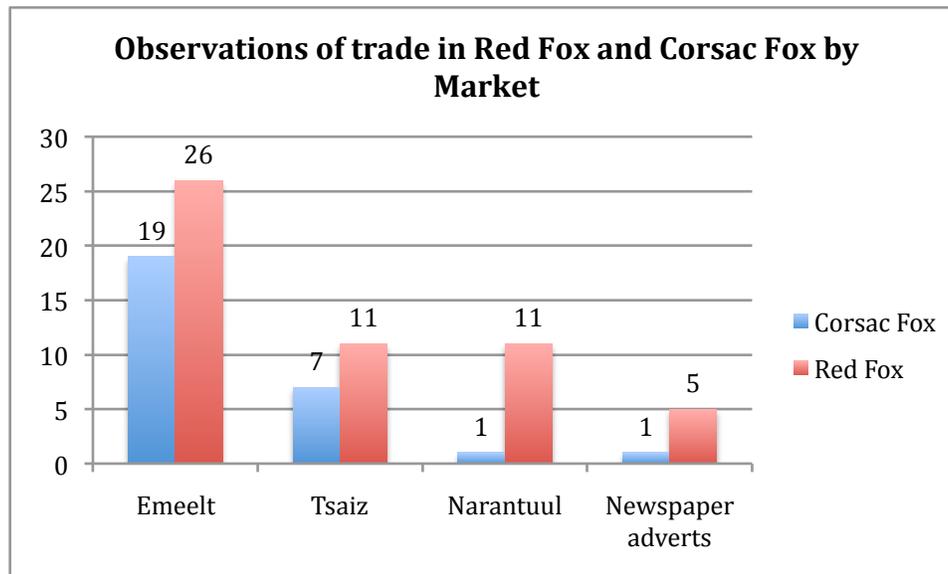


Figure 17. Observations of trade in red fox (*Vulpes vulpes*) and corsac fox (*Vulpes corsac*).

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

With the exception of some skins and 28 fox fur hats for sale at Narantuul market, the trade appears to be entirely centered around the raw materials markets of Emeelt and Tsaiz, and there appears to be little domestic market for meat or organs, with only two advertisements for fox lungs. Trade in fox skins appears to be mainly for export from the raw materials markets.

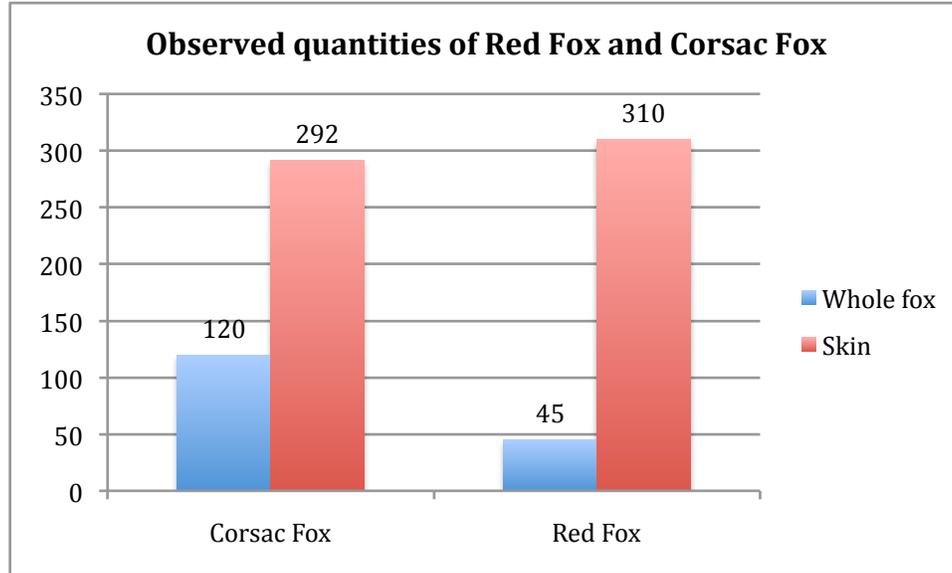


Figure 18. Observed quantities of fox (*Vulpes spp.*).

Most of the observed trade was quantifiable as the survey teams were able to count or record the number of foxes or skins that were detected during the survey. Three observations were recorded of Black Fox being available and it is assumed that this is of imported farmed fox.

Prices ranged from 5,000 MNT to 10,000 MNT for corsac fox, and from 8,000 to 18,000 MNT for red fox in the raw materials markets; red fox being both more valuable and more abundant than corsac fox. In Narantuul market fox skins sell for 25,000 to 80,000 MNT, price presumably depending on quality and whether the skin has been processed. Fox hats sold for 25,000 to 85,000 MNT.



Figure 19. Cache of illegally hunted fox skins confiscated by authorities after tip-off by the survey team.

### Brown Bear *Ursus arctos*

Brown bear is a forest species found in Northern Mongolia: survey teams recorded bear parts and products originating from forest regions of Bulgan, Khovsgol, and Selenge Aimags, surprisingly none were reported from Khentii, but origin was only reported in 40% of observations.

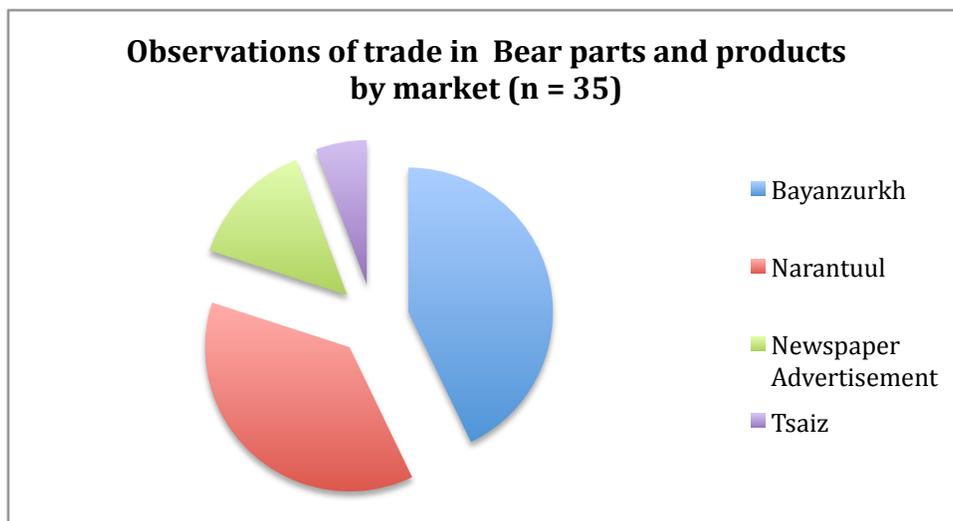
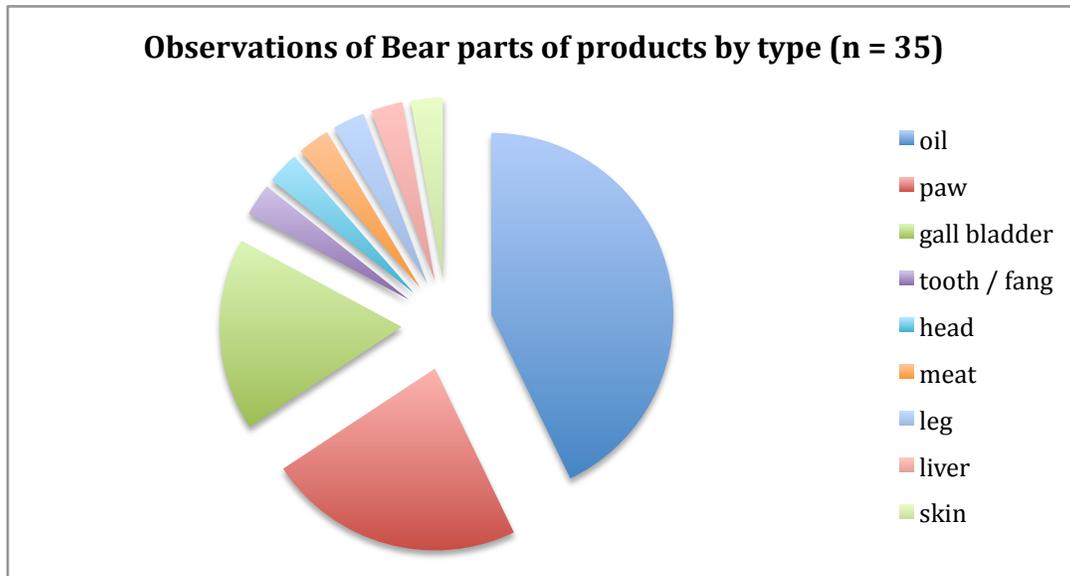


Figure 20. Observations of trade in brown bear (*Ursus arctos*).

Bear parts and products were openly traded, with the exception of two instances of hidden trade in gall bladder. Bear products are most traded at the domestic markets of Narantuul and Bayanzurkh markets, and are processed and divided up into the various

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

parts before going on sale; either trade in whole bears is hidden, or more likely the bears are processed and divided into the valuable parts by the hunters themselves. No export trade was observed and it is presumably well hidden; only bear parts and products for domestic, mainly medicinal use, were observed.



