

# ILLEGAL WILDLIFE TRADE IN THE LOWLAND DONG NAI RIVER WATERSHED FOREST, SOUTHERN VIETNAM



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**WILDLIFE CONSERVATION SOCIETY**

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# Illegal wildlife trade in the Lowland Dong Nai River Watershed Forest, Southern Vietnam

Wildlife Conservation Society  
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## Introduction

The Lowland Dong Nai River Watershed Forest is a high-priority conservation corridor in the South of Vietnam. The Lowland Dong Nai River Watershed Forest extends into four provinces (Dong Nai, Lam Dong, Binh Phuoc and Dak Lak), covers an area of 8,328km<sup>2</sup>, and contains a number of important forest types including lowland tropical evergreen, semi-evergreen and riverine forest as well as freshwater wetlands. Many threatened and endangered species remain with this area including the yellow-cheeked crested gibbon (*Nomascus gabriellae*), black-shanked douc (*Pygathrix nigripes*), Asian elephant (*Elephas maximus*), lesser one-horned rhinoceros (*Rhinoceros sundaicus annamiticus*), gaur (*Bos gaurus*), Siamese crocodile (*Crocodylus siamensis*), orange-necked partridge (*Arborophila davidi*), and crested argus (*Rheinardia ocellata*).

Trade in wildlife threatens almost all terrestrial vertebrate species in Vietnam, driving some species to the verge of extinction, and currently operates in an uncontrolled, criminal and unsustainable manner. An increasing domestic and international demand for wildlife products, combined with the country's recent shift to market-oriented economic policies has provided ideal conditions for the rapid growth of the illegal wildlife trade in Vietnam.

The Vietnam Forest Protection Department (FPD) leads the development of the protected area system and with their staff of forest rangers, and is responsible for the enforcement of forest and wildlife legislation. Although a small number of Provincial FPDs are beginning to tackle the wildlife trade more seriously (e.g. provincial action plans and wildlife trade working groups), the majority FPD rangers lack the knowledge, skills and motivation to conduct investigations and develop enforcement strategies that target this illicit trade.

Only some sparse data on the wildlife trade from southern Vietnam are available. No work to date has targeted the illegal and unsustainable trade in threatened species in this area, and little has focused on wildlife trade in Southern Vietnam in general. Although the work already carried out by NGOs and the FPD has made some progress towards the control of the illegal wildlife trade, field data and recommendations are rarely translated into action, and the illegal wildlife trade continues largely unabated.

A project was initiated in late 2007 with the vision to direct training, research and strategic planning for improved protection of the yellow-cheeked crested gibbon and other protected species in Lam Dong and Dong Nai provinces of the Lowland Dong Nai Watershed Forest in southern Vietnam. Through training of local FPD and close involvement throughout the duration of the project the project hoped to affect positive changes in the conservation of these species. The objectives to this project were as follows:

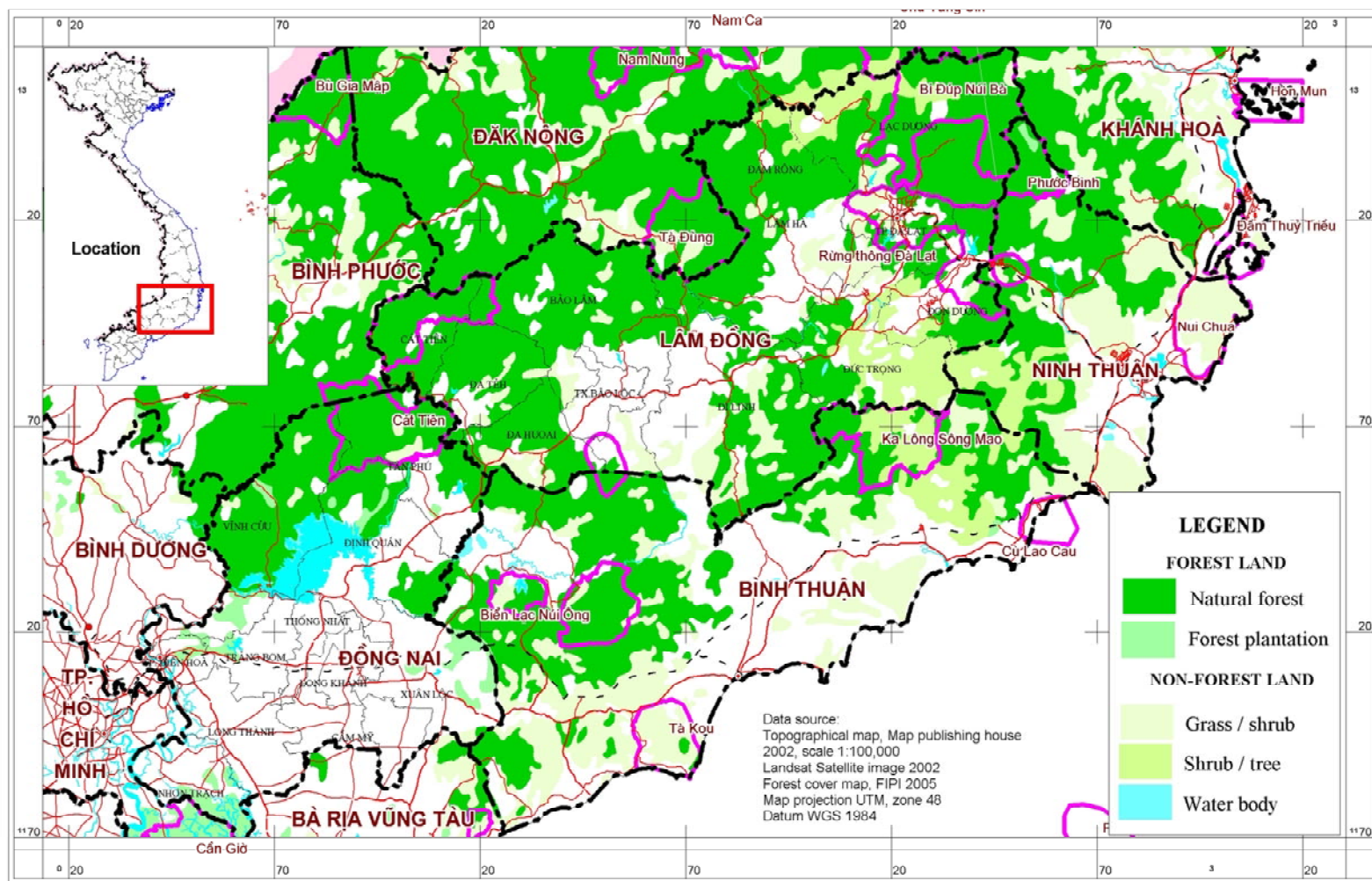
- To assess the level of threat that the wildlife trade poses to globally-threatened species in Lam Dong and Dong Nai province;

- To increase knowledge on the scale and organization of the illegal wildlife trade in the Lowland Dong Nai Watershed forest;
- To improve the skills, knowledge and motivation of FPD rangers from Lam Dong and Dong Nai provinces in wildlife trade investigations and enforcement, to reduce the illegal trade of the yellow-cheeked crested gibbon and other species;
- To improve strategies to reduce the illegal trade of globally-threatened species in the Lowland Dong Nai Watershed forest.

This report presents the findings of the studies carried out in the two provinces in 2007 and 2008 to achieve the first three objectives. The final objective will be met through an inter-agency meeting to be held in early 2009. The report is split into the following four sections:

1. Surveys into the illegal wildlife trade operating in Lam Dong and Dong Nai provinces, Vietnam
2. An Analysis of Lam Dong Forest Protection Department Records on wildlife trade management in 2007
3. The illegal trade in Gibbon in the Lowland Dong Nai Watershed Forest, Southern Vietnam
4. A rapid survey into the trade and consumption of Tiger (*Panthera tigris corbetti*) and Elephant (*Elephas maximus*) in Da Lat City, Lam Dong Province, Vietnam, with observations in some other districts.





**Figure 1: Map of Lam Dong and Dong Nai province showing land cover, protected areas, district and provincial boundaries and major roads.**

# Surveys into the illegal wildlife trade operating in Lam Dong and Dong Nai provinces, Vietnam

December 2008

Compiled by Scott Robertson  
Wildlife Conservation Society – Vietnam Wildlife Trade Program

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## Introduction

The Forest Protection Department (FPD) is one of the lead agencies responsible for controlling the illegal trade in wildlife in Vietnam. At present, the FPD rarely carries out surveys into the illegal wildlife trade, relying primarily upon informant tips and patrols as means to initiate cases. Furthermore, wildlife crimes are considered by many FPD's across the country as a lesser priority to other violations they encounter, and therefore wildlife crime often continues unabated.

Increasing the capacity to investigate wildlife crimes and the FPD's understanding of the wildlife trade dynamic is required to build commitment and strengthen enforcement of Vietnam's wildlife trade laws. This chapter introduces an approach that aimed to achieve this objective and provide key baseline data on the wildlife trade dynamic operating across Lam Dong and Don Nai provinces, Vietnam.

## Methods

From November 22<sup>nd</sup> to December 4<sup>th</sup> 2007, WCS Vietnam organized a training program aimed at providing Vietnamese Forest Protection Department rangers with the skills to plan and implement effective surveys into the illegal wildlife trade. For more detailed of this training program please refer to the WCS training report and training resource CD-ROM.

Trainees were from all district Forest Protection Departments of Lam Dong province, Dong Nai province and the mobile unit of the 3rd Regional Office for Forest Protection of the National Forest Protection Department. Trainees were selected from district mobile groups, field stations and investigation departments and included heads of these units in addition to general forest rangers.

### *FPD ranger selection for surveys*

Following a short field practice survey in Ho Chi Minh City, all trainees were assessed with a written examination in addition to an appraisal of their overall performance in the training program by the facilitators and trainers. Trainees were then ranked and the top 20 rangers selected to carry out investigations in Lam Dong and Dong Nai province.

Background checks were carried out on all selected FPD rangers. This involved each ranger providing a full record of their history in both provinces (i.e. time spent in each district for education, living with family, visiting friends, working etc). This would ensure

that FPD rangers were not placed in areas for undercover surveys where they would be recognised as FPD rangers which would not only compromise the data reliability but present risks to their safety, so we aim to avoid this.

#### *Methodology development*

Trainees were guided through a participatory group exercise by WCS facilitators aimed at identifying the priority information needs for their wildlife trade investigations in Lam Dong and Dong Nai provinces. Rangers were split into groups each tasked with producing a set of minimum data needs for a different section of the wildlife trade dynamic from supply to demand (i.e. hunting in Vietnam, wildlife farms, international import, transport, wildlife traders/middlemen, wild meat restaurants, pet shops, traditional medicine pharmacies etc). Each group then reported back their results in plenary for comments and additions. This allowed us to compile an 'information framework' that would guide data collection for the ranger investigations across the whole trade dynamic (Appendix 1).

This participatory approach to investigation development was designed so that rangers would be more likely to collect the broad range of information needed as they are guided through the process of what are the priority information needs for conservation, enforcement and policy improvement.

#### *Investigation approach*

FPD Rangers were taken through a number of exercises to develop their individual cover stories they would use in these undercover investigations that allowed input not only from the WCS facilitators but also from their colleagues also carrying out investigations.

#### *Survey team and locations*

The selected FPD rangers were each assigned a district and were tasked with carrying out a wildlife trade investigation for 10 days. A team of two WCS staff travelled through the two provinces during the 10 days carrying out daily communications with all 20 rangers providing support and guidance. During this time the WCS team also carried out more focussed urban wildlife trade surveys in Da Lat city, Bao Loc town and Bien Hoa city. This totalled over 200 day's survey effort across the two provinces in December 2007.