*Figure 21. Trade in brown bear (Ursus Arctos) parts and products.*

The main trade is in gall bladder, and oil; four complete gall bladders and 15 g of gall bladder were found, priced at 150,000 to 350,000 MNT for one gall bladder, and in total 1,878 g of bear oil was observed for sale.

**Eurasian Badger *Meles meles***

Survey teams made 31 observations of trade in badger. This was mostly at the domestic markets of Narantuul and Bayanzurkh, either as oil, or whole carcass. Interestingly two instances of live badgers being kept or traded were recorded; it was reported that fresh badger blood is used for medicinal purposes, and that live badgers are being kept and bled for this purpose. Survey evidence points to domestic trade, rather than export.

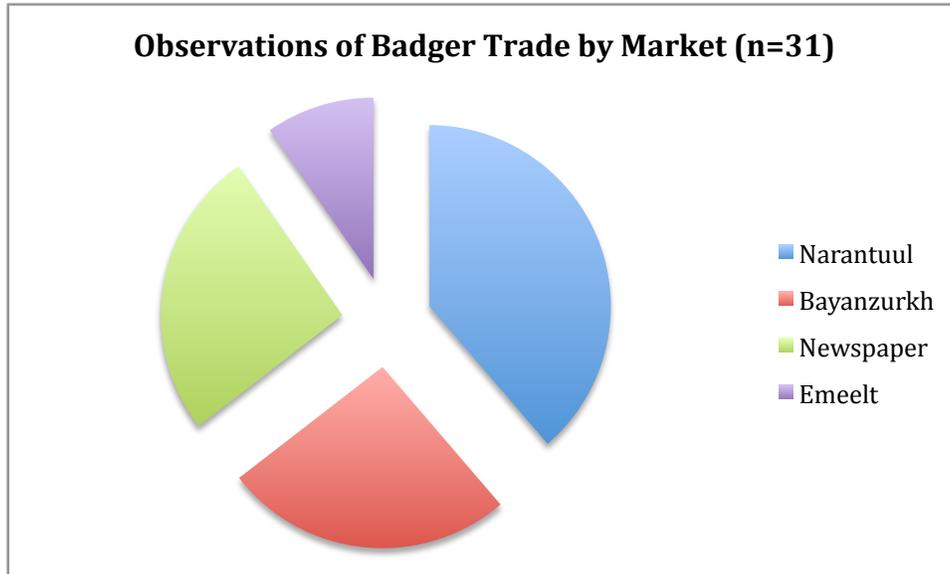


Figure 22. Observations of trade in Eurasian Badger (*Meles meles*) by market.

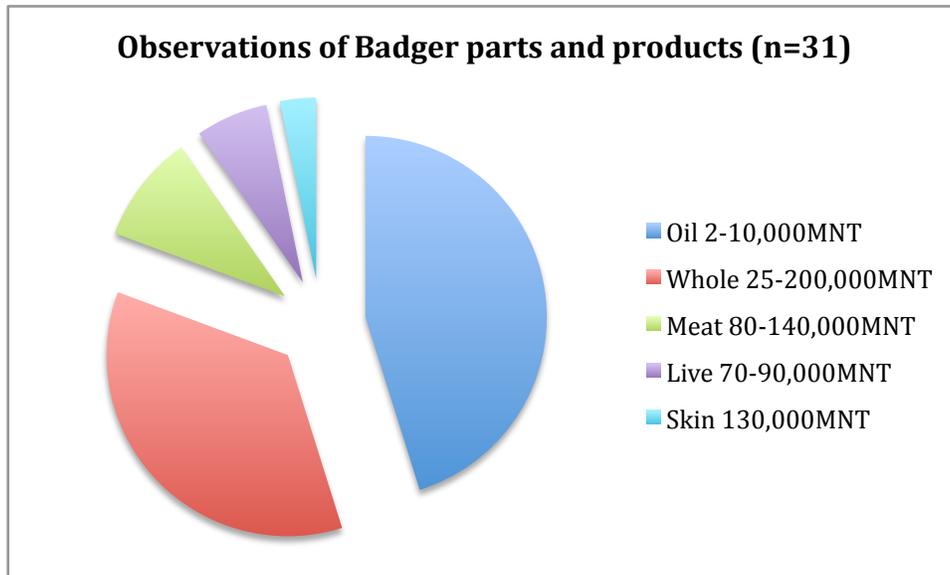


Figure 23. Eurasian badger (*Meles meles*) parts and products traded in Ulaanbaatar markets.

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### Birds

The majority of trade in birds is of Altai snowcock *Tetraogallus altaicus* and ptarmigan *Lagopus lagopus*; with the addition of several owls, two observations of trade in Dalmatian pelican *Pelecanus crispus*, some Cinereous vulture *Aegypius monachus* parts, and one sparrow. Snowcock and ptarmigan are either sold whole or dried and packaged. Whole Altai snowcock sell for 25,000-30,000 MNT at Emeelt, 50,000-60,000 MNT via newspaper advertisements, and up to 120,000 MNT in Bayanzurkh market, whereas ptarmigan were traded at 5,000 to 50,000 MNT.

Reported origin of Altai snowcock includes, Bayankhongor, Gobi-Altai, Khovd, Khovsgol, and Uvs Aimags. Ptarmigan originated from the mountain and forest regions of Khovd, Uvs, and mostly from Zavkhan Aimags. These birds are consumed for medicinal purposes.

Birds are most traded via newspaper advertisements, and at the domestic markets of Bayanzurkh and Narantuul, with some evidence of supply chain from the western Aimags via Emeelt market.

Owls and sparrows were not identified to species level. The cinereous vulture parts were a head and some claws, which were trading for up to 35,000 MNT.

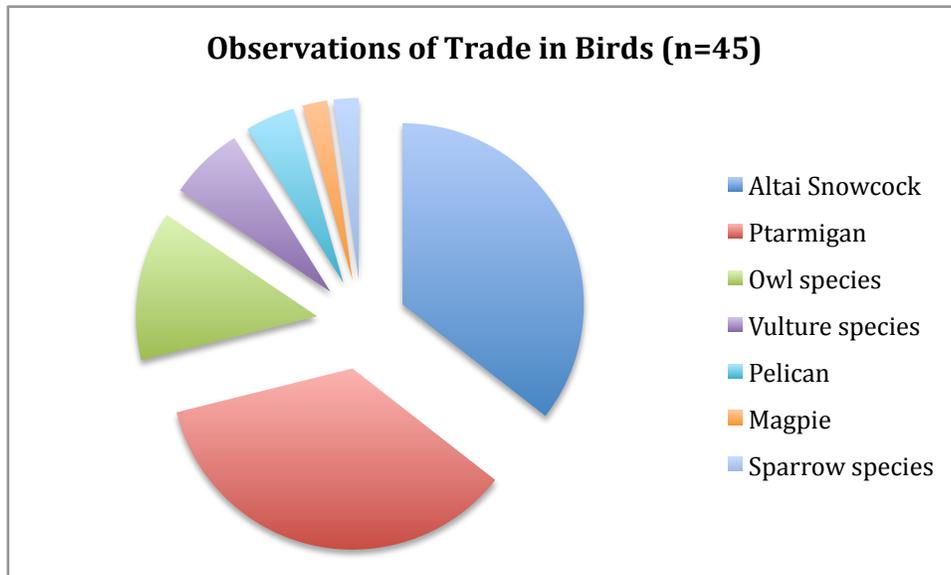


Figure 24. Observations of trade in bird species.

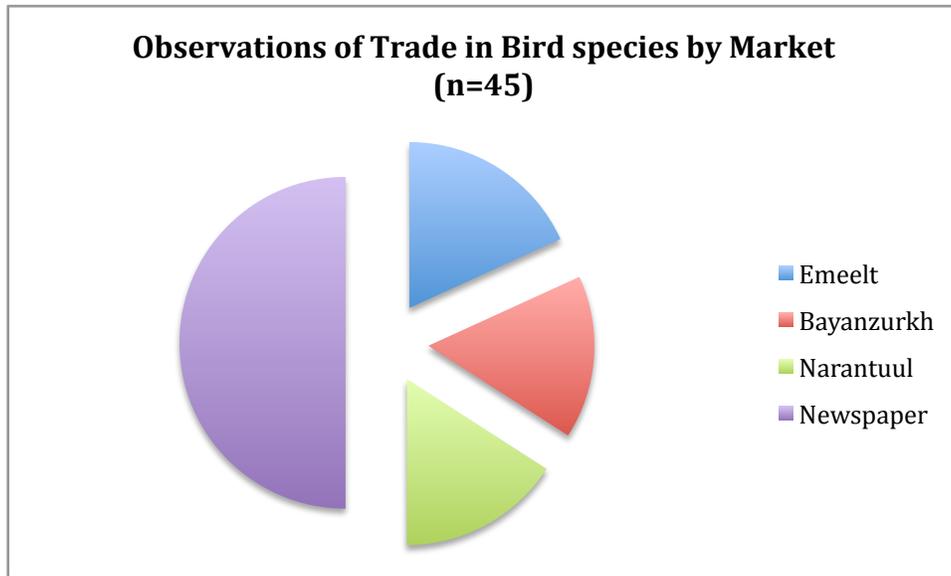


Figure 105. Observations of trade in bird species by market.