#### *Information management*

Data from interviews and observations was stored in specially designed 'District case files' which contained a number of sections designed to ensure all the information the FPD rangers collected was captured. These files included the following sections:

- 1) Detailed daily activity diary: The diary was for future readers of the case book to understand the flow of the investigations. It was also intended to help structure time management and allow monitoring of the rangers work.
- 2) Encounter reports: For every encounter where information was collected (meeting, conversation, observation etc), a separate encounter report was completed to record what information was gathered.
- 3) Wildlife trader profiles: These profiles were designed to capture information on wildlife traders (e.g. modus operandi, species traded, etc). They were designed in previous wildlife trade surveys in central Vietnam by the WCS coordinator and replicated here to ensure common data fields for enforcement databases currently under construction at a national level. These profiles will also help bring attention to particularly important wildlife traders.

4) Vehicle lists: This is for recording detailed information on vehicles used in the illegal wildlife trade. This sheet will be used to look for similarities between the districts and provinces to help identify links not uncovered in the investigations

These detailed records are maintained in the provincial FPD's in Dong Nai and Lam Dong and also at the WCS office in Hanoi.

#### *Information collection and reliability*

Rangers were assigned districts to survey with which they had little or no previous association, to avoid them being recognised as forest rangers and thus compromising the research. We understood that even with these measures, rangers would vary in their reliability but we justify the decision to use forest rangers as 1) they were collecting basic data (i.e. if the restaurant offered wild meat and what species were offered), and 2) this is the law enforcement group charged with implementing controls over the illegal wild meat trade in Vietnam and we believe that increasing national capacity and commitment to this task should be present in all research and activities associated with this issue.

Following the 10 day investigations, the FPD rangers were all separately debriefed by the WCS facilitators back in Ho Chi Minh City. This process was designed to provide a better understanding to the reliability of the information they collected (through cross-questioning and understanding how they dealt with situations they faced and their perceived success/failure of their cover story) and also to help identify which rangers enjoyed the investigations and had a good understanding to the broader issues of wildlife crime that would make them important in the follow-up investigations and strategy meetings.

#### **Results**

These results provide a summary of the surveyors' results highlighting any interesting or important points, but for the detail please refer to the encounter reports held at provincial FPD in Lam Dong and Dong Nai provinces. It is important to note that unless specified the information collected is based upon reports from sources interviewed during surveys. We present the findings here by province.



## Lam Dong Province

### Commercial hunting

The focus of data collection in these surveys was mainly at the wholesale trade and retail parts of the trade dynamic. Information on commercial hunting was collected through discussions of suppliers of wildlife with wholesale traders and retailers. In addition, a small number of hunters were interviewed directly. Therefore, it is not complete, but provides an insight to commercial hunting operating in the province

Overall, the surveys highlight that illegal hunting is still prevalent across Lam Dong province. The surveys found professional hunters in operation in all forested areas with sources in Cat Tien and Da Teh districts reporting that at least 175 professional hunters were active in those two districts alone.

Commercial hunters from Lam Dong mainly reported to hunt in local forest areas including protected areas such as Bi Doup-Nui Ba and Cat Tien National Parks. However, Dak Lak and Dak Nong provinces were also reported as hunting destinations by hunters in Don Duong, Dam Rong, and Lam Ha districts. Hunters in Don Duong also reported to hunt in Ninh Thuan province whilst Cat Tien hunters also sourced wildlife from forests in Binh Phuoc province. No hunters reported travelling to Cambodia or other countries to hunt wildlife.

Hunters interviewed reported a range of hunting equipment used in Lam Dong province including hand-made shotguns, R16 guns, cabin guns, and cross-bows loaded with poison arrows. However, the most common hunting method reported was home-made cable snare trap that can be set to target a wide range of species.

A source in Kado Commune, Don Duong district provided information on 4-6 member hunting group he was a part of. He stated that they would check cable snare traps after 3-5 days and could collect 15-40kg wildlife from Pine forests in Ninh Thuan each time. In Dam Rong one hunter reported his group took 5-10 day trips laying around 100 cable snare traps. He highlighted that unlike authorities they hunt through the night, holidays and weekends.

There were no reports or indications that commercial hunters had relationships with authorities that allowed them evade enforcement.

### Import

Dak Lak and Dak Nong provinces were the most reported sources of wildlife imported into the province by wholesale traders and retailers in Lam Dong. However, sources also reported wildlife to be imported from Binh Thuan (Bao lam, Da Lat), Dong Nai (Lam Ha). The Truc Mai wildlife trading family (Da Huoai) were the only report of wildlife imported from Cambodia. The major wholesale trader Tu Loan in Da Lat city reported buying wildlife from family members in Nghe An province and showed surveyors two Rhino horns she said had come from Africa (bought 4.8kg, now roughly 1kg remaining, sells for 40 million VND/100g) and Myanmar.

### **Commercial wildlife farms**

Twelve households were identified in the surveys as commercial farming wildlife or holding bears for gall bladder bile extraction. A commercial wildlife farm in this survey was defined as a household or company breeding wildlife with the expressed intention of selling it for profit. It does not include households holding wildlife as pets or for visitors to view.

The most common species farmed was Southeast Asian porcupines (5 households), followed by Asian Black Bear (3 households), Wild pig (2 households), with only one household farming Sika and Reticulated Python. Seven of these households openly admitted to illegally buying their farm stock with only one stating they bought from another farm.

The information collected in these surveys did not clarify the output from these farms, but the prevalence of hunting in the area and also reports that farm stock is from the wild, indicate that they are not providing a substantial quantity.

### **The illegal transport of wildlife**

Overall, the surveys revealed that illegal transport of wildlife is carried in a relatively simple manner mainly utilising motorbikes, buses, and trucks. The regular bus services from Dak Lak province (National Road 27) and Dak Nong (National Road 28) emerged as important means of transporting wildlife being imported from those provinces.

As in other provinces, wildlife was reported to be hidden amongst other products (e.g. vegetables) and one trader explained that they regularly changed the number plates of their truck to reduce the likelihood of being recognised by authorities. The surveys indicated that whilst hunters were more likely to transport their wildlife; wholesale traders and retailers would hire other people to make the illegal transport to reduce risk of them being caught.

The surveys did not collect detailed information on exact routes taken by wildlife transports in the province. However, the national highways 20, 27, and 28 were the most frequently reported by sources. There are a number of locations in Lam Dong where these highways intersect, where a road-check may be effective e.g. Lien Nghia/Hiep Thanh, Duc Trong and Di Linh town.

There was no common time for wildlife transports with traders, hunters and retailers reporting deliveries in the morning, afternoon and evening. Two wholesale traders reported that they transport wildlife at times when authorities are changing shifts to reduce risk of interception.

### **Wholesale wildlife traders**

Surveys identified 39 people operating as wholesale wildlife traders (i.e. people buying wildlife from sources and selling to other wholesalers/retailers). Almost half of these traders (20/39) reported to sell wildlife at a national level (i.e. to provinces outside of Lam Dong), whilst others reported selling within the province (14/37) or within the district (5/37) (Table 1). No traders reported selling to other countries.

The most commonly reported selling destination outside of Lam Dong province was Ho Chi Minh City with 100% of national level traders reporting to sell wildlife to locations in

the city. This was closely followed by Dong Nai province (15/18 national traders), whilst the remaining locations were Binh Phuoc (5/18). Binh Duong (2/18) and Ba Ria -Vung Tau (1/18).

Table 1: The reported trading scale of wholesale wildlife traders in districts of Lam Dong province during from surveys in December 2007.

District	Within District	Within province	National
Lam Ha			1
Da Lat			2
Da Huoi			2
Bao Lam	1	7	
Bao Loc		1	1
Cat Tien			4
Da Teh	1		5
Dam Rong		4	1
Di Linh			3
Don Duong	1		
Duc Trong	1		
Lac Duong	1	2	1
<b>Total</b>	<b>5</b>	<b>14</b>	<b>20</b>

Within Lam Dong province, Bao Loc town emerged as a major destination for wildlife. Fourteen of the 28 traders reporting selling destinations reported sales to Bao Loc. This was followed by Da Lat city (9/27). Other sale destinations included Duc Trong, Dam Rong, Lam Ha, Di Linh and Don Duong.

Only one trader limited their operations to a single taxa (Mr Loc, Da Huoi: Birds), all other traders traded in a variety of species for a variety of purposes. The most commonly reported trade purpose was for wild meat (15/19 reports) but traditional Vietnamese medicine and as live animals (possibly for pets/zoos/export) were also reported in Lam Dong.

Twenty wholesale traders provided estimates of the quantities of wildlife they sold. Five of these traders based their operations in a restaurant, so these figures are likely to include the quantity they sell to restaurant customers too. There is no way to verify these quantities and they are solely based upon the testimony of the actual traders to the surveyors. They may be under-estimating or exaggerating what they sell, so data should be used with caution.

Daily illegal trading amounts of these 20 traders ranged from 2 kg -150 kg of wildlife. Based on the trading figures provided by only these traders; they sell between 600 kg – 1200 kg of wildlife each day, which could reach a total of 33,600kg in a month for just these 20.

The average quantity traded each day by these 20 traders was 44 kg, which would equate to an average of 308kg/week. If the remaining 12 provincial and national traders (excluding district-level traders as they mainly sell to the provincial/national traders) follow this average trading amount it would mean that around 1,400kg wildlife are traded each day, totally 9,850 kg each week and 39,500 kg /month.

Twenty-nine wholesale traders provided information on the most common species they trade. It is important to recognise that this does not represent an exhaustive list of the species they trade; these are only the species they reported to the surveyors so it may not include those species considered sensitive to discuss openly (e.g. protected species like tiger etc).

The most commonly reported species traded was wild pig (25/29 traders) followed by sambar (20/29), civet (19/29), mouse deer (17/29), bamboo rat (13/29), Pangolin (12/29), Southeast Asian porcupine (11/29) and snakes (10/29). In addition wholesale traders reported dealing the following species (listed in order of % traders reporting it): Monitor lizard, muntjac, cobra, bear, macaque, tiger, gibbon, serow, python, elephant, wild cat, Oriental magpie robin, Myna, spotted dove, parakeet, wild cattle, Soft-shell turtle, Douc langur, hard-shell turtle, and rhino.

Only one trader (Chien-Nuong, Lam Ha District) reported being arrested, although this question was not asked to all interviewees. Eleven traders openly admitted to having a special relationship with government agencies that allows them to illegally trade wildlife.

Tu Loan (Da Lat) emerged as an important wholesale wildlife trader dealing in a wide variety of species and forming part of a trade network reportedly stretching from Africa, Myanmar to Vietnam. Tu loan owns a wild meat restaurant, zoo/farm and deals and processes wildlife for TCM and decorative purposes. She openly reported to surveyors her ability to buy strictly protected species including tiger, rhino, bear, gibbon and Langur on order, and surveyors observed many of the se products in her house (including Rhino horn, tiger canine, 30+ bear canines, dead Douc langurs, and Gibbon skins). Tu Loan's zoo located above Tuyen Lam lake is one location where she stores wildlife, but sources claimed she had another location too as this was open to public and FPD visit regularly.

### Wild meat restaurants

The surveys identified 55 restaurants serving wildlife in Lam Dong province. Every district was found to have wild meat restaurants ranging from 3-9 per district. The highest number was identified in Da Lat (9), Bao Lam (7) and Lac Duong (7); whilst Don Duong, Duc Trong and Da Huoi had the least with three restaurants (Table 2).

Table 2: The number of restaurants reporting to serve wild meat in Lam Dong province from surveys conducted in December 2007.

District	No. restaurants
Tp. Đà Lạt	9
TX. Bảo Lộc	5
Bảo Lâm	7
Lạc Dương	7
Đam Rông	6
Đạ Tẻh	5
Lâm Hà	4
Di Linh	3
Đơn Dương	3
Đức Trọng	3
Đạ Huoai	3
<b>TOTAL</b>	<b>55</b>

Seventeen different taxa were reported to be sold as wild meat by the Lam Dong wild meat restaurants including 10 mammals, six reptiles, and one bird. The most commonly reported taxa were wild pig (reported by 33 restaurants), Sambar (19 restaurants), porcupine (18 restaurants), chevrotain (15 restaurants), civet (14 restaurants) and snake (10 restaurants). Other taxa reported included bamboo rat, pangolin, soft-shelled turtle, muntjac, cobra, pigeon, hard-shelled turtle, monitor lizard, python, wild cat, and macaque.

Twelve restaurant owners provided estimates on the quantity of wildlife they sold each day (Table 3). They reported quantities ranging from 2-100 kg, totalling from 285-307 kg/day for these 12 restaurants. Based on these reports the average quantity of wild meat sold by these restaurants would be between 23.8-25.6 kg/day, which could total 179.1 kg/week and 716.3kg/month per restaurant. If these averages are used to make a very rough estimate of wild meat consumption across the 55 restaurants identified the results are staggering. Based on minimum quantities reported across the province, around 1300kg of wild meat could be consumed daily, totally over 9000kg ever week and around 36,500 kg each month.

Table 3: The reported quantities of wild meat sold as reported by restaurant owners in Lam Dong province from surveys conducted in December 2007

Restaurant name	District	Quantity
Xuân Đức Restaurant	Bảo Lâm	100kg/day
Duy Khéo restaurant	Đam Rông	100kg/month
Hoa Viên restaurant	Đạ Tẻh	10kg/day
Cao Nguyên restaurant	Đạ Tẻh	10kg/day
Hiệu Restaurant	Đạ Tẻh	10kg/day
Đồng Văn restaurant	Di Linh	15 kg/day
Thảo Loan Restaurant	Bảo Lâm	50-70kg/day
Phương Lan restaurant	Đam Rông	50kg/month
Not recorded	Đức Trọng	5-7kg/day
Bia Hoi Restaurant	Đạ Tẻh	5kg/day
Huyền Trang restaurant	Đam Rông	60kg/day
Suối Hồng Restaurant	Đạ Huoai	Wild pig 300kg, Sambar 100kg

The majority of restaurant owners did not openly advertise wildlife; with 25/37 (68%) owners stating that they provide wildlife when asked by customers and 12/37 (32%) having wildlife on the menu. Most of these restaurants had wildlife on-site both live (five restaurants) and frozen (18 restaurants), with only four restaurants stating they kept wildlife off-site at another location.

Fifteen restaurant owners provided insight to the main customers of wildlife meat in their establishments. The most reported customers were government officials (reported by seven restaurants), followed by tourists (5 reports), businessmen (4 reports) and one report of drivers. Four restaurants openly reported having close relationships with authorities that facilitates their illegal business.



### **Traditional medicine pharmacists**

There are 99 registered TCM practitioners in Lam Dong province, located mainly in Da Lat (38), Bao Loc (21) and Duc Trong (15), but distributed in all districts. FPD Surveyors did not visit any of these retailers so we cannot confirm the proportion that sells wildlife products illegally. This is a clear opportunity for follow-up research in the province.

A number of wildlife traders reported to sell wildlife that is used for TCM including Tu Loan and Tran Xuan Toan (Da Lat). Mr Toan reported he had recently sold 40kg of elephant teeth to Ho Chi Minh City for TCM at \$20/kg.

### **Souvenir and decoration**

In Da Lat market there are five main shops selling wildlife products, although many other souvenir shops also sell these in smaller numbers. The main products sold here include Wild pig tusks, bear and cat claws, and bone-substitute canine teeth. However some shops also reported to sell a small number of skins (inc. Bear, Serow, and Macaque) and one had recently sold a Gibbon skin (Huy-Da Lat market).

Tourist sites in Lam Dong invariably sell wildlife products (e.g. canine teeth, ivory, claws and wild pig tusks) yet many of these appeared to be fakes. At Prenn waterfall site, surveyors observed a stuffed leopard cat, large cat claws, and a number of fake products including fake canine teeth, ivory, and tiger penis. The small souvenir shop at Prenn also sold TCM wildlife products including monkey bone balm, gall bladders, porcupine stomach, dried sambar tendons and a infant pangolin in ginseng ruou.

### **Private zoos**

Surveys identified two main private zoos in Lam Dong province: Tu Loan-Tuyen Lam lake and Dam Br'i, yet there were also small collections in Madagoui (crocodiles and one python) and Prenn water fall (two leopard cats, one stump-tailed macaque, one long-tailed macaque, one Sun bear and a dozen or more crocodiles).

Surveyors could not gain access to the zoo at Dam Br'i as it was under renovation but sources reported the following species were held there: Civets, Asian golden cat, Asian black bear, gibbon, macaque, elephant, Sambar, peafowl, python and crocodile. The source of these animals was reported by a manager of the area to be from wildlife farms, hunters and traders living locally.

The zoo owned by Tu loan located above Tuyen Lam Lake has the largest and most diverse collection of wildlife. The keeper at the zoo told surveyors that anything could be bought from the zoo, and that the zoo is a storage location for wildlife before being sold to restaurants in town. The zoo has cages on public show but behind the building they also have some cages off-show for new animals and also an area for preparing bone balm. A full inventory was carried of the zoo in December 2007 and September 2008 by surveyors and we were provided with the FPD's report from April 2008 (Table 4). A simple comparison of these reports clearly shows that the collection is not stable and animals are moving in and out regularly.

Table 4: Full inventory of Tu loans zoo on Tuyem Lam lake carried out by WCS, FPD and Hanoi University in 2007 and 2008

Species	11 December 2007 (SR)	April 2008 (FPD)	September 2008 (VNT/TXV)
Slow Loris	0	1	0
Stump-tailed macaque	5	5	6
Pig-tailed macaque	2	5	2
Infant macaque ( <i>M. mullata?</i> )	2	2	0
Southeast Asian Porcupine	3	10	4
Brush-tailed porcupine	1	1	2
Sun Bear (*inc baby inside)	4*	4	4
Asian black bear	2	2	0
Yellow-throated marten	1	1	1
Masked palm civet	5	1	0
Common palm civet	1	0	1
Binturong	1	1	1
Spotted linsang	0	1	0
Small-toothed palm civet	0	1	0
Leopard cat	5	3	0
Asian Golden Cat (*inc one inside)	3*	2	0
Leopard	1	1	1
Wild pig	4	6	3
Sambar	13	13	9
Muntjac	2	4	2
Banteng	1	1	1
Serow	0	1	0
Siamese crocodile	10	10	12
Burmese python	1	0	0
Manouria Impressa	1	0	7
Indotestudo elongata	1	27	0
Box turtle sp.	0	0	1
Oriental Pied Hornbill	1	2	1
Crested Serpent Eagle	2	1	0
Painted Stork	1	0	0
Peafowl	5	5	4
Siamese fireback	0	4	0
Red Jungle fowl	0	2	0
Black kite/Osprey	0	1	3

### Wildlife selling prices

All reported buying and selling prices collected throughout the surveys are available in the Annex at the very back of this report. Price information collected in this sort of survey is strongly affected by the surveyor's ability to negotiate prices. Therefore, these figures should be treated with some caution. We have presented the average selling prices below for species where we had more than three reports (Table 5).

These figures highlight that restaurant owners selling wild meat and wholesale wildlife traders are making a very high profit illegally trade wildlife. As this is illegal and therefore not recorded, all of this profit is not included in Personal Income tax payments.

Table 5: The average selling prices (VND/kg) reported to Vietnamese surveyors in Lam Dong province December 2007. NB: USD1:16500 at time of survey.

Species	Wholesale trader	Restaurant
Bamboo rat	n/a	196,000
Civet	154,000	271,000
Cobra	633,000	496,000
Mouse-deer	121,000	149,000
Pangolin	1,540,000	1,429,000
Porcupine	189,000	244,000
Sambar	152,000	165,000
Snake	n/a	315,000
Wild pig	107,000	164,000

## **Dong Nai Province**

### **Commercial hunting**

The surveys highlighted that illegal hunting is still prevalent in certain districts of Dong Nai province. Vinh Cuu, Dinh Quan and Tan Phu emerged as the main source districts of wildlife with the majority (43/52 reports) of wildlife wholesale traders and retailers reporting these districts as the source of their wildlife. Only nine commercial hunters were interviewed from Dong Nai province but these reported to hunt in Cat Tien National Park and Vinh Cuu Nature Reserve. Two hunters from Xuan Loc also reported to travel to Binh Thuan province to hunt wildlife. No hunters reported travelling to Cambodia or other countries to hunt wildlife.

Hunters interviewed reported a range of hunting equipment used in Dong Nai province including guns, net traps, and snap traps. However, the most common hunting method reported was home-made cable snare trap that can be set to target a wide range of species.

There were no reports or indications that commercial hunters had relationships with authorities that allowed them evade enforcement. One hunting group reported to have been arrested once already, yet they have continued to hunt.

### **Import**

Binh Thuan province was the most reported source of wildlife imported into the province by wholesale traders and retailers in Dong Nai (nine reports). However, sources also reported wildlife to be imported from Lam Dong (five reports), Ho Chi Minh City (four reports), Binh Duong, Binh Phuoc and Tay Ninh (two reports each).

Wildlife farm owners reported importing farm stock from other farms in Dong Thap, Ha Tinh, Tay Ninh and Ho Chi Minh City.

### **Commercial wildlife farms**

Surveys identified 54 commercial wildlife farms holding 11 different taxa in Dong Nai province. Taxa included (listed as most common first): Crocodile, sambar, porcupine, bear, wild pig, sika deer, monitor lizard, Soft-shelled turtle, macaque, water dragon and scorpion. A detailed inventory is provided in the Appendix of this report including population size and location of the species and farms.

Although for most of these farms it was unclear if all or some of the stock was of wild origin or bought from another farm, 14 farm owners openly admitted to having stock of wild origin, and an additional three were unclear but suggested they had bought from wild sources.

Data collection from farm owners was generally incomplete. For example, the selling destinations were only collected from a seven farms but two of these were trading internationally (Nafovanny and Le Ky Phung) and four others at national scale (i.e. Ho Sau, Pham Trong Dai, Lau Nhut Sang, and Duong Thi Nha). The operations of the Nafovanny Macaque farm are poorly understood, but there are reports from other provinces and sources within Dong Nai that they are regularly buying wild macaques from locations in Vietnam as well as Cambodia.

In-depth discussions with a restaurant owner in Bien Hoa City revealed interesting insights to the potential for wildlife farms as a substitute for wild populations. The source reported that his customers want wild-caught animals and not farmed ones. He stated that farmed civets and wild pig are fattier than wild-caught individuals and their price is cheaper for that reason. However, despite their lower price, he still chooses to purchase wild-caught stock as much as possible to meet the customer demand.

### **Illegal transport of wildlife**

As in Lam Dong province, the surveys revealed the illegal transport of wildlife is carried in a relatively simple manner on motorbikes, buses, and occasionally trucks. Surveyors collected registration numbers from hunters and wholesale traders that are listed in an appendix at the back.

Surveys indicated that the main source areas are in the north of the province (i.e. Vinh Cuu, Tan Phu and Dinh Quan); therefore it is likely that the roads coming from those areas (e.g. National highway 20, Provincial Road 767, 763, 765) may be effective areas for road-checks.

The Quoc Cuong company car (7-seater) based in Phuong Lam, Tan Phu district was reported by two different wholesale traders to be available to hire to transport wildlife to HCMC. In addition, the wholesale trader Mrs Ho Phu (Xuan Loc) offers transport of wildlife using either her 4-seater car or truck. Many wholesale traders also reported that they hire motorbike drivers to transport wildlife and will almost never travel with the wildlife.

### **Wholesale wildlife traders**

Surveys identified 28 people operating as wholesale wildlife traders (i.e. buying wildlife from sources and selling to other wholesalers/retailers). These wholesale traders were found in only five of the ten surveyed districts (No traders were identified in Thong Nhat, Long Thanh, Long Khanh, Tp. Bien Hoa, or Nhon Trach). This certainly does not mean they do not operate in those districts, simply that they were not uncovered during these surveys. Furthermore, there is often ambiguity in distinguishing commercial wildlife farms and wholesale traders. Farm owners have been found in previous surveys to operate as wholesale traders, whilst maintaining the appearance of a legitimate, often registered wildlife farm. Future surveys should target the numerous wildlife farms in Dong Nai province to further investigate this possibility.