### Deer and Gazelle

Only six observations were made of trade in red deer *Cervus elaphus*, four at Emeelt, one at Tsaiz and one advertisement. One dealer claimed to have 200 deer from Bulgan, Khovsgol, and Selenge, and was selling these for 150,000-160,000 MNT. Over 100kg of red deer horn was detected at 12,000-18,000 MNT per kilogram. 500 g of red deer testes were available for sale at Emeelt for 250,000 MNT. Trade in red deer was mostly hidden, and especially considering the values it can be assumed that much more hidden trade is occurring.

Three observations of open trade in Siberian roe deer *Capreolus pygargus* horns and skin were made. One musk deer *Moschus moschiferus* pod was discovered at Bayanzurkh, selling for 250,000 MNT. Six observations were made of trade in gazelle. The three observations of gazelle meat for sale for 1,000-1,500 MNT/kg were made at Tsaiz, presumably these animals originated from the Eastern Steppes.

### Other species

Of the other forest species: wild boar *Sus scrofa* was observed on 19 occasions; sable *Martes zibellina* was observed four times, and red squirrel *Sciurus vulgaris* also four times. Wild boar was either liver or meat, with livers fetching up to 100,000 MNT. Sable skins were being bought for 10,000-15,000 MNT and sold for 50,000-60,000 MNT.

Of the other fur-bearing species, lynx *Lynx lynx* were found six times and Pallas' cat *Otocolobus manul* also six times. One snow leopard *Uncia uncia* skin from Khovd or Uvs was detected, with the vendor asking from 800,000-1,200,000 MNT for the skin. Lynx skins sold for up to 180,000 MNT and a lynx fur coat was for sale for 1,600,000 MNT.

Argali *Ovis ammon* and Siberian ibex *Capra sibirica* skins were both observed for sale on one occasion. Four steppe polecats *Mustela eversmanni* and three beech martens *Martes foina* were detected. One saiga antelope *Saiga tartarica mongolica* horn was on

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

sale for 80,000 MNT. Part of a wild ass *Equus hemionus* was available for sale at Bayanzurkh markets. A bat, one snake skin, a muskrat, a hare *Lepus spp.* fur coat, hedgehog spines, and even a ground squirrel *Spermophilus undulatus* skin were also observed.

### 2.2.2 Hospitals Survey

Surveys were undertaken at the Trauma Hospital and the Burns and Rehabilitation Centre. In both of these hospitals there is evidence of the use of wolf meat, Altai snowcock meat, bear and badger oils, and other medicinal products derived from wildlife. Despite the fact that any use of wildlife or wildlife parts is strictly prohibited in both hospitals, patients are using wildlife meat or products. It is common for the patients' relatives to bring home-cooked meals to the hospital, and this can include wolf or fox meat. Wildlife parts and products are purchased from the food markets or directly from the countryside, for example from relatives in rural areas. The survey of markets showed that Bayanzurkh market is a significant source of wildlife parts for medicinal use. Some species that were not observed in the raw materials and food markets are used for medicinal purposes at these hospitals.

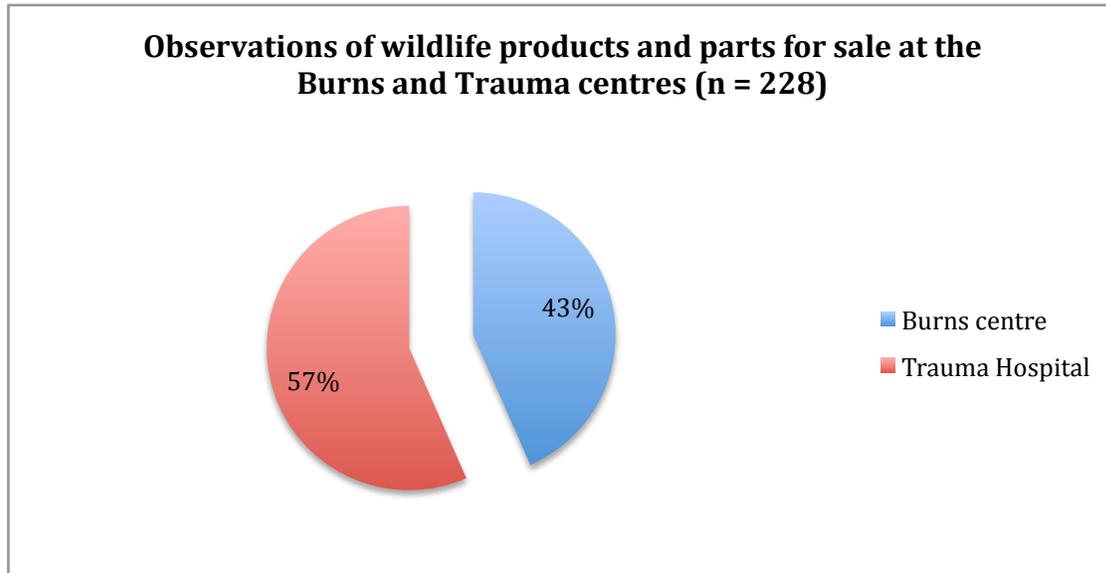


Figure 26. Observations of wildlife parts and products at hospitals.

**WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

<b>Species</b>	<b>#</b>	<b>Parts or product, and treatment or use</b>
Marmot	54	Meat, 'gland meat', liver, kidney, gall bladder, oil, to treat pancreas, pain stomach, lungs, kidney, liver, wounds and for bone setting
Wolf	42	Meat, brain, tongue, stomach, ankle bone, sinew, lungs, treatments for stomach, lungs, tonsil, blood pressure, thyroid
Wild boar	18	Liver, kidney, fat, oil, gall bladder, tusk, dung, for liver, lungs and pancreas
Altai snowcock	17	Meat for wounds, setting bone, trauma, and appendix
Brown bear	17	Mostly oil and gall bladder, also some paws and meat
Red Deer	12	Antlers, testicles, blood, and tail, mainly to strengthen the blood and treat anemia
Badger	11	Meat, oil and blood, for malignant tumors, stomach and liver
Partridge	6	To decrease stress
Hare	6	Meat and hearts, to treat the heart, and lower stress
Roe deer	5	Meat, liver and blood, to treat the liver, brains, and lower stress
Fish	4	To treat asthma, or for vitamins
Hedgehog	4	Oil and blood
Vulture	4	Brain, gall bladder, liver. Gall bladder to treat eyes, liver to treat liver
Black Kite	3	Meat and liver, to treat liver, and malignant tumor
Fox	3	Meat and lungs, to treat coughs and lungs
Ptarmigan	3	To treat liver
Argali	2	Meat to 'strengthen the blood' and decrease stress
Bustard	2	To reduce stress
Woodpecker	2	To decrease stress
Musk deer	2	Testicles, to treat kidneys
Snow leopard	2	Oil, and meat to treat stomach, and wounds
Camel (domestic)	1	Camel testicles to treat the pancreas
Cappercaillie	1	Meat to decrease stress
Eagle	1	Meat to treat wounds
Mongolian Gazelle	1	Meat
Pallas cat	1	Meat, to treat kidneys, and back
Saiga	1	Unknown
Snake	1	Unknown
Sparrow	1	Blood to treat the stomach
Steppe polecat	1	Unknown

*Figure 27. Species observed in the Ulaanbaatar hospitals survey, parts and their usage.*

### 2.2.3 Shop Survey

The restaurant survey team expanded their activities to include a survey of the major souvenir shops and some department stores in Ulaanbaatar. Surveys revealed significant illegal trade in wildlife; however, shop staff were largely unaware of any illegality. The most common wildlife goods available in shops are furs, and even snow leopard fur was reported. A large number of horns, including argali horn, are sold as souvenirs. The State Department Store has the largest quantity and variety of wildlife products for sale. Wildlife products are often sold to unsuspecting tourists who could find themselves breaking the law by taking CITES listed species, such as fur products from snow leopard, wolf, Pallas' cat, and lynx, or argali and saiga horns, home with them. Fur products also feed domestic Mongolian fashions.