Almost half of these traders (13/28) reported to sell wildlife at a national level (i.e. to provinces outside of Dong Nai), whilst others reported selling within the province (3/28) or within the district (4/28). Eight traders did not provide details on where they sold wildlife to. One trader in Tan Phu claimed to be part of a network that sells snakes to China, but apart from that there were no further references to sales to other countries.

The most commonly reported selling destination outside of Dong Nai province was Ho Chi Minh City with 12/13 national level traders reporting to sell wildlife to locations in the city. This was followed by only Lam Dong province, reported by only 4/13 national traders. One trader in Xuan Loc claims to have recently sold wildlife to northern provinces but did not provide details on which province.



Surveyors did not collect any information on the quantity of wildlife traded by these wholesale traders. The most commonly reported species traded was chevrotain (13/18 reporting traders) followed by civet (10/18), snakes (8/18) and cobra (8/8). In addition wholesale traders reported dealing the following species (listed in order of % traders reporting it): Monitor lizard, jungle fowl, wild pig, southeast Asian porcupine, macaque, sambar, bamboo rat, langur, pangolin, muntjac, bear, gibbon, tokay, python, Oriental magpie robin, Myna, Laughing thrush and Soft-shelled turtle.

One trader of particular interest is Mr Tran Kim Dong (Vinh Cuu) who is a former vice-captain of the Vinh Cuu district police) department, but now is a full-time wholesale wildlife trader. Local traders reported to surveyors that they sold to him as he had protection given his past employment.

### Wild meat restaurants

Surveys identified 81 restaurants selling wild meat in Dong Nai province ranging from 1-17 in a district with an average of 8 per district. The highest densities of wild meat restaurants identified were in Bien Hoa city (17 restaurants), Long Khanh town (14 restaurants) and Dinh Quan district (11 restaurants) (Table 6).

Table 6: The number of restaurants reporting to serve wild meat in Dong Nai province from surveys conducted in December 2007.

District	No.
TP. Biên Hòa	17
TX. Long Khánh	14
Định Quán	11
Xuân Lộc	8
Vĩnh Cửu	8
Tân Phú	7
Long Thành	6
Trảng Bom	5
Thống Nhất	4
Nhơn Trạch	1
<b>TOTAL</b>	<b>81</b>

Thirty different taxa were reported to be sold as wild meat by the Dong Nai wild meat restaurants including 11 mammals, nine reptiles, and eight birds and one scorpion. The most commonly reported taxa were wild pig (reported by 54 restaurants), porcupine (35 restaurants), snake (33 restaurants), Sambar (26 restaurants), chevrotain (24 restaurants), and civet (20 restaurants). Other taxa reported included the following (in decreasing order of number of reports): Chinese water dragon, squirrel, bamboo rat, soft-shelled turtle, wild hare, jungle fowl, cobra, pigeon, hard-shelled turtle, water rail, pangolin, monitor lizard, Chinese francolin, douc langur, le le (unknown bird species), small lizard sp., bats, scorpion, cuckoo, copperhead racer, rainbow water snake, and falcon.

Data was collected from only one restaurant (Hoang Restaurant, Tp. Bien Hoa) on daily consumption quantities which totalled 40kg/day (estimated for snake, soft-shelled turtle, civet, porcupine, wild pig, hard-shelled turtle, and wild hare). If we assume that the average daily wild meat selling quantity reported in Lam Dong province (23.8-25.6kg) is valid for Dong Nai province, then consumption levels in these 81 restaurants could reach

2,074 kg/day, 14,500/week and over 58,000 kg/month. One restaurant owner claimed that the supply does not meet the demand for his customers, and a recent trend for eating wild meat at weddings has boosted his sales. However, at a recent wedding he had to substitute civet with some dogs as he couldn't buy enough from local traders.

Eight restaurants openly advertised the sale of wild meat (either on menu/sign) with most of others offering wildlife either when directly asked or when the staff present what dishes they have available. At least thirteen restaurants were found to be keeping wildlife on site, though others may also do this but surveyors did not have the opportunity to confirm this.

Twelve restaurant owners provided information on who are their main customers buying wild meat. Ten of these restaurant owners reported that local officials were their main customer. The only others reported were local businessmen, drivers and rich people.

Many restaurant owners explained that as officials were common customers, they rarely had a problem with law enforcement. In addition, one restaurant owner in Dinh Quan was the former vice-captain of the Dinh Quan Police dept and one owner in Xuan Loc was reported to be in a local military leader.

#### **Traditional medicine pharmacists**

Surveys only visited four locations selling wildlife for Traditional medicine purposes. Three of these were in Dinh Quan town, the other in Long Khanh town. These pharmacies sold the following products: Macaque and Serow Bone balm, Pangolin scales, dried tokay lizard, snake skin, cobra, bear bile and various Rice wine with wildlife steeped in it. There are undoubtedly more than four in the province and similar to Lam Dong, we recommend further surveys into this market.

#### **Pet Shops**

Only one pet shop was identified during the survey; a pet bird shop in Xuan Loc district selling myna (nhông), laughing thrush (khướu), white-rumped shama (chích choè), and chim ri.

#### **Souvenir and decoration shops**

No shops selling wildlife products as souvenirs or decoration (e.g. skins, teeth, and claws) were identified during the surveys

#### **Private zoos**

The private zoo trade in Dong Nai province is complex as there are a number of wildlife farms that also operate as a zoo, allowing paying visitors to enter and see the animals (e.g. in Long Thanh and Trang Bom districts). These surveys collected only very basic information at these locations and require further research to reliably evaluate their role in the wildlife trade. Given the extent of wildlife farms in the province it is likely they play a significant role in the wildlife trade dynamic.

There is an interesting collection of animals in Bien Hoa city (Address) including a number of South American bird species (Scarlet macaws, African grey parrots and Toucans). The zoo also holds two yellow-cheeked gibbons, a Burmese python, Siamese fireback, imperial pheasant, and two Sun Bears and two Asian black bears.

### Wildlife prices

All reported buying and selling prices collected throughout the surveys are available in the annex at the very back of this report. Price information collected in this sort of survey is strongly affected by the surveyor's ability to negotiate prices. Therefore, these figures should be treated with some caution. We have presented the average selling prices below for species where we had more than three reports (Table 7).

These figures highlight that restaurant owners selling wild meat and wholesale wildlife traders are making a very high profit illegally trade wildlife. As this is illegal and therefore not recorded, all of this profit is not included in Personal Income tax payments.

Table 7: The average selling prices (VND/kg) reported to Vietnamese surveyors in Lam Dong province December 2007. NB: USD1:16500 at time of survey.

Species	Unit of sale	Wholesale trader	Restaurant	Wildlife farm
Civet	Meat (kg)	310,000	326,250	
Cobra	Meat (kg)		558,000	
Crocodile	Meat (kg)			90,000
Dui	Meat (kg)		230,000	
Monitor Lizard	Meat (kg)	245,000		
Mouse-deer	Meat (kg)	112,000	210,000	
Porcupine	Breeding pair			8,800,000
Porcupine	Meat (kg)		327,000	
Sambar	Velvet (kg)			5,188,000
Sambar	Breeding indiv.			12,000,000
Sambar	Meat (kg)		193,000	
Sika Deer	Velvet (kg)			7,400,000
Snake	Meat (kg)	215,000		
Squirrel	Meat (kg)		37,000	
Wild chicken	Meat (kg)	83,000		
Wild pig	Meat (kg)		180,000	

## Discussion

These surveys are vulnerable to criticism and there are certainly weaknesses and drawbacks of our approach using local FPD rangers as surveyors. However, these weaknesses do not eclipse the fact that there are numerous criminal and administrative violations of wildlife protection and management occurring across both provinces at a large-scale. Surveys collected information on the following serious violations:

- Illegal hunting in protected areas in both provinces including the use of guns
- Illegal cross-province transport of wildlife
- Illegal international import of wildlife
- Illegally sourced wildlife farm stock
- 67 illegal wholesale wildlife traders selling Group IB and IIB (Decree 32/2006/ND-CP) species in massive quantities (including tiger, rhino, bear, elephant, gibbon, Douc langur, wild cats, Southern serow and king cobra)
- Illegal sale of protected/unprotected but illegally sourced wildlife in at least 136 restaurants across both provinces, consuming massive quantities (Lam Dong province: 36,500kg/month)

These surveys uncovered what is perhaps a major obstacle in law enforcement efforts to control the illegal trade, that being leniency of local law enforcement agencies and government offices. Many restaurants illegally serving wild meat reported government officers and even law enforcement officers as main customers and in some districts restaurants owners and wholesale traders had previously worked in local enforcement agencies or had close family working there. Many sources claimed to have ‘connections’ or to ‘know someone’ in local enforcement or government agencies that provides them protection from law enforcement.

There were sources interviewed during the surveys who claimed to have stopped illegally trading wildlife following arrest and seizure. However, there is also the contradictory situation where wholesale traders, retailers and commercial hunters claimed to surveyors that enforcement is strong but they then go onto detailing their continued illegal activities.

A large proportion of traders and retailers reported diminishing local stocks of wildlife species, and hence the import from and hunting in neighbouring provinces. One restaurant owner claimed that even common, fast-breeding species like wild pig are becoming rare in the forest. The provincial government is not only losing millions of VND in not issuing fines for these crimes and lost tax revenue, but very soon they will lose one of the most valuable assets this unique area has – its wildlife.

**Appendix 1: Wildlife trade survey information frameworks developed during participatory exercise with FPD rangers in December 2007.**

**The Supply of wildlife**

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**Commercial hunting:**

- Where are the professional hunters (villages, communes) (in groups or indiv)
- Methods of hunting (trap types, guns etc)
- Where do hunters buy hunting tools/materials? (or do they make them?)
- Hunting seasons (the best season for different species)
- Selling prices and destinations
- Hunting areas (protected areas?)
- Frequency of hunting trips
- Time of hunting trips (e.g. day/night, holidays)
- Species and quantities (kg/indv)
- Relationships with authorities to hunt

**Import:**

- What provinces and countries is wildlife imported from?
- Species, quantities and prices (kg/indv)
- Storage locations
- Is it for re-export or Vietnamese consumers?

**Commercial wildlife farms:**

- Type of farm (private, organization, government)
- Address and contact details
- Species & quantities (kg/indv)
- Sources of species in the farm
- Indication of animals from the wild
- Buying/selling price from hunters and to traders

**From above sources of animals, what is proportion of each source to the demand?**

**Linking Supply to demand**

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**Means of transport:**

- Manual or Vehicle (car, motor bike, bus, taxi, power board, board, train etc)
- Does the means of transport change with different species?
- Number plate and vehicle details
- Is the driver hired or the owner of the wildlife?
- Methods of hiding animals during transport
- How do traders/transporters know the inspection of enforcement officer on the road

**Transport routes:**

- Highways, roads (commune, district, province), paths, rivers, streams, stations, train lines
- Important junctions, routes (i.e. where would a road block be most effective?)
- How do they evade police and FPD road blocks?
- Times of transportation (day/night, holidays)



### **Wildlife traders**

We want to know an accurate and reliable number of how many wildlife traders in every district of Lam Dong and Dong Nai

- Name, address, contact info etc
- Main species traded, quantities, prices (kg/indv)
- Trade scale (local, national, international)
- Organisation and details as per wildlife trader profile
- Buying locations
- Selling destinations (details of export out of province)
- Relationships with authorities (ever arrested, indication of corruption)
- Storage locations

### **The demand for wildlife**

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#### **1) *Wild meat restaurants***

\*\* We want to know exactly how many restaurants serve wild meat out of the ones you visit in the district town.

- Address, owner name
- Big or small restaurant
- Species and quantity per month (including seasonal differences)
- Is wildlife on the menu, on order, or advertised on signs (including wildlife-based rice wine)
- Source of animals (hunting, import from outside of province, trader, wildlife farms)
- If from farm do they have papers to show legality?
- Storage of animals (Do they keep live animals or dead animals in their restaurant or order and get delivered as they need it?)
- Consumers (Age, gender, occupation, income)
- Buying and selling price and method of calculating
- Relationships with authorities

#### **2) *Traditional medicine pharmacists***

\*\* We want to know exactly how many pharmacists sell wildlife products out of the ones you visit in the district town.