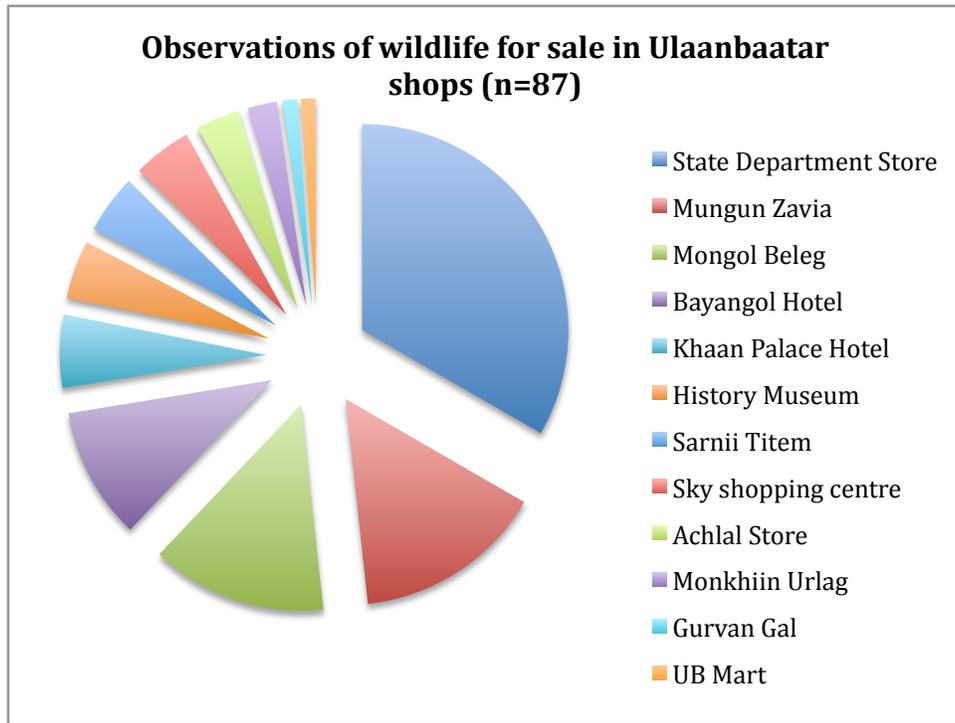


Figure 28. Observations of wildlife products for sale in Ulaanbaatar shops.

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

Species	# items	Observations
Fox	172	Mantle, skin, coat, hat, paw, fur reportedly coming from a skin processing factory in Mongolia, 70-80,000 for a skin or mantle up to 550,000 for a coat
Mink	118	Mink hats, collars and coats selling for up to 5,000,000 MNT
Hare	64	Hare's foot key chains, skin, collars, and coats. Four coats, selling for up to 250,000MNT
Mongolian Gazelle	91	Skin, horn and handbag (50,000MNT)
Wolf	92	Skins, hat, teeth. Twenty skins for sale at 129,000MNT each in the State Department Store
Ibex	8	Horn
Argali	2	Horn
Black tailed gazelle	4	Horn
Eagle	1	
Otter	7	Skin
Pallas cat	3	2 hats for 30,000, coat for 90,000
Wolverine	3	Hat for 30,000MNT and two skins for 75,000 MNT
Lynx	1	Collar
Red deer	4	Horns for 70,000 MNT
Roe deer	7	Horns for 45,000 MNT
Saiga	1	Horn for 10,000 MNT
Snow Leopard	2	Snow leopard collar/mantle at Khan Palace Hotel, for 350,000 MNT each

Figure 29. Type of products made from wildlife for sale in Ulaanbaatar shops

### 2.2.4 Restaurant Survey

The only wildlife openly available for sale in restaurants was Khovsgol whitefish *Coregonus pidschian* from Tsagaan Nuur in Khovsgol Aimag. Sale of other wildlife meat was not observed, but perhaps some meat such as gazelle is being served as *huushuur* (fried meat-filled pies) or *buuz* (steamed meat-filled dumplings) in Mongolian restaurants, and *guanz* (informal establishments serving Mongolian food) but this was not detected. Survey teams surveyed 20 restaurants, including European, Mongolian, Russian, Korean and Chinese restaurants. Khovsgol whitefish was available in various dishes at all restaurants surveyed. Some restaurants serve imported fish, and others are suspected of serving taimen.



*Figure 30. Fried fish served in an Ulaanbaatar restaurant.*

### **2.2.5 Choibalsan Market Survey**

In collaboration with Eastern Mongolia and Nomrog Special Protected Area Administration staff, WCS Wildlife Trade Specialist N. Odonchimeg conducted a market survey in Choibalsan city, Dornod Aimag from 12-15 December, 2007. The survey was conducted in ‘Shur’ market (which is the biggest market in Choibalsan trading raw materials and food), some departments of the city hospital, and in two Chinese Restaurants named ‘Orgil’ and ‘Chadanguud’. The ‘Shur’ market was surveyed twice and the other locations once each.

In general the wildlife trade in Choibalsan market has changed to hidden trade compared with the previous year when trade was open and very organized. ‘Shur’ market now looks very clean and very few buyers or vehicles displayed announcements about wildlife and its parts. During the survey no wolf, gazelle, fish and other wildlife or their parts were observed in the market.

One trader reported that there was little activity because it was not the main trading season, that the prices were low, and border points closed. Due to these reasons the local poachers and herders were keeping their raw materials at home or elsewhere and waiting for prices to increase. In addition he reported that some major traders are collecting all wildlife raw materials and parts and keeping these in a container. This is to meet orders placed by a Chinese dealer who is funding the purchases with cash from China. The trader reported that before New Year the price of wildlife and its parts should increase, and then all the raw materials will go to the border point and be exported illegally to China. The Khavirga border point is located around 130 km from Choibalsan and was scheduled to open on 6 January, 2008.

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

### **Mongolian Gazelle**

No gazelle or parts were openly traded in the market, but hidden trade is occurring. For example; gazelles are transported from Ereen-tsav soum on the local train (twice a week) and from Kherlen and other soums by local public mini bus. People bringing gazelles are informing a female dealer who sells Dornod bread inside the food market. This dealer is in contact with gazelle meat buyers and has orders to supply gazelle meat. The price is 12,000-15,000 MNT (similar to the price in UB); this is an increase in price from the previous year. Only one Chinese Restaurant named 'Orgil' has gazelle meat openly listed on the menu, priced at 5,000 MNT. Other small cafes and *tsainii gazar* (tea-houses) near 'Shur' markets are selling horse-meat huushuur (fried meat pies) that actually include gazelle meat.

### **Wolf**

Due to a ban on hunting wolves, this trade is now hidden. The main trade is occurring at the hospital. The price of one leg was 20,000 MNT and lungs were also 20,000 MNT.

### **Marmot skin**

Trade in marmot skins is also hidden, allegedly marmot skins are being smuggled to China inside vehicle tires.

### **Fish**

There were no fish in Choibalsan markets. Fishing mostly occurs on Buir Lake, and is traded directly to China.

### **Wild boar**

Most wild boar reaching the Choibalsan markets originates from Khalkh Gol soum (Nomrog Strictly Protected Area is located in this soum). Some Chinese restaurants are cooking wild boar, but selling this as pork. Most wild boar parts are traded at the hospital where one fresh liver fetches up to 50,000-70,000 MNT. Information was given that the Bostok restaurant had ordered six wild boars from a trader.

### **Corsac fox**

Corsac fox skins were also being collected by traders for export.

### **Conclusion and recommendations**

1. Due to the marmot and wolf ban, wildlife trade in Choibalsan is now hidden and more organized.
2. The number of gazelles traded in Choibalsan is decreasing but has also changed to hidden trade.
3. In Choibalsan, because of its proximity to border points, it is suspected that most (perhaps 80%) of traded wildlife and its parts are crossing the border directly, and only a small portion is transported to Ulaanbaatar.
4. One-off surveys should be organized in January at the Khavirga border point.
5. Further cooperation should be developed with the Aimag Intelligence representatives to monitor wildlife trade.

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

6. A visit should be scheduled to Ereen-tsav soum to survey gazelle trade and transportation by local train.

### **Activity 2: “Ride Along” with Enforcement Officials**

*Question. How are wildlife trade laws enforced in Ulaanbaatar?*

Our second objective was to identify strengths and weaknesses in the enforcement system by observations made throughout the survey and by ‘ride-alongs,’ i.e., accompanying enforcement officers on patrol.

Market surveys included questions on enforcement activity (or lack thereof) observed during the market survey. In addition, when significant quantities of wildlife were detected during the survey, students informed the project leader, who made the decision to report certain cases to the authorities. Fifteen ‘ride-alongs’ were conducted where WCS staff accompanied enforcement officers to observe enforcement activities. In total 228 items were confiscated, 14 warnings were issued, and 8 penalties or fines given. In particular the ‘ride-alongs’ helped WCS staff to develop a good working relationship with J. Badamkhand, Senior Inspector of the Municipal State Inspection Agency (MSIA). Cooperation with the MSIA resulted in official letters being sent to the main newspapers advertising wildlife, demanding that such advertisements be stopped; the result was positive as the newspapers ceased to carry these advertisements.

Market name	Ride along	Number of items confiscated	Warnings Issued	Penalties Issued
Emelt	1	4	2	1
Tsaiz	2	200	1	1
Narantuul	2	8	3	2
Bayanzurkh	2	4	2	2
Mercury	0		2	
Souvenir shops	3	11	2	2
Restaurants	0			
Newspaper	2	1	2	
Hospital	0			
Other	3			
<b>Total</b>	<b>15</b>	<b>228</b>	<b>14</b>	<b>8</b>

*Figure 31. Results of 'ride-alongs' with enforcement officers.*

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### 3.1 Confiscation of musk deer pod in Bayanzurkh market of UB

Market name: Bayanzurkh food market

Date: 28th February 2008

Team members:

Tuvshinjargal, WCS student survey team leader

J. Badamkhand, MSIA Senior inspector

Policemen (2) from the Inspection and Monitoring Unit 805 of the General Police of Mongolia

Batmunkh, WCS student survey team

Tsend-Ayush, WCS student survey team

2 drivers with 2 vehicles

During this joint patrol two pieces of musk deer pod and one owl were confiscated. Enforcement and confiscation notices were issued. A member of the student team played the role of a buyer in order to detect the wildlife parts. The inspector was then informed and inspection carried out. During the inspection the offenders were very angry, and the presence of the policemen was important. The offender had already been noticed by the survey teams, and was considered to be the biggest trader in the market, selling items such as musk pod and deer ovary.



Conclusion and recommendations:

- Provide safety and back up (i.e., Police)
- Need a well-coordinated team
- Need to play the role of buyer convincingly

### 3.2 Confiscation wolf skins in Emeelt market

Market: Emeelt

Date: 28 February 2008

Team members:

Tuvshinjargal, WCS student survey team leader

J. Badamkhand, MSIA Senior inspector

Policemen (2) from the Inspection and Monitoring Unit 805 of the General Police of Mongolia

Batmunkh, WCS student survey team

Tsend-Ayush, WCS student survey team

2 drivers with 2 vehicles

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

During this joint patrol four wolf skins were confiscated, and warning and confiscation notices were issued. There was little reaction by the offender who mostly trades in livestock raw materials, as well as some wildlife and skins (but no parts).



### 3.3 Confiscation of red fox skins in Tsaiz market

Market: Tsaiz, Nalaikh District

Date: 13 January 2008

Team members:

Tuvshinjargal, WCS student survey team leader

J. Badamkhand, MSIA Senior inspector

Policemen (2) from the Inspection and Monitoring Unit 805 of the General Police of Mongolia

Erden-Ochir, WCS student survey team

Munkhzaya, WCS student survey team

Ser-Oddamba, WCS student survey team

2 drivers and 2 vehicles

During this joint patrol 200 red fox skins were confiscated. The fox skins were detected as a result of the regular surveys at Tsaiz and the authorities were informed. Confiscation and enforcement notices were issued. The 200 skins were transferred to the *Special Commission for Re-selling for Income for the State*. The offenders was given a penalty of 25,000 MNT according to the hunting law. The market owner was also issued with a penalty, total 250,000 MNT. The skins originated from Sukhbaatar Aimag.



## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

After the confiscation of the skins, Mrs. Dulmaa, the owner of Tsaiz market followed the enforcement teams in a Ford Expedition (licence UBO 0040) as far as the Municipal State Inspection Agency office. She also called the head of the Division at the Municipal State Inspection Agency demanding that the skins be returned. Inspector Badamkhand had nowhere to properly store the confiscated items, and had to keep them in her office for two nights. After this enforcement activity, team members received threatening and intimidating phone calls.

### 3.4 Confiscation of Pallas' cat

**Address:** Bayangol district

**Time:** 16 February 2008

**Team members:**

Tuvshinjargal, WCS student survey team leader

Khos Erdene, WCS student survey team

J. Badamkhand, MIA Senior inspector

Policeman (1) from the Inspection and Monitoring Unit 805 of the General Police of Mongolia

An advertisement 'Selling Manuul' was discovered in Shurkhai Zar newspaper on 15<sup>th</sup> February 2008. Student team members Tuvshinjargal, Myagmarjav, and Khoserdene visited the family who placed the advertisement and discovered a live Pallas' cat. They paid 5,000 MNT to take some photos, and left to inform the authorities. A joint patrol was formed with Municipal inspector, Badamkhand, which returned to the family home to confiscate the cat. The Pallas' cat was then released in the countryside about 5 km from Emeelt. This case study highlights the lack of protocols for the handling, rehabilitation and release of live wildlife.



### 3.5 Inspection in Tsaiz market

**Market:** Tsaiz

**Date** 27 February 2008

**Team members :**

Tuvshinjargal, WCS student survey team leader

J. Badamkhand, MIA Senior inspector

Policeman (1) from the Inspection and Monitoring Unit 805 of the General Police of Mongolia

Munkhzaya, WCS student survey team

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

2 drivers and 2 vehicles

During this 'ride-along' with inspection officers two frozen whole wolves, eight red fox skins, and two wolf skins were confiscated. On this occasion the dealer, a female, accused the policemen and inspectors of harassing her for a bribe, and said that they would probably return the wildlife after being paid off. She also said that she would not be trading in wildlife if it was not for the Chinese paying high prices. If prices were low she claimed that she would not be conducting this kind of trade.



### 3.6 Inspection and survey at tyre repair point near Songolon, Songinokhairkhan district.

**Date:** 27 February 2008

**Team members:**

Tuvshinjargal, WCS student survey team leader

J. Badamkhand, MIA Senior inspector

Policeman (1) from the Inspection and Monitoring Unit 805 of the General Police of Mongolia

Munkhzaya, WCS student survey team

2 drivers and 2 vehicles

Two frozen wolves were confiscated on this patrol. The wolves were on sale at a tyre repair operation. There was no reaction from the offenders, who were issued with a warning. These wolves were displayed by the side of the road, illustrating just how open trade in some species is.



## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

### **3.7 Patrol in Narantuul International Market**

**Market name:** Narantuul

**Date:** 20 February 2008

**Team members:**

Tuvshinjargal, WCS student survey team leader

J. Badamkhand, MIA Senior inspector

Policeman (1) from the Inspection and Monitoring Unit 805 of the General Police of Mongolia

Munkhzaya, WCS student survey team

2 drivers and 2 vehicles

The area inside of the left entrance to the market is a location for illegal trade in wildlife parts and plants. Five vendors in three booths conduct trade in this location. Altai snowcock, cinerous vulture, owl, marmot (meat, liver, kidney), wolf parts, badger oil, and wild boar meat were found here. This is considered to be a major location supplying wildlife parts for medicinal uses, and was discovered through information gathered in the hospital survey.

In the area in front of the police post, where the booths selling hand-bags are located, the patrol observed six to eight dealers trading in livestock raw materials. In this area survey teams discovered a lynx coat and skins of beech marten, red fox, corsac fox, ibex, and steppe polecat. Despite proximity to the police post, there was no enforcement activity by police, perhaps due to lack of knowledge on wildlife law enforcement.

At the bus terminal, while there was no wildlife trade detected in this area, bus drivers offered to bring Mongolian gazelle if orderd. Price was 10,000–15,000 MNT for one gazelle. Interestingly, when approached by students who offered to sell gazelle meat to cafes in the Narantull market area, only seven out of thirty cafes were prepared to buy, while the rest were not interested and said it is prohibited.

### **3.8 Report by J. Badamkhand, Municipal State Inspection Agency**

The ‘ride-along’ activities with enforcement officers helped WCS to develop an effective working relationship with J. Badamkhand of the Municipal State Inspection Agency. Ms. Badamkhand reported that as a result of the joint activities that 11 kind of wildlife skins and products were confiscated, including Pallas’ cat, wolf, corsac fox, red fox, and lynx from shops (Flower center, State Department, Nomin shop, and some souvenir shops) and Emeelt, Tsaiz, Baynzurkh markets. Also 6 kinds of fish species (pike, lenok, perch, osman and carp) were confiscated from Narantuul, Mercury, Khantalst, and Kharkhorin food markets. These items had no certificate of origin and violated the following articles of Mongolia law:

- 16.1.6 of Law on Hunting
- 5.2. of Law on Hunting Fee
- 14.1.2 of Law on Advertisement

#### **Enforcement actions taken by J. Badamkhand**

- Sent official letter requesting a stop to wildlife trade adverstizments to several TV channels and newspapers

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

- Sent official Inspector's Conclusions to 3 offenders who sold wildlife and its parts (#117/1965 and 1954 on 11 March, 2008; and #117/1974 on 12 March).
- Sent Inspectors Official Note to Shuurkhai Zar and Zar Medee newspapers (#117/176 18 March, 2008, #117/205 24 March, 2008).
- In total as a result of these enforcement activities a total of 429,400 MNT was imposed as fines on 1 business entity and 10 individuals.

### **Conclusions**

All of the confiscated wildlife had no permits or certificates of origin. The inspections revealed weak inspection and management of inspectors at the local level. Citizens (dealers, vendors, buyers) have little knowledge or understanding about wildlife trade laws and permits.

### **Recommendations by J. Badamkhand**

- Improve local level exchange and sharing of information among enforcement agencies for future cooperation, especially regarding the Hunting Law.
- Need to obtain, or purchase, information from informants about illegal wildlife trade, and reward the informants.
- Develop and publish materials and distribute these to citizens, especially to the vendors and dealers who are working in the markets.
- Establish or create a special storage facility with refrigerator to store confiscated wildlife parts.

**Activity 3: Assessment of Results**

WCS contracted a Mongolian specialist, Mr. Kh. Badam to assist in the assessment of the results and to contribute to the formulation of future strategies. Mr. Badam is a recently retired Senior Environmental Inspector of the State Specialized Inspection Agency (SSIA) where he was head of the hunting and wildlife section. He is recognized as one of Mongolia's leading experts in enforcement of wildlife laws in Mongolia; in addition he has excellent connections to, and is respected by, the enforcement agencies that WCS was working with during the implementation of this survey, and he has an interest in working with them in the future.

Mr. Badam classified the observed wildlife trade according to the legal status of each species. This classification can be found in Appendix II. Mr. Badam concluded that the current laws were ineffective, that illegal wildlife trade was increasing in terms of both volumes and number of species traded, and that there was a complete lack of enforcement across the entire country. Mr. Badam's report provides useful information on the legal status, offences and penalties related to wildlife trade, as well as suggestions for future actions, activities and law amendments.