- Address, owner name, contact details
- Species and quantity per month (including what part of the animal and products)
- Processing techniques
- Species use in medicine
- Source of animals (hunting, import from outside of province, trader, wildlife farms)
- If from farm do they have papers to show legality?
- Storage of wildlife (Do they keep live animals or dead animals or order and get delivered as they need it?)
- Consumers (Age, gender, occupation, income)
- Buying and selling price and method of calculating
- Relationships with authorities

#### **3) *Souvenir and decoration***

\*\* We want to know exactly how many shops sell wildlife souvenirs and skins in the district you're surveying

- Address, owner name etc
- Species and quantity per month (including what part of the animal and products)
- How do they know if its fake product or not?
- Source of animals (hunting, import from outside of province, trader, wildlife farms)
- If from farm do they have papers to show legality?
- Storage of wildlife (Do they keep live animals or dead animals or order and get delivered as they need it?)
- Consumers (Age, gender, occupation, income)
- Domestic market or for export
- Buying and selling price and method of calculating
- Relationships with authorities

#### **4) Pet shops**

**\*\*We want to know exactly how many pet shops in the district you're surveying**

- Address, owner name, etc
- Species and quantity per month (mortality rate?)
- Source of animals (hunting, import from outside of province, trader, wildlife farms)
- If from farm do they have papers to show legality?
- Storage of wildlife (Do they keep live animals or dead animals or order and get delivered as they need it?)
- Consumers (Age, gender, occupation, income)
- Domestic market or for export
- Buying and selling price and method of calculating
- Relationships with authorities

#### **5) Private zoos**

**\*\*We want to know exactly how many private zoos in the district you're surveying**

- Address, owner name, etc
- Species and quantity,
- Source of animals (hunting, import from outside of province/country, trader, wildlife farms)
- If from farm do they have papers to show legality?
- Do they sell animals or just for visitor to look at animals
- Relationships with authorities

#### **Law enforcement issues**

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- Do people in the illegal wildlife trade framework have relationships with law enforcement or government officials to help them break the law?
- Is there an indication that people involved in the wildlife trade been fined many times but as the fines are low it doesn't stop them from continuing involvement?
- Are people making or provide fake permits for trading/transporting wildlife etc
- Are people using permits multiple times?
- Are traders, hunters, or transporters using loopholes or ambiguities in the law to allow them to trade wildlife illegally
- Is there any indication that people are hired as they exempt from punishment (e.g. pregnant women, war heroes, children)

# **An Analysis of Lam Dong Forest Protection Department Records on Wildlife Trade Management in 2007**

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## **Introduction**

Lam Dong and Dong Nai province are located in South of Vietnam, in close proximity to Ho Chi Minh City (HCMC). There remains relatively good forest cover and populations of many species of wildlife in these provinces, which gives rise to a thriving illegal trade for wildlife products. Wildlife trade in both Lam Dong and Dong Nai provinces has been poorly studied in the past with only short surveys carried out in some locations as part of wider, national studies on tiger trade (Nguyen Xuan Dang *et al.* 1999) and elephant trade (TRAFFIC 2000).

In 2007/08 WCS alongside Forest Protection Department rangers and Hanoi National University staff implemented a series of wildlife trade surveys in both provinces hoping to increase our understanding of the wildlife trade operating in this area to provide the data foundations for effective interventions.

Provincial Forest Protection Departments (FPD) maintain detailed records on the illegal trade in wildlife, timber and other forest products within their reports from the settlement of administrative violations. From case initiation through to fining/punishment the FPD collects information on what crime is being committed, who is committing it, their methods and the evidence involved, and the punishment issued. Additionally, permits issued for inter-provincial transport of protected species, hunting, and applications for registration of facilities holding captive wildlife (e.g. commercial wildlife farms and zoos) are also stored. Analysis of these data would provide a broader understanding of wildlife trade management in the area and also an indication of wildlife trade enforcement effectiveness.

## **Methods**

Lam Dong province was selected as the case study for this review. Ideally, we would have also surveyed Dong Nai province but their data was unavailable for review. The primary investigator (PI) first visited the Provincial FPD and reviewed the annual reports for the year 2007. Following this the PI determined which of the 12 districts and two mobile units in Lam Dong province to visit and collect more detailed data.

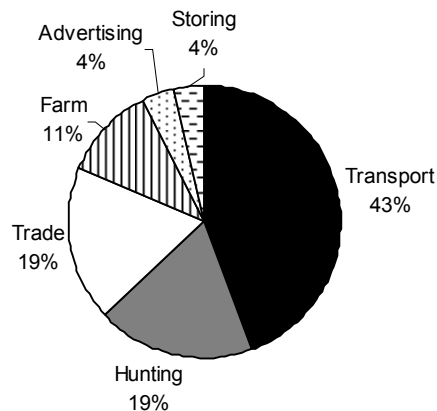
The PI visited the following eight districts in Lam Dong province: Bao Lam, Lam Ha, Lac Duong, Don Duong, Da Teh, Di Linh, Dam Rong, Da Lat as well one mobile unit based in Madaguoi town, Da Teh district. At each district FPD data were extracted from transport permits, wildlife farm registration, and from case files on administrative violations. Data were inputted into an excel spreadsheet for analysis. The PI also cross-checked data with annual reports submitted to national and provincial FPD. No hunting permits were issued by Lam Dong FPD in this time period.

### Administrative violations of forest protection and management

In 2007 Lam Dong FPD dealt with 2,819 administrative violations of the Forest Protection and Management Law, of which there were 27 cases (1%) involving violations of wildlife management and protection (Table 1a,b). The most commonly recorded type of violation was the transport and trade of forest products with 995 cases across the province. Four of the 12 districts (36%) and one of two Mobile Units had no cases of violations of wildlife management and protection in 2007. Three districts (Lam Ha, Lac Duong and Don Duong) had only 1 case and Dam Rong district had the most cases (n=8).

The most common violation of wildlife protection and management in 2007 was illegal transport of wildlife which accounted for 12 of the 27 cases (43%). This was followed by illegal hunting (19%) and illegal trade of wildlife (19%). Other violations included illegally storing, farming, and advertising wildlife or wildlife products (Figure 1).

Figure 1: Violation types of wildlife protection and management in Lam Dong Province 2007



### Demographics of people violating wildlife protection laws

There were 44 persons arrested across all 27 cases comprising 38 males (86%) and six females (14%). The age of the violators ranged from 17 years (Born in 1990) to 60 yrs (Born in 1947) with an average age of 31yrs old.

There are 40 ethnic groups in Lam Dong. Only five of these ethnicities were represented as violators of wildlife crimes in 2007. Kinh people represented the biggest group of violators (55%), followed by people of H'Mong ethnicity (36%). C'ho, Gia Lai and Cil ethnic groups together accounted for only 9% of violators (Figure 2).

Table 1a: Administrative violations of forest protection and management in Lam Dong province, 2007 (collected from Province FPD 2007 final paper-report)

Province	Illegal exploitation of the forest	Illegal exploitation of forest products	Violating regulations on forest fire control	Illegal transport and trade of forest products	Illegal encroachment of the forests	Other violations	Violations of regulations on wildlife management and protection	Violation on forest products processing	Total
Lam Dong	679	512	23	995	437	118	27	28	2819

Table 1b: Administrative violations of forest protection and management in Lam Dong province, 2007 (collected from Province FPD's PC database)

District	Illegal exploitation of the forest	Illegal exploitation of forest products	Violating regulations on forest fire control	Illegal transport and trade of forest products	Illegal encroachment of the forests	Other violations	Violations of regulations on wildlife management and protection	Total
Bao Lam	20	12	1	126	24	15	2	200
Cat Tien	3	8	1	68	0	4	0	84
Bao Loc	1	7	0	93	2	7	0	110
Lam Ha	70	26	5	84	16	9	1	211
Lac Duong	41	3	0	39	20	5	1	109
Don Duong	17	18	1	57	52	15	1	161
Da Huoi	15	7	0	36	22	0	0	80
Mobile Unit 2	0	0	0	37	0	2	3	42
Duc Trong	0	1	0	2	0	0	0	3
Da The	0	0	0	0	0	0	2	2
Di Linh	0	0	0	0	0	0	5	5
Dam Rong	0	0	0	0	0	0	8	8
Da Lat	0	0	0	0	0	0	4	4
Mobile Unit 1	0	0	0	0	0	0	0	0
Total	167	82	8	542	136	57	27	1019

NB: The above table highlights the discrepancy between the data inputted into the database at a provincial level and the hard-copy reports submitted by districts to the province. This explains the zero values for five of the above districts. Wildlife crimes are consistent in both, so it does not affect our analysis.

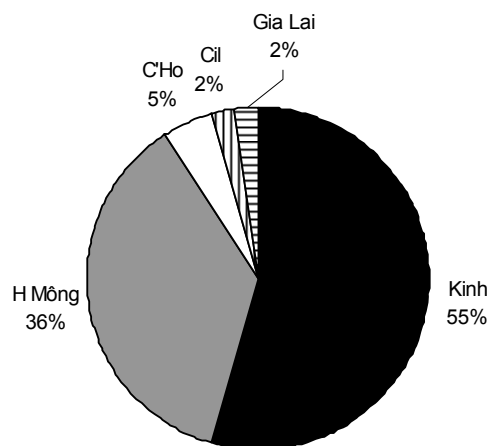


Figure 2: Ethnic groups found violating wildlife protection and management laws in Lam Dong province 2007

In terms of the violators' occupation, the majority was farmers (59%) or their occupation was not recorded (30%). The remaining people included two traders, a businessman, a veterinary officer and a High school student.

The majority of violators were from Lam Dong province accounting for 55% of the violators (24/44 people). However, 17 violators were from Dak Nong province and two person were from Dong Nai province and one person was from Quang Ngai province. There were no cases of repeat violations within these data.

The only means of transport recorded was motorbike. No other means of transport were recorded in 2007, although the means of transportation for 21/44 violators was recorded.

#### Fines and punishments

The total received fines for violations of wildlife protection and management was 37,580,000VND. The level of fines per violator ranged from 100,000 VND to 3,560,000 VND, with an average of 916,585 VND. The level of fines per case ranged from 300,000 VND to 7,000,000 VND, with an average of 1,565,833VND.

There was only one case where FPD did not receive the fine money issued which was Bon Nieng Ha Manh, who illegally transported 17kg of wild pig meat and 30 animal traps, he produced a letter from his commune showing he was from a registered poor family, and so they did not collect the fine. Two cases did not show any fines and were likely resolved by the animal owners volunteering the animals. No cases were transferred to police for criminal violation proceedings in 2007.

#### Confiscated wildlife

Twenty six of the 27 cases resulted in the confiscation of wildlife. There were 19 different taxa recorded in confiscations from these 26 cases in 2007 (Table 2). In general recording of seizures was unstandardised which limits analysis here. In some cases only weight was recorded others only number of individuals and in some both.

Only 11 taxa were recorded to species level others were recorded in more generic groups e.g. civet, muntjac, bird. Seized species included those in the IUCN Red list (e.g. Asian Black Bear, Great hornbill), Vietnam Red Book (e.g. Asian Black Bear). These results

indicate that mammals represent the largest proportion of seizures in terms of number and weight followed by birds and reptiles.