**4.1 Current situation and trends in illegal wildlife trade (Kh. Badam)**

Since the early 1990s Mongolia made the transition to a market economy, and developed both domestic and foreign trade, allowing citizens to travel freely abroad. Growth in domestic and foreign trade has permitted an increase in illegal wildlife trade, and fueled this through greater access to firearms and ammunition and vehicles for hunters. Increasing unemployment and poverty has also contributed to the rise in wildlife crime.

In recent times illegal natural resource use, trade and smuggling of wildlife resources has become an organized network and is getting more serious. Penalties in the criminal and civil laws no longer reflect the seriousness of the offences. Illegal trade in wildlife, their organs and raw materials has become the main source of livelihood for some citizens, and at the same time international and domestic market demand has increased dramatically.

The Mongolian environmental laws related to wildlife mostly deal with wildlife hunting and capturing processes, but regulation of trade in wildlife is not sufficiently dealt with under the current laws. In 2002 the Mongolian Parliament approved a law on the regulation of trade in fauna and flora to implement the CITES convention in Mongolia; but this law has no power to regulate and coordinate domestic trade in the country.

**4.2 Mongolian legal articles prohibiting wildlife trade (Kh. Badam)**

**Mongolian Law on Fauna:**

Article 7.2 states that only special permits for scientific purposes, can be issued for hunting of species listed as endangered. Article 7.3 states that it is prohibited to trade in an endangered animal's skin, bone, and other raw materials.

**Mongolian Law on Hunting:**

Article 7.3 states that the Soum State Inspector for Nature and Environment should issue a certificate of origin to citizens, and entities, who are trading wildlife raw materials. Furthermore, article 15.1 states that it is prohibited to trade in wildlife raw materials without a certificate of origin.

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

Penalties are low for such violations and only violations involving endangered and rare species are criminal offences.

### **4.3 Penalties for illegal wildlife trade (Kh. Badam)**

#### **Mongolian Law on Fauna:**

Article 27.1.3 states that citizens who purchase an endangered animal's skin, fur and other raw materials without permission should pay a penalty of 35,000-50,000 MNT, while companies and entities should pay 150,000-250,000 MNT and that purchased and sold items should be confiscated.

Article 27.2 states that in the case of repeated violations of articles 27.1.2-27.1.4, hunting endangered species, and in cases of running illegal trade and smuggling abroad, criminal penalties should be imposed according to related law.

#### **Mongolian Law on Hunting:**

Article 16.1.6 states that in the case of illegal hunting of game species and trade in their raw materials, the items should be confiscated and a penalty of 10,000-25,000 MNT imposed for citizens, or 100,000-200,000 MNT for companies and entities

Article 16.2 states that persons who hunt, capture and trade illegally in rare game species, without permission, are subject to criminal penalties.

#### **Mongolian CITES Law:**

Article 15.1.1 sets out fines for citizens illegally exporting fauna and flora listed in the CITES convention; 50,000 MNT for citizens, 60,000 MNT for officials and 250,000 MNT for companies and entities. All items can be confiscated.

#### **Mongolian Criminal Law:**

Article 203.2 states that in the case of illegal hunting, capturing and smuggling of endangered animals offspring or juvenile [definition is not clear here] across the state border the penalty is 3-5 years in prison.

#### **Mongolian Administrative Law:**

Chapter 42 says that if illegal cases of manufacturing, trading and other activities are not a criminal offence then the items should be confiscated and penalties of 10,000-50,000 MNT for citizens and 80,000-250,000 MNT for companies and entities, be imposed.

This law also states that a judge, governor of soum, district, bag, or khoroo, and police departments or authorized body should investigate and take necessary measurements on certain issues under their jurisdiction. This means that not only State Inspectors, but also all the officials mentioned could and should take action to control illegal trade in wildlife. Specifically this article gives the police department power to conduct enforcement in such cases.

### **4.4 Conclusions of Mr. Badam's Assessment**

Mr. Badam considers that the main gap in the above environmental laws are that the articles and penalties only deal with species classified as rare or endangered, and does not cover all wildlife species.

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

The musk of musk deer; red deer genitals, tail and blood antlers; saiga antelope horn; bear bile; and all furs are mostly exported to the People's Republic of China. Another driver of wildlife trade is the current resurgence in the use of traditional medicine within Mongolia. There is high demand for wolf, marmot and other animal's organs, meat, blood, fat, oil and bile.

Regulatory and monitoring activities are insufficient to control the trade. According to the Hunting law penalties for poachers are relatively high compared to those for trade. For example, a poacher should pay a fine of twice the assessed species ecological and economic value, and in addition guns, equipment and even vehicles can be confiscated. Comparatively penalties for those citizens and entities involved in illegal trade activities are low.

Enforcement and awareness campaigns should be extended to include not only State Inspection Agencies, but also trade and health care organizations and agencies.

### **Actions proposed to control and stop illegal wildlife trade (Kh Badam):**

1. Prohibit to purchase or prepare medicine originating from wildlife without approved standards, technology and methodology.
2. Stop sale and purchase of wildlife originated raw materials in food markets, shops, drug stores and other places.
3. Make penalties for preparation, production, storage, transport and trade in wildlife organs and raw materials, equivalent to those in the Hunting law.
4. Increase the penalty for companies and entities that provide the opportunity for illegal trade, preparation and production to 1,000,000-5,000,000 MNT.
5. Raise awareness of illegal wildlife trade, and related laws and penalties through the mass media.
6. Stop advertising of wildlife parts and raw materials in the media.
7. Give the right to the police department, health care and all authorized bodies to confiscate illegal wildlife items.
8. All confiscated organs, raw materials and items not be uses or resold; they should be destroyed.
9. Prohibit transport of frozen and whole bodies of wild animals, entering into settlements, storage, and sale of all wildlife species except fish species.
10. Regulate sale and ownership of guns and ammunition in order to protect biodiversity.
11. Submit suggestions and proposals to lawmakers to increase penalties through amendments to the Hunting, Fauna and Administrative laws.
12. Create a reward system for citizens who deliver reliable information about illegal wildlife trade to the legal authorities and officials.
13. Develop guidelines on legal status and enforcement of wildlife trade for distribution to legal and nature/environmental organizations.

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

14. Provide training for State Inspectors, and other enforcement agencies on wildlife trade, including identification of wildlife parts and products, and wildlife trade laws.
15. Provide equipment, such as vehicle or motorcycle, and cameras, to the inspectors who are working in illegal hunting and trade hotspots.
16. Ministry of Nature and Environment declared a ban to prohibit hunting internationally endangered species, grey wolf, for 2 years in the Dornod, Khentii and Sukhbaatar Aimags. This was an important decision. Further opportunities to extend the ban on hunting of wolves and other species should be pursued.
17. Prepare and publish a guidebook about wildlife, their organs and raw materials, including identification guidelines for use by state inspectors for nature and environment, rangers, and officials of other stakeholder organizations. Prepare associated materials, such as posters, and photo albums.
18. Proposals should be developed to add additional Mongolian species to the CITES convention appendices.
19. Based on the Administrative Law's chapter 7, article 42, police department and state inspectors for trade inspection should be involved in the wildlife trade activities.
20. Conduct campaign to confiscate wildlife, their organs, raw materials and products that are found for sale in the markets, through cooperation with State Inspection Agency and Police department.
21. Submit a *State Inspectors Official Requirement* to the administration of markets where wildlife trade is occurring; to demand control of and cessation of wildlife trade in the market.

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### **Discussion and Conclusions**

WCS staff and students from the Ecology Knowledge club designed a survey of wildlife trade in Ulaanbaatar markets and implemented the survey from December 2007 through to the end of February 2008. The survey teams completed a total of 160 surveys in markets, shops, restaurants hospitals, and through the investigation of newspaper and other advertisements. The survey revealed trade in 51 species of wildlife and fish, including two species listed in CITES Appendix I, seven species listed in CITES Appendix II, 12 species registered in the Mongolian Red Book; six species classified as endangered, and eight species classified as rare according the Mongolian Law on Fauna. Trade included horns, skins, meat, organs, and other raw materials. The majority of recorded trade is considered to be illegal according the laws of Mongolia.

The data was recorded in a MS Excel spreadsheet to create a simple database of wildlife trade; one of the recommendations of the Silent Steppe Report was to create such a wildlife trade database and the one created for this survey can be considered a pilot database for this purpose. Excel has proved to be sufficient to process and analyze the data for these surveys, however, for future surveys and to record enforcement activities a database program such as MS Access should be used. Further refinement of the survey methods is required to gather more precise price data, and the estimation and recording of quantities can be improved. More detail should be recorded under the observations field of the survey database, and photographs should be catalogued and stored as part of the database. The results of enforcement can be included in the same database.

Analysis of the survey data revealed several trends that can inform future enforcement activities. Emeelt emerged as the major raw materials market where trade in wildlife was occurring; primarily trade is in skins, especially wolf, for export to China. Tsaiz is mainly a subsidiary market of Emeelt. There is significant seasonality in the trade, and variability in price according to the season; this seasonality is due to both winter being the primary hunting (and fishing) season, and that certain border points open in January. The seasonal opening of certain border points for cross-border trade is a significant factor in facilitating smuggling of wildlife to China. Demand for furs from China can be considered a major driver of wildlife trade. The Choibalsan survey highlights the fact that much of the trade in wildlife raw materials goes directly from regional centers to China, and not through Ulaanbaatar.

The main domestic wildlife trade is in parts and products for medicinal use, and significant quantities of fish for consumption. Bayanzurkh has been shown to be the major domestic market for trade in wildlife parts and products for medicinal use. Hospital surveys also revealed the huge popularity of wildlife parts and products as medicine for a wide range of ailments; species were discovered here that were not seen in the market surveys, suggesting that patients and their families can obtain these medicines from other sources such as relatives in the countryside. Medicinal use of wildlife parts appears to be a growing phenomenon in Ulaanbaatar. Trade driven by demand from China for furs is creating a by-product of wildlife meat and parts, especially wolf and marmot, to feed this trend for wildlife medicines and so called 'health food'.

The restaurant survey showed that the use of mammalian wildlife meat in Ulaanbaatar restaurants is minimal, and presumably well hidden if it is occurring at all. The survey

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

does highlight the widespread availability of fish, notably Khovsgol whitefish, and one has to question the capacity of Mongolia's freshwater lakes and rivers to sustain such demand. The shop survey revealed considerable wildlife trade, both for tourist souvenirs, and furs for domestic fashions. Several CITES listed species were found to be traded, and even snow leopard furs were for sale. Through the survey activities it was also discovered that both newspaper and television advertisements play a significant role in facilitating trade in wildlife, parts and products.

Joint patrols and surveys with enforcement officials have led greater co-operation between WCS and enforcement agencies, especially with J. Badamkhand of the Municipal State Inspection Agency, and to inter-agency co-operation with the Inspection and Monitoring Unit 805 of the General Police of Mongolia. The 15 joint patrols, or 'ride-alongs' resulted in 228 items being confiscated, 14 warnings were issued, and 8 fines imposed. These enforcement activities give us a greater understanding of the enforcement process and the laws under which enforcement can be carried out. It was possible to confiscate items of wildlife, and issue warnings or impose fines, primarily because the traders did not have certificates of origin for the wildlife.

Newspaper and television advertising, and the retail souvenir shops can be considered soft targets for enforcement activities, where rapid results can be gained, and publicity can be generated from closing down these markets. J. Badamkhand was able to stop two newspapers from advertising wildlife; and a similar approach can be taken with the souvenir shops.

Enforcement activities also highlighted that protocols need to be developed to deal with the confiscation, rehabilitation, and release of live wildlife; and that agencies need storage facilities for confiscated wildlife parts. What happens to confiscated wildlife once it is transferred to the Special Commission for Re-selling for Income for the State is as yet unclear, and is an area that WCS needs to investigate further. Both J. Badamkhand, and Kh. Badam made recommendations for future actions on wildlife trade enforcement that support the recommendations made in the Silent Steppe report.

# WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

## Appendix 1 – Survey Questions

### **Representative Markets (Raw Materials and Food Markets)**

**When:** Twenty-four visits over three months from December to February

**Who:** *Raw Materials Markets:* Two students at each of the two Markets

*Food Markets:* One student at each of the three food markets, or alternatively three students will jointly survey the three markets

Student teams will be rotated to reduce the risk of them being identified by traders

**Where:** *Raw Materials Markets:* Emeelt and Tsaiz

*Food Markets:* Narantuul, Bayanzurkh and Mercury

### **Questions:**

*1. How many vendors sell wildlife in each market?*

Each, month, estimate how many of the traders are buying or selling wildlife commodities at the market. At the raw materials markets it is considered that all traders are probably dealing in wildlife commodities; however the same survey format is to be used for both the raw materials and food markets, where the percentage of stalls selling wildlife may differ.

*2. What kinds of animals are available for sale in each market?*

On each visit, students will record what wildlife species are for sale (presence/absence).

*3. How much do different animals cost in the market?*

On each visit, students will pose as buyers to target a number of booths, vendors or advertisers to inquire about price of wildlife commodities.

*4. How frequently is wildlife sold in the market?*

Students will survey each market twice a week for three months. On each visit students will record what wildlife species are for sale (presence/absence). Analysis of the survey will show trends in the number of days wildlife is sold, and number of booths selling wildlife.

*5. How much of each type of wildlife is available for sale?*

On each visit, students will estimate or quantify the number of animals, or parts thereof, that are offered for sale; in addition, on each visit students may pose as buyers and target a number of booths, vendors or advertisers to inquire about the quantity of wildlife commodities available.

The following questions were not considered in the WCS Lao PDR wildlife trade surveys, but have been added here to provide more information about the wildlife trade supply chain.

*6. What is the condition of the wildlife? e.g., whole, skin, parts, raw or processed product.*

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

During surveys students will record the condition of the wildlife commodity or product.

### *7. Where does the wildlife originate?*

When posing as buyers, students will inquire about the origin of the wildlife commodity for sale. In addition, it may be possible to infer the origin by the location of the market, registration of traders' vehicles, or by species distribution.

### *8. What kind of trade is occurring?*

Students will record their observations on the type of trade, for example raw materials for export or domestic processing, or retail direct to domestic consumers.

### *9. Is trade open or hidden?*

Students will record whether wildlife was openly traded or hidden (e.g., whether they had to pose as buyers to inquire about certain wildlife commodities).

### *10. What enforcement activity was observed during the market surveys?*

Students will record how many enforcement officers, and which agencies, were present at the market on each visit, and note any observed activity.

### *11. What else can we learn about wildlife trade, supply chain, and enforcement?*

Students will record additional observations and information about wildlife trade.

### *12. What kind of enforcement activities are occurring?*

During the market survey, students will also note any enforcement activity. If significant quantities of wildlife are detected during the survey, students will inform the project leader, who will make a decision on whether to report the matter to the authorities. If wildlife trade is reported, the actions taken will be recorded.

The survey form for twice-weekly surveys includes the following data fields.

Data is recorded by species:

Wildlife species type, product or part thereof available

- Condition of the wildlife (whole, product, part)
- Processed or raw

Quantity of booths, entity, or individuals selling this wildlife commodity

- Total number of traders interviewed

Quantity of commodity, product or part

Buying and/or selling price

Origin of wildlife

Type of trade (e.g., export, consumer, processor)

- For export, domestic processing, or domestic retail
- Seasonal or year round trade

Any other observations or information

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

Additional baseline information will be collected on a monthly basis, in order to monitor any seasonal variation in activity at the markets:

Number of traders

Number and type of traders' vehicles (for raw materials markets)

Number of enforcement officers on duty

### Restaurant Survey

**When:** Complete a patrol 12 times over the 3 months (December, 2007 and January, February, 2008): i.e., once per week the team will visit four restaurants

**Who:** Two students together

**Where:** Stratified sample of Chinese, Korean, Mongolian, and European restaurants. One of each category each week.

### Questions:

*1. How many restaurants in Ulaanbaatar sell wildlife?*

The student team leader will request data from each city district on the number of restaurants registered in that district. It will then be possible to use survey sample results to estimate the percentage of restaurants that sell wildlife.

*2. What kinds of animals are available for sale in the restaurant?*

During each random visit record the presence/absence of animals on the menu, or for sale if asked.

*3. How much do different animals cost in the restaurant?*

On the random visit, ask and record the price of animals available on the menu or available when asked.

*4. How frequently are different types of wildlife sold in the restaurant?*

Students will record if the wildlife is a regular menu item, and will ask if it is available at that time, or whether the wildlife items are only available on request.

The survey form for restaurants includes the following data fields:

Type of restaurant e.g. Chinese, Korean, Mongolian, European

Name of the menu items that include wildlife

Type of wildlife or its parts or organs that are used in the dish

Price of the wildlife dish

Origin of the wildlife if possible

Additional wildlife dishes available on request

- Price of specialty wildlife dishes available on request

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### Hospital Survey

**When:** Complete a survey of each hospital every ten days: totally 9 times within 3 months, once in a week (December, 2007 and January, February, 2008 )

**Who:** Two medical students will interview patients, nurses and doctors at the selected hospitals.

**Where:** Ulaanbaatar's Trauma hospital and Burns Centre

#### Questions:

*1. How many locations sell medicinal wildlife products or parts?*

Student team leader will collect information on the number of locations suspected of supplying medicinal wildlife products or parts. Analysis of all surveys of food markets and hospitals will corroborate this.

*2. What kind of animal's products or parts are used as medicine, and what is it used to treat?*

Students will ask patients, doctors and nurses about which kind of animal parts or products are being used, and what they are used to treat.

*3. How much do different medicinal wildlife products or parts cost?*

Student interviews with patients, doctors and nurses.

*4. Where do wildlife products or parts that are used for medicine originate from, and where are they purchased?*

Student interviews with patients, doctors and nurses.

*5. How frequently are different types of medicinal wildlife products and parts sold?*

Student interviews with patients, doctors and nurses, ask and assess how common is the use of medicines derived from wildlife.