**Table 2: Taxa confiscated in wildlife crime cases in Lam Dong province, 2007.**

<b>Vietnamese</b>	<b>English</b>	<b>Kg</b>	<b>No</b>
Khỉ đuôi dài	Long-tailed macaque	13	5
Khỉ đuôi lợn	Pig-tailed macaque	9	2
Khỉ mặt đỏ	Stump-tailed macaque	6	1
Gấu ngựa	Asian Black Bear	16	1
Cầy hương/Chồn	Civet sp.	12.2	
Cheo cheo	Mouse-deer	24.8	
Hoẵng	Muntjac	30	
Nai	Sambar	83	
Heo rừng	Eurasian Wild pig	100	
Dúi	Bamboo Rat		2
Nhím	SE Asian porcupine	0.8	
Sóc	Squirrel		2
Rắn hổ ngựa	Cobra sp.	2	1
Kỳ nhông	Eastern butterfly Lizard		4
Rắn ráo	Indochinese rat snake	4	
Rắn	Snake sp.	7	
Hồng hoàng đất	Great hornbill		3
Gà rừng	Junglefowl	2.5	
Chim	Bird sp.	0.3	2

There was very little difference in the number of cases transporting dead versus live wildlife (13:12). All four cases where reptiles were confiscated involved live animals, yet for mammals it was split 11 cases of live animals, seven of dead animals. The three cases involving birds had two with live birds, one with a dead bird.

Following seizure, the most common placement in cases with confiscated wildlife was destruction or release, both being the outcome in 10 cases, dead wildlife was sold in five of the cases, and the case involving the Asian Black bear saw the bear transferred to a rescue Centre in Cat Tien National Park.

Seven cases involved the confiscation of illegal hunting equipment. The most common type of hunting equipment confiscated was bicycle brake cable for snare traps (n=113), yet the FPD also seized snap traps (n=14), guns (n=2), gunpowder/bullets (n=7), snake cages (n=2) and hoe's for digging out animals (n=3).

#### **Registered captive wildlife holdings**

There are a total of 45 addresses registered as holding wildlife for commercial, tourism or study purposes in eight districts of Lam Dong province. Bao Loc district has the highest number of registered captive species (n=12), followed by Da Lat (n=9), Di Linh (n=6), Bao Lam (n=5) , Da The (n=4) and Da Huoi, Cat Tien and Duc Trong each had three. Dam Rong, Lam Ha, Di Linh and Don Duong FPD have no records of captive wild animals. There are 82% of these registered as private household farms, with the remaining 28% belonging to a company.

We believe the purpose of many of these facilities to be ambiguous and previous work has collected reports of some of these tourist/study facilities also trading in wildlife. For this reason we will consider them all together.

Only 50% of the records stated a registration date. It is unclear if this means these locations have yet to be registered. The earliest date was in 1999, and since there has been general trend of increasing numbers of species registered, peaking at 7 in 2006 and 2007 (Figure 3).

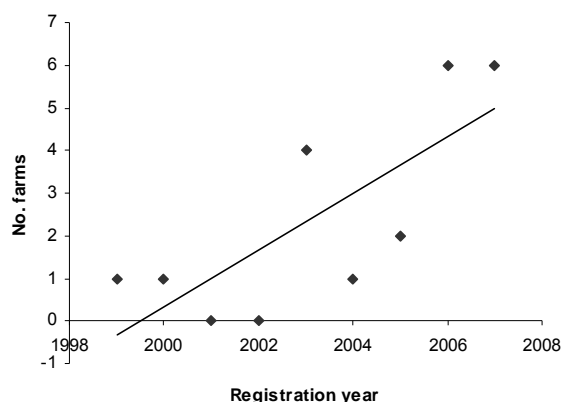


Figure 3: The frequency of captive wildlife registration in lam Dong province as of 2007

There is a total population of 3870 individuals of 51 species recorded in FPD records. The most common species is farmed is soft-shell turtle at 3150 individuals accounting for 81% of the total population, followed by Southeast Asian Porcupines at 263 individuals. Twenty two of the 51 species recorded are considered protected species under Decree 32/2006/ND-CP (14=IB; 8=IIB). In addition 14 of the species are considered globally-threatened in the IUCN Red list including one Critically Endangered, six Endangered, and seven Vulnerable species. At a national level, 18 of these species are considered nationally threatened in the Vietnam Red Book; including 02 Critically Endangered, 10 Endangered and 06 Vulnerable (Table 3).

The source of most animals is not provided in detail in the records of FPD with most owners stating they ‘bought’ the animals yet it is not made clear from where and from who (i.e. a registered farm, wholesale trader, or hunter). We can only assume that a large proportion of these facilities illegally purchased animals and have no paper trail showing a legal origin.

#### Transport permits and Hunting permits

There were no permits issued for the transport or hunting of wild animals in the year 2007 by Lam Dong FPD.

Table 3: List of species in wildlife farm in Lam Dong

Vietnamese Name	Latin name	Quantity	No. farms	VNRD	IUCN RL	Decree 32 group
Bà ba	<i>Trionyx steinacheri</i>	3150	2		EN	
Nhím	<i>Acanthion suberistatum</i>	263	24			
Heo rừng	<i>Sus scrofa</i>	119	3		LC	
Cá sấu	<i>Crocodylus siamensis</i>	69	2	EW	CR	IIB
Trĩ đỏ	<i>Phasianus colchius</i>	47	2			
Khi mặt đỏ	<i>Macaca arctoides</i>	30	4	VU	VU	IIB
Rùa núi vàng	<i>Indotestudo elongata</i>	27	1	EN	EN	IIB
Nai	<i>Cervus unicolor</i>	26	3		VU	
Hươu sao	<i>Cervus nippon</i>	21	7		LC	
Gấu ngựa	<i>Ursus thibetanus</i>	18	6	EN	VU	IB



Khi đuôi dài	<i>Macaca fascicularis</i>	18	2	LR	LC	IIB
Công	<i>Pavo muticus</i>	8	1	EN	VU	IB
Gấu chó	<i>Ursus malayanus</i>	8	5	EN	VU	IB
Cây mực	<i>Arctictis binturong</i>	6	1	EN	VU	IB
Mèo rừng	<i>Felis bengalensis</i>	6	2	EN		IB
Voi	<i>Elephas maximus</i>	6	4	EN	EN	IB
Báo lửa	<i>Felis temminckii</i>	4	2	VU	NT	IB
Gà lôi hồng tía	<i>Lophura diardi</i>	4	1	VU	LC	IB
Mễn(Hoẵng)	<i>Muntiacus muntjak</i>	4	1	EN	EN	IB
Vượn đen má hung	<i>Nomascus gabriellae</i>	4	2		LC	IIB
Cây hương	<i>Viverricula indica</i>	3	2	CR	LRnt	IIB
Trăn đất	<i>Python molurus</i>	3	3		LC	IIB
Cao cát b.trắng	<i>Anthracoceros albirostris</i>	2	1		LC	
Cây Vòi mốc	<i>Paguma larvata</i>	2	2		LC	
Gà rừng	<i>Gallus gallus</i>	2	1	LR	LC	IIB
Khi vàng	<i>Macaca mulatta</i>	2	1	CR	NT	IB
Báo hoa mai	<i>Panthera pardus</i>	1	1	EN	EN	IB
Bò rừng	<i>Bos banteng</i>	1	1	VU	LC	IIB
Cây gấm	<i>Prionodon pardicolor</i>	1	1	LR	LC	
Cây tai trắng	<i>Arctogalidia trivirgata</i>	1	1		LC	
Cây vàng	<i>Martes Flavigula</i>	1	1			
Chồn bạc má	<i>Melogale personata</i>	1	1	VU	EN	IB
Cu li lùn	<i>Nycticebus pigmaeus</i>	1	1		LC	
Đon(Suốt)	<i>Atherurus macrourus</i>	1	1	VU		
Gà sao	<i>Normal quine-Fowl</i>	1	1			
O'	<i>Aegypius calvus</i>	1	1		LC	
ó bông	<i>Spilornis cheela</i>	1	1		LC	
ó biển lôngchân	<i>Pandion haliaetus</i>	1	1	EN	VU	IB
Sơn dương	<i>Capricornis sumatraensis</i>	1	1			
Bướm cái vàng	<i>Enipc intermedia pollyra</i>		1			
Bướm cánh rộng	<i>Hypolintnua polinas</i>		1			
Bướm chanh di cư	<i>Catopsilia popala</i>		1			
Bướm giáp lớn	<i>Vinlala Eoote chersensis</i>		1			
Bướm hô đốm	<i>Pratlien aplen</i>		1			
Bướm hổ vằn	<i>Darians geatilia</i>		1			
Bướm hoa xanh	<i>Graphium saparlon</i>		1			
Bướm khế	<i>Attacus atlasliunacus</i>		1			
Bướm mắt đen	<i>Papilio helera</i>		1			
Bướm tấm gỏi	<i>Dilas descondesi</i>		1			
Bướm tấm lá mì	<i>Cytabia Pamia</i>		1			
Bướm xanh đuôi dài	<i>Arpena naenas doiddeday</i>		1			

## Discussion

With 27 cases of wildlife administrative fines in 2007, representing 1% of the total cases of forest crimes in the province is slightly lower than the national proportion in 2007 of 3.2% (1,241/39,693). Both figures are low and highlight the weak enforcement currently placed on wildlife protection and management in Lam Dong Province and Vietnam as a country.

FPD rangers explained to the author that wildlife violations occur at a small-scale involving small numbers of animals and thus are harder to encounter than timber violations which require large trucks for transport etc. They recognize the need for improved skills in investigation techniques to identify and apprehend suspects violating laws on wildlife protection and management.

In all cases of transporting wildlife by motorbike, the motorbike driver claimed they had been hired by a middleman/trader to transport the wildlife and that they did not own the wildlife themselves. In addition, all these cases involved wildlife being transported from locations in Lam Dong to destinations in Lam Dong. There were no cases of transport to or from other provinces or countries.

Despite a general consensus by many people that ethnic minority groups are responsible for the majority of the wildlife trade, the majority of cases involved Kinh people found violating wildlife laws. This may be related to the type of wildlife crime cases dealt with in Lam Dong mainly being transport and trade (accounting for over 60% of cases) with around 20% for hunting. It is fair to comment that many ethnic minority groups may not have the resources to transport and trade and are more commonly found as suppliers (i.e. hunters) of wildlife.

Almost half of the species found recorded in captivity in Lam Dong province are species protected by Decree 32/2006/ND-CP, and it is fair to say almost all sources of these animals is not clear. This presents a major problem in wildlife law enforcement as even if they were all confiscated it would be very difficult for the FPD to provide short-term holding of these animals or locate long-term placement for many of them. If the numbers of animal registered in captivity in the province continues to grow the FPD requires more effective methods of managing and enforcing these facilities.

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# The Illegal trade in Gibbon in the Lowland Dong Nai Watershed Forest, Southern Vietnam

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## Introduction

Vietnam is considered to be an important stronghold for gibbon diversity in the world, with at least three species of gibbon confirmed present (*Nomascus concolor*, *N. leucogenys*, and *N. gabriellae*), and a new black gibbon species (*N. nasutus*) recently recognized as a new species of the crested gibbon genus (*Nomascus*) (Geissmann et al., 2000; Nguyen, 2005).

Gibbons have long been considered an endangered and protected species by Vietnamese law. The earliest document is the Government decree number 39-CP (1963) on Temporary regulation on hunting of forest birds and animals. In this document; gibbon was one of the most protected species. Again, the protection of gibbon was repeatedly confirmed in the government decree No. 18/HDBT (1992), Decree 48/2002/ND-CP (2002) and most recently in Decree 32/2006/ND-CP (2006) as one of the most threatened species in Vietnam. Despite the strict protection, trade in gibbon was reported in many areas in Vietnam, mostly as pet animal and partly used for traditional medicine preparation (Geissmann et al., 2000; Nguyen, 2002; Nguyen, 2005; Nguyen and Covert, 2005; Anon., 2008).

Distribution of yellow cheeked gibbon (*N. gabriellae*) in Vietnam is believed range from Da Nang to Dong Nai and Binh Phuoc province (Geissmann et al., 2000; Nguyen et al., 2005). Population of the gibbon is unknown in Dong Nai province and Lam Dong province as there has been no comprehensive population survey ever made in these two provinces. Nevertheless, a gibbon census in Cat Tien national park located in both Lam Dong and Dong Nai provinces found a population of 480 individuals of yellow cheeked gibbon found in 71,920 ha of Cat Tien national park (Nguyen et al., 2005). This number highlights the importance of these provinces yellow-cheeked gibbon in Vietnam.

Assessments of wildlife trade in Vietnam have shown that a variety of wild animal and plant species are harvested, used and traded for a variety of reasons, both domestically and internationally to and from Vietnam (Cao, Weitzel and Vu, 1994; Nguyen, 2002; Robertson, Trần and Momberg, 2003; Nguyễn Quảng Trường et al., 2004; Robertson et al., 2004; Nguyen et al., 2006; Nguyen et al., 2007). Among the species are being traded, primates represent a key targeted group (Hà, 2004; Nguyen and Covert, 2005). Primates are primarily hunted and traded for their use in medicinal treatments; yet recently rare and beautiful primates such as gibbons (Hylobatidae) and doucs (Pygathrix: Cercopithecidae) are also targeted for trade as pets and as stock for private zoos.

Wildlife trade is rarely mentioned in Dong Nai and Lam Dong province and there has been no specific wildlife trade survey to analyze the level of trade in the two provinces. Trade in primates is also poorly reported in Vietnam and the trade in gibbons is occasionally mention in wildlife surveys in central and north provinces (Nguyen, 2002; Nguyen and Covert, 2005).

A considerable number of gibbons with unclear origins are observed in many private zoo and personal collections throughout the country. There are large captive populations of gibbons in Binh Duong, Ho Chi Minh City and Dong Nai provinces where four of Vietnam's largest private zoos are located such as Dai Nam (Binh Duong), Suoi Tien and

Dam Sen (Ho Chi Minh city), and Vuon Xoai (Dong nai province) (Nguyen Manh Ha, personal data).

The aims of this survey were to assess the dynamics of the trade in gibbons in the Lowland Dong Nai Watershed Forest, Southern Vietnam to help recommendations for improved control of the illegal trade in gibbons.

## **Methods**

The survey focused in eight districts of Lam Dong (Tp. Da Lat, Bao Loc and Cat tien) and Dong Nai provinces (Tan Phu, Xuan Loc, Long Thanh, Vinh Cuu, and TP. Bien Hoa) that were identified as either key source or trade areas from the FPD surveys in December 2007. Roughly two days were spent in each location totaling 12 days by a sole surveyor (N. M. Ha). The surveyor had access to the records of traders and hunters reported to hunt or trade gibbons as starting points in the survey, but a snowball survey method was adopted where other households would be visited on recommendations from informants.

The main survey method was interviews with actors directly involved in the trade using a role-play cover. The surveyor posed as a private zoo collector interested in buying rare primates, especially gibbons. A total of 24 wildlife traders were visited and offered the surveyor live gibbons.

Data was collected through these interviews on the following: species of gibbon traded, location of source populations (including international), wholesale traders involved, hunting methods, customer demographics, price, gender and age class of animals in trade (e.g. baby, adult, infant), method of transportation, and reported quantity traded or available.

In addition to the undercover survey, the team also approached two local hunters by introducing the true identity and aims of the survey. The reason that the cover was broken on these two occasions was (i) due to the hunter knowing the true identity of the surveyor from previous field survey work in the area and (ii) the hunter had recently been visited by students carrying out surveys on wildlife collectors and people's attitude toward wildlife trade. Some positive honest information on local hunting and trade of gibbon was collected by this manner of survey, nevertheless, our team had to make a promise that name of the hunters was changed as promise to the informant; nevertheless, address of those informant was given in the attached trader profiles.

The team did not contact local Forest Protection Department or local authority during the survey to ensure that the survey was conducting in the most neutral condition to reflect the fact of the wildlife/gibbon trade in the areas.

During the survey, information of wildlife law enforcement in the area and its effect to the trade were also collected and are analyzed in the report. The analysis was undertaken by asking the trader on the possibility of arrest or prosecution while picking up the gibbon or any of such action was ever made in the areas or happened to the trader personally. All those information were double checked at least at two traders in the same area before summarizing in a standard profile that provided in the annex.

## **Results**

The previous wildlife trade survey has indicated that, there are over 100 wildlife traders, wild meat restaurant and traditional medicine stores/clinics in both Lam Dong and Dong Nai province (Anon., 2008). In our survey, we focused only on 25 key traders/restaurants that were identified to be indirectly or directly involved in gibbon trade. Nevertheless, no

gibbon product and its derivative were identified within the 25 wildlife traders and bush meat restaurants in the focus districts during the survey.

None of the 25 wild meat restaurants visited during the survey offered gibbon in the menu. However, at least at three restaurants at Phu Ly commune (Vinh Cuu district) did sell Douc and macaque meat. The survey also recorded two hunters state that they ate gibbon meat as these meats taste the better than other primate. In addition, those people also confirm that gibbon meat has some medicinal purposes and illness treatments.

#### *Species of gibbon traded*

The survey result indicates that yellow cheeked gibbon is the only gibbon species that is and has been traded within Dong Nai and Lam Dong province. Although no live gibbons were observed during the survey; information on the illegal gibbon trade was common, particularly in Cat Tien district (Lam Dong province) and Vinh Cuu district (Dong Nai province).

The result also indicated that only live baby or infant gibbons are being traded for the zoo and pet trade in the provinces. The trade focuses on baby gibbons because these can be easily concealed for transport and are trainable as pets or for zoo collections.

Survey results confirmed a minimum of 24 gibbons were illegally purchased and kept in the survey areas last 2 years, but there were reports of many more kept in households and small businesses

**Table 1: Record of gibbon trade in Dong Nai and Lam Dong**

No.	Name of trader/location	Number of gibbon	Date
1	Mrs. Tu Loan (Dat Lat City, Lam Dong)	2 gibbons were purchased illegally and kept as pet animals in “the wild animal farm”	2007
2	Mr. Van (Tien Hoang commune, Cat Tien district, LD)	1 kept as pet	2007
3	Bien Hoa city park (Dong Nai)	2 kept as show pet and transferred to Cat Tien national park in 2008	2007-2008
4	Bao Loc district	Approximately 4 were reported sold	2007-2008
5	Cat Tien district	Approximately 8-10 were reported sold	2007-2008
6	Vinh Cuu	Approximately 9-15 were reported sold	2007-2008

#### *Location of source populations*

Information gathered from traders and hunters revealed no trade of gibbons originating overseas or foreign traders involved in the trade within the two provinces. All gibbons (and all wildlife) were reportedly hunted from populations in local forests or adjacent provinces.

The survey results also highlight Cat Tien district (Lam Dong) and Vinh Cuu district (Dong Nai) are the most important source of gibbons for trade with six of the 25 traders interviewed citing these districts as the source for their gibbons. Traders reported a minimum of up to 20 gibbons sourced from these two districts were sold within 2007 - 2008. Furthermore, the traders in Cat Tien and Vinh Cuu district also confirmed that they were able to provide more live gibbon if it would be required and paid for in advance by customers from these sites.

It also seemed like the trade in live gibbon is well escalated and more common recently in these to specific area as the hunter are got used to with live gibbon trade order. If the information was true it would be a staggering fact that population of gibbon in Vinh Cuu nature reserve and Cat Tien national park are facing a real danger from the trade.

#### *Hunting methods*

One hunter in Vinh Cuu district described the hunting technique most commonly used to capture live gibbons in the area. The hunter explained the dry season (November to May) is most favorable season for gibbon hunting, as at this time gibbons make morning calls more regularly, thereby locating gibbon groups is easier. Hunters will select a group where females are carrying infant gibbons and then shoot the mother. The baby gibbon always holds onto the dead mother, even as she falls down to the ground. There is a risk that the baby is injured in this hunting method, but the hunters find this the most successful approach. This technique is important as it indicates that the number of live gibbons observed in trade does not represent the total number hunted, which could be at least double.

#### *Traders involved*

The survey result has indicated all the 25 traders are involved in the illegal gibbon trade, detailed information on the traders was filed in a specialized datasheet for further monitoring and follow-up law enforcement activity (see annex 1). The majority of these key gibbon traders were found in urban cities and towns such as Da Lat City, Bao Loc town, Dong Nai town, Vinh An town (see annex).

The survey revealed none of the wildlife trader does their business solely in gibbon trade but they rather trade in many other wildlife species, and gibbon is one of those many wildlife trade items.

Through the interviewing, it likely show that, the demand for pet and zoo collection seems to make the gibbon trade become better coordination as the hunter and trader act accordingly to the demand. For instance, when private zoo or collector need gibbon they will send the order to middle man then local hunter will do hunting to fulfilled the order.

All traders involved in the gibbon trade were highly aware of the illegal nature of their business, yet this had no effect on their continued operations. 18 out of 25 traders visited during the survey offered gibbon to the surveyor, and was told they would contact once the gibbon would be ready for delivery. This indicates that the traders run a well organized network where they can order specific species to the demand of their customers.

According to estimates of wholesale traders in the survey, annual gibbon trade from Lam Dong province is about 10 live animals, and 14-16 animals in Dong Nai province. The traders also concluded that there is a general reduction of trade in live gibbon due to the fact that gibbons have become rarer in the wild, not because of effect of wildlife trade law enforcement.

#### *Demand for gibbons*

Survey result indicates that the majority of the consumers of gibbon in Dong Nai and Lam Dong are private zoos or amateur wildlife collectors. There was no information on gibbon meat or derivatives or products in traditional medicine treatments.

Interview information indicates that the demand for gibbon from Dong Nai and Lam Dong is mainly from zoos and amateur wildlife collectors in Ho Chi Minh City, Binh Duong, and Dong Nai province. There are a large number of gibbons held in collections in these provinces and many are unlikely to have accompanying legal documents or permit on

hunting or capturing gibbon for the zoo. It is difficult to estimate what proportion of the animals were sourced from Lam Dong and Dong Nai provinces but as these provinces represent a core of their distribution, it could be significant.

In addition, gibbons in private zoo suffer high mortality rates and are often replaced by a new one as they die from diseases and poor diet (Nguyen M.H. personal observation). The turnover is difficult to measure without proper monitoring of these collections but is an important factor for consideration as many of these collections receive legal endorsement.

#### *Price of gibbon in trade*

Traders reported that gibbon is considered a valuable item with a higher price than other species of primates traded in the area. For instance, one live infant female gibbon (1.3 kg) was offered to the team by a trader in Da Lat city with the price VND 5,500,000 (US\$320). According to the trader, the animal was to be transferred from An Suong road junction (Ho Chi Minh City) to Da Lat or other place as demanded by the customers. One more baby gibbon was offered by traders in Bao Loc town to the team with the price 4,000,000 VND (US\$230) this gibbon originated from the forest of Bao Loc district. According to the hunters in Vinh Cuu, price of a douc langur cost about 300,000-500,000 VND (US\$17-29) for a live animal whilst a dead douc costs only VND 200,000 (US\$12) or even less.

The differences in price of gibbon with other primate are gibbon is rarer and it needs a specialized hunting method and skill. Hunters also informed that, for many amateur wildlife collectors, they prefer gibbon rather than other primate because gibbon has a distinctive and attractive singing and other does not.

#### *Method of keeping and transport route*

Traders interviewed result indicated that gibbons are strictly protected and they rarely deliver them to other provinces, preferring customers picking them up from the trader. The maximum distance of delivery is from the town to the capital town of the province or other town within the province such as Da Lat and Bien Hoa. Any request of interprovincial delivery is subject to further consideration or denial. In addition, the price of live gibbon also increases almost double for an interprovincial delivery. For example, on one occasion, traders in An Suong (Ho Chi Minh City) offered the delivery of two gibbons to Hanoi however the price escalated from VND 5,500,000 (US\$320) to VND 10,000,000 (US\$575) due to the difficulty and the risky nature of the illegal action. This indicates that traders view transport of wildlife as having a higher risk of detection by law enforcement agencies than other steps in the wildlife trade (e.g. hunting, storage, and sale).

The survey results reveal that national road number 20 is the key route for the gibbon trade in Lam Dong and Dong Nai. As indicated by the hunters in Da Lat and Bao Loc, gibbon were always sent southward, mostly to Ho Chi Minh City, by that route.