The survey form for Hospital Surveys includes the following data fields:

Name of Hospital

Number of vendors selling medicinal wildlife parts at this location

Wildlife species, part or product,

- Condition e.g. dried, fresh, slated, processed

Quantity available for sale

Availability: common or rare / whole year or seasonal

Price of medicinal wildlife product or parts for sale

Origin of the wildlife,

- Where was it purchased?
- Where did the wildlife originate?

What treatment the wildlife product or parts are used for?

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

Any additional information or observations, especially with regard to identifying illegal trade networks.

### Shop Survey

During the survey design process, it was decided to extend the restaurant survey to include souvenir shops and department stores that may be selling souvenirs or other wildlife derived products such as furs.

**When:** Complete a patrol 12 times over the 3 months i.e. once per week (December, 2007 and January, February, 2008)

Once per week, two shops

**Who:** Two students together

**Where:** Souvenir shops, Department stores, Art and Craft shops, Tourist shops

### Questions:

*1. What kinds of wildlife products are available for sale in shops?*

During each random visit record the presence / absence of animals or animal products (e.g. furs) on display, or for sale if asked.

*2. How much do different animal products cost in the shops?*

On the random visit, ask & record the price of animals, and animal products (e.g. furs) available on the display

The survey form for shops includes the following data fields:

Name and type of shop

Products that include wildlife

Quantity of product available

Price of the wildlife product

Type of wildlife or its parts or fur that are used in the product

Origin if possible (some items may be imported)

Seasonal or year round availability

Type of buyer, i.e. tourist souvenir product or item for local Mongolian consumption

### Enforcement and 'ride-along' Surveys

*1. What enforcement activities are undertaken by the Authorities?*

General observations will be made by students during scheduled survey patrols. WCS Project staff, and the student team leader will make joint patrols with Municipal State Inspection Agency on an ad hoc basis: a patrol report will be made, and record made of any actions taken. Suspected cases will be reported to the Municipal State Inspection Agency, a record of actions taken will be made.

## **WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

### *2. What actions are taken when suspected Wildlife Trade infringements are reported?*

The WCS project team will report any serious cases detected during the survey. A record of the incident will be created, and actions taken will be recorded and followed up.

### *3. How effective are enforcement activities, and what opportunities are being missed?*

Analysis and discussion of survey results should reveal what opportunities are being missed. WCS will contract a local Wildlife Crime Expert, Mr. Kh. Badam, to analyze preliminary survey results (see TOR) in order to determine the legal status of detected wildlife trade, and identify missed opportunities.

Crime or Incident Reports will record the following information:

What wildlife was detected and reported?

Who made the report?

How was the crime detected?

Who was the incident reported to?

Who were the suspects or offenders?

What section of the Wildlife Protection Legislation was infringed?

Evidence recorded or confiscated.

Actions taken (e.g., fine, arrest, confiscation)

Reactions or other observations.

How was the wildlife parts or product disposed of?

The patrol report for each joint patrol will record the following:

Location name (market, restaurant, airport);

Date of patrol (day, month, and year)

Time start of patrol to site

Time finish of patrol

Person completing the form

Persons participating in the patrol

Wildlife observed (yes / no)

Wildlife confiscated (yes / no)

Actions taken

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### Appendix II: Legal Status of Detected Wildlife Species

#### Mammals

Species name		CITES		Mongolian Law		Mongolian Red List of Fishes	Mongolian Red book
		Appendix I	Appendix II	Law on Fauna	Hunting Law	Regional Status	
Snow leopard	<i>Uncia uncia</i>	+		Very rare	Very Rare	Endangered	Rare
Argali	<i>Ovis ammon</i>		+	Rare	Rare	Endangered	Rare
Siberian Ibex	<i>Capra sibirica</i>			Rare	Rare	Near threatened	Rare
Beech marten	<i>Martes foina</i>			Rare	Rare	Data deficient	
Eurasian Lynx	<i>Lynx lynx</i>		+	Rare	Rare	Near threatened	
Brown bear	<i>Ursos arctos</i>		+	Rare		Data deficient	
Red deer	<i>Cervus elaphus</i>		+	Rare	Rare	Critically endangered	
Sable	<i>Martes zibellina</i>					Vulnerable	
Wild boar	<i>Sus scrofa</i>			Rare	Rare	Near threatened	Rare
Siberian roe deer	<i>Capreolus pygargus</i>					Least concern	
Eurasian red squirrel	<i>Sciurus vulgaris</i>					Near threatened	
Siberian musk deer	<i>Moschus moschiferus</i>		+	Very rare	Very Rare	Endangered	Very rare
Grey wolf	<i>Canis lupus</i>		+			Near threatened	
Pallas' cat	<i>Otocolobus manul</i>		+			Near threatened	
Saiga antelope	<i>Saiga tatarica</i>		+	Very Rare	Very Rare	Endangered	Very Rare
Black tailed gazelle	<i>Gazella subgutturosa</i>			Rare	Rare	Vulnerable	Rare
Red fox	<i>Vulpes vulpes</i>					Near threatened	
Corsac fox	<i>Vulpes corsac</i>					Near threatened	
Altai marmot	<i>Marmota baibacina</i>					Data deficient	
Siberian marmot	<i>Marmota sibirica</i>					Endangered	
Steppe polecat	<i>Mustela eversmanni</i>					Least concern	
Eurasian badger	<i>Meles meles</i>					Least concern	
Mongolian gazelle	<i>Procapra gutturosa</i>					Endangered	
Wolverine	<i>Gulo gulo</i>					Least concern	
Ground squirrel sp.	<i>Spermophilus alashanicus</i>			Rare	Rare	Endangered	Rare

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

	<i>Spermophilus dauricus</i>					Data deficient	
	<i>Spermophilus erythrogenys</i>					Least concern	
	<i>Spermophilus undulatus</i>					Least concern	
Tolai hare	<i>Lepus tolai</i>					Least concern	
Eurasian otter	<i>Lutra lutra</i>			Very Rare	Very Rare	Data deficient	Very Rare
Beaver	<i>Castor fiber</i>			Very Rare	Very Rare	Endangered	Rare
Muskrat	<i>Ondatra zibethicus</i>					Not listed	
Bat sp.						14 species listed; least concern or data deficient	

**WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank**

**Fish**

Detected Wildlife Species name		CITES		Mongolian Law		Mongolian Red List of Fishes	Mongolian Red book
		Appendix I	Appendix II	Regional Status	Hunting Law		
Taimen	<i>Hucho taimen</i>			Rare		Endangered	
Whitefish sp.	<i>Coregonus pidshian</i>					Endangered	
	<i>Coregonus chadary</i>					Data deficient	
	<i>Coregonus autumnalis migratorius</i>					Date deficient	Rare
Peled whitefish (introduced)	<i>Coregonus peled</i>					Not applicable	
Osman sp.	<i>Oreoleuciscus angusticephalus</i>					Vulnerable	
	<i>Oreoleuciscus humilis</i>					Vulnerable	
	<i>Oreoleuciscus potanini</i>					Least concern	
Perch	<i>Perca fluviatilis</i>					Least concern	
Carp sp.	<i>Cyprinus rubrofuscus</i>					Not applicable	
	<i>Carassius gibelio</i>					Least concern	
	<i>Carassius carassius</i>					Not applicable	
Lenok	<i>Brachymystax lenok</i>					Vulnerable	
Grayling	<i>Thymallus arcticus</i>					Near threatened	
	<i>Thymallus brevirostris</i>					Vulnerable	
	<i>Thymallus grubei</i>					Endangered	
	<i>Thymallus nigrescens</i>					Endangered	
Burbot	<i>Lota lota</i>					Data deficient	
Pike sp.	<i>Esox reichertii</i>					Least concern	
	<i>Esox lucius</i>					Least concern	
East Asian catfish	<i>Silurus asotus</i>					Least concern	

## WCS 2008 Ulaanbaatar Wildlife Trade Survey: Report to the World Bank

### Birds

Detected Wildlife		CITES		Mongolian Law		Mongolian Red List of Birds	Mongolian Red book
Species name		Appendix I	Appendix II	Law on Fauna	Hunting Law	Regional Status	
Altai snowcock	<i>Tetraogallus altaicus</i>			Listed		In preparation	Rare, endemic
Willow Ptarmigan	<i>Lagopus lagopus</i>					In preparation	
Owl sp.						In preparation	
Cinereous Vulture	<i>Aegypius monachus</i>					In preparation	
Eagle sp.						In preparation	
Daurian Partridge	<i>Perdix daurica</i>					In preparation	
Black billed Magpie	<i>Pica pica</i>					In preparation	
Dalmatian pelican	<i>Pelecanus crispus</i>					In preparation	Rare, globally threatened

#### Notes:

1. Mammal species status is taken from the Mongolian Red List of Mammals, Clark et al. 2006, and with reference to the Mongolian Law on Fauna (2000), Mongolian Law on Hunting (1995), and the Mongolian Red Book 1987 and 1997 (Shagdarsuren et al., 1987; Shiirevdamba et al., 1997)
2. Fish species status from the Mongolian Red List of Fishes, Ocock et al., 2006.
3. Some species observed in the surveys were not identified to species level, highlighting the need for training of survey teams and enforcement staff in species identification, particularly small mammals, and fish species