The result also confirmed that, almost no gibbon was transferred northward to Hanoi or other northern provinces. A likely reason is that such a long distance and some difficulty of transportation would not provide favorable conditions to bring live gibbons to Northern provinces. In addition, during our gibbon survey in North Central Vietnam as well as the observation of captive gibbon in the Northern Provinces, no yellow cheeked gibbon were observed to be traded or kept as pet (Nguyen, 2005). On the other hand, the availability of other species of gibbon in central and Northern provinces would also reduce the demand of gibbon from Lam Dong, Dong Nai and other southern provinces. When asking for delivery of gibbon to Northern Province such as Hai Phong and Hanoi, the traders all refused this option; because it was deemed too risky in term of concealing the gibbon and the mortality rate could be very high for such a long distance.

None of the traders stored gibbons in their house or holding facility, due to the protected status of the species. The gibbon will often be sent to customer rapidly after being caught in the wild to reduce time for detection by law enforcement agencies. This also reduced the time and opportunity for the animal to get sick, stressed or injured.

At least seven traders in Cat Tien and Vinh Cuu districts informed that, because trade in gibbon is strictly prohibited by the law, transportation of live gibbons is arranged to avoid the detection from law enforcement agencies. Hunters in Cat Tien and Vinh Cuu district explained that live gibbon would be delivered to the customer within hours of their arrival at the trader's house to avoid mortality of the gibbon as well as the detection of the law enforcement. Gibbons would be put into a standard carry-all bag and transported by motorbike to avoid any curiosity from other drivers or law enforcement officers.

Three traders in Da Lat and Bao Lam informed that in the case their previous gibbon sales, customers would be informed of the availability of live gibbon and asked to come and pick up the gibbon directly. These traders refused delivery out of the province of Lam Dong but could arrange the delivery by passenger minivan within the province.

#### *Law enforcement*

Survey results in Lam Dong and Dong Nai reveal that, law enforcement on wildlife trade in the two provinces likely does not achieve its intended effect. This is evidenced by the number of illegal wildlife traders and wild meat restaurants present in all the districts and towns of the province. As in the case of Vinh Cuu District, wild meat restaurants were found in town and in the buffer zone of the Vinh Cuu Nature Reserve and relic site. In Lam Dong, well known wild meat restaurants and wildlife traders were found in every town and district.

The interview information shows that all wildlife traders and bush meat restaurant owners were well aware of the illegal aspect of their business, as all of them know that trade in protected wildlife is strictly prohibited by the law. However, most of them have been or are currently involved in the trade of protected wildlife such as gibbon. Their involvement could suggest that there may be some ineffective aspects of the current wildlife trade legislation or enforcement. There are few signs of law enforcement amongst the existing wildlife traders, especially the wild meat restaurants in the survey areas as wild meat of protected species were clearly indicated in menu. In addition, the trader confirmed the possibility of live gibbon trade as well as the delivery of live gibbon within province. This information also indicates the weakness of law enforcement.

The law enforcement is weakest in Cat Tien (Lam Dong) and Vinh Cuu Districts (Dong Nai) as shown by the number of wild meat restaurants and wildlife traders were identified in the in the areas in this survey an most recent survey (Anon., 2008). Moreover, in Vinh Cuu at least two restaurants have douc meat (*Pygathrix* sp.) on their menu; douc meat trade in restaurant is rarely reported throughout Vietnam however seem to be common at least in Phu Ly commune. Moreover, the areas were identified as the most important supply areas for the gibbon trade. As informed by the local hunters, gibbon was hunted mostly in the Vinh Cuu Nature Reserve and Cat Tien National Park. All these information combine show an appalling fact of the illegal hunting and trade in endangered species as well as the weakness of law enforcement in the area as the whole.

#### **Discussion**

This survey confirmed the ongoing trade of yellow-cheeked gibbons in both Lam Dong and Dong Nai province. The results indicate that gibbons are not a commonly traded item compared to other species, which may be directly related to their low abundance in the wild. However, the commercial trade in gibbons at any level represents a serious threat to



their survival in Lam Dong and Dong Nai provinces and is a serious violation of the current Vietnamese legislation on wildlife conservation and the protection of highly endangered species.

Records of gibbon trade in the provinces only confirmed the trade in live gibbon, no information on gibbon meat or its derivatives were found during the survey. The information shows a different story from the northern province where gibbon is often used both as a pet animal and traditional medicine (Geissmann et al., 2000; Nguyen, 2005).

The trade in gibbon is not yet escalates in large scale both in Dong Nai and Lam Dong province, however indicates that it is forming a group of specialized hunter and trader which target in gibbon or even other endangered species. The trade also has an important involvement of wild meat restaurant owners. However, these traders limited their trade to the local level (provincial) rather than interprovincial level.

The survey result identified that there were some specialized gibbon hunters both in Lam Dong and Dong Nai Provinces. These hunters activate the hunt when they have an order from a local trader or customers. This manner of hunting could seriously threaten the gibbon population of the two protected areas such as Cat Tien National Park and Vinh Cuu Nature Reserve where indicated by traders as the major sources of live gibbon for trade in Lam Dong and Dong Nai provinces.

Law enforcement appears to have had little effect on the gibbon trade in the area; with both traders and hunters well aware of their illegal action yet showing no intention to change their practices. There was no information on active wildlife trade law enforcement in the area, as the wild meat restaurants were all well known in the area and (almost) freely engaged in the wild meat business. If there was any law enforcement, it is likely too weak to make a negative impact on the gibbon and wildlife traders in the areas.

The demand for pet animals and zoo collections is the key driver for the gibbon trade in the two provinces. There are a growing number of animal collections in the south of Vietnam (particularly Ho Chi Minh City, Binh Duong Province, and Dong Nai Province) that acquire a significant number of gibbons for their collection as well as replacing animals that die due to the poor care given to them in most sites.

## **Recommendations**

- Strengthened law enforcement is required to control the illegal trade in gibbons in the area. We recommend that tactical enforcement operations (e.g. raids) are designed to target the wholesale traders and restaurants identified in this survey particularly those in Cat Tien District (Lam Dong) and Vinh Cuu District (Dong Nai)
- Further surveys of private zoos and wildlife collectors in surrounding provinces (including Dong Nai, Binh Duong and Ho Chi Minh City) are recommended to provide a better estimate of the scale of demand on remaining gibbon populations from these zoos.
- Training for local law enforcement agencies in Lam Dong and Dong Nai should be developed to improve skills and knowledge on strategic enforcement planning and implementation, and investigations.
- A further assessment on the gibbon populations in Lam Dong and Dong Nai focusing on Vinh Cuu Nature reserve and Cat Tien National Park should be carried out to assist in monitoring impacts of the trade and regulatory interventions.

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**Annex 1. Profiles of wholesale wildlife traders interviewed during surveys in September 2008 that involved the trade of gibbons**

Name	Address	Tel/fax	Trade level	Origin of wildlife	Involvement in gibbon trade	Mean of transportation	Connect to other traders
Mrs. Tu Loan	49 bis Hai Ba Trung, Da Lat, LD (also Tuyen Lam lake)	918156460	National	Lam Dong	Facilitate the trade of at least two gibbons	Motorcycle, passenger bus	Traders in Lam Dong and Ho Chi Minh City, Private zoo and collector in
Mrs Lai	123/28/3 St, TT Bao Loc, LD	Tel/fax 0939051041	National	Lam Dong	Yes – in-regularly from local hunter, already sold 2 gibbon last three years (latest 1 gibbon and 1 douc langur in 2007)	Motorcycle, van, Passenger van	Supplier: Bao Lam, Bao Loc Retailer: Hoc Chi Minh, Bien Hoa and other
Mr. Hung	40/Ha Giang St, TT Bao Loc, LD	986163865	Restaurant	Bao Lam, Bao Loc districts		Motorcycle, van	Local hunters and local retailers in Bao Lam and Bao Loc districts
Mr. Hiếu	T-Junction, TT Dong Nai, Cat Tien, LD	989356198	National	Cat Tien district, Cat Loc and Dak Lua (Cat Tien NP), Dong Phu (Binh Phuoc province)	Yes – in-regularly from local hunters, already sold 5 gibbon last three years	Motorcycle, van	Supplier: Local hunter in Cat Tien, Dong Phu and Dak Lua commune Retailer: Madagui, Bien Hoa, Ho Chi Minh city
Mr. Xuất	TT Dan go, Cat Tien, LD	906884299	National	Cat Tien district, Cat Loc and Dak Lua (Cat Tien NP), Dong Phu (Binh Phuoc province)	Yes – in-regularly from local hunter, sold 2 gibbons last three years	Motorcycle, van	Supplier: Local hunter in Cat Tien, Dong Phu and Dak Lua Retailer: Madagui, Bien Hoa, Ho Chi Minh
Mr. Vãn	Tien Hoang, Cat tien, LD	63897511	Restaurant	Cat Loc Sector (Cat Tien NP)	Yes - in-regularly from local hunter, kept one gibbon as pet last 2 years	Motorcycle	Local hunter in Tien Hoang, Thon 5 and Gia Viet communes
Mr. Tho (Tho Ca)	T-Junction, TT Dong Nai, Cat Tien, LD		National	Cat Tien NP, Cat Loc, Binh Phuoc province			
Hue pet shop (Mr. Binh)	176a Phan Dinh Phung, Bien Hoa, DN	906019737	National	Dong Nai province and HCMC	Yes – in-regularly from local hunter, sold 1 gibbons last three years	Motorcycle, van	Local suppliers and from Ho Chi Minh city

	Quốc Đông Restaurant, Vinh An, Vinh Cuu, DN	National	Vinh Cuu	Yes – in-regularly from local hunter, sold 2 gibbons last three years	Motorcycle	Local suppliers in Vinh Cuu district
	9999 Restaurant, Vinh anh, Vinh Cuu, DN	Provincial	Vinh Cuu		Motorcycle, van	Local suppliers in Vinh Cuu district, mostly from Phu Ly commune
Mr. Anon	Vinh An, Vinh Cuu, Dn	Provincial	Vinh Cuu	Hunted total of 5 gibbons in last two years. Sold two gibbon (1-1,5 kg) to local trader in Vinh Cuu - price is 2-3 milion VND per live gibbon. Estimates 10-15 live gibbons are hunted in Vinh Cuu annually	Motorcycle, bicycle, passenger bus	Local suppliers and hunter in Vinh Cuu district
	Oanh-Ngoc Restaurant, Vinh Cuu, Dn	Provincial	Vinh Cuu		Motorcycle and passenger van	Local hunter in Phu Ly and Trader in Vinh Cuu and Trang Bom district
Mr. Lập	Thanh Lich Restaurant/Guest House, Phu Ly, Vinh Cuu, DN	Provincial	Vinh Cuu		Motorcycle and passenger van	Local hunter in Phu Ly and Trader in Vinh Cuu and Trang Bom district
	Ngoc An Family Restaurant, Phu Ly, Vinh Cuu, DN	Provincial	Vinh Cuu		Motorcycle and passenger van	Local hunters in Phu Ly and Trader in Vinh Cuu and Trang Bom district
Hong Kong Restaurant/Beer	Xuan Tho, Xuan loc, DN	Restaurant	Dinh Quan forest (Cat Tien NP)		Motorcycle and passenger van	Trader in Dinh Quan district

# **A rapid survey into the trade and consumption of Tiger (*Panthera tigris corbetti*) and Elephant (*Elephas maximus*) in Da Lat City, Lam Dong Province, Vietnam, with observations in some other districts.**

**Vu Ngoc Thanh**  
Hanoi National University, Zoology Museum

## **Introduction**

The Indochinese Tiger (*Panthera tigris corbetti*) is an endangered species found in Vietnam, Lao PDR, Cambodia, Thailand and Myanmar. The recent IUCN global mammal assessment reports that there are no more than 2500 individuals of *P.t. corbetti* occurring globally. In Vietnam the Tiger population was estimated at maximum of 200 individuals in 1995 (Nguyen Xuan Dang et al, 1995), yet government representatives at the 2007 International Tiger Symposium of the Global Tiger Forum, stated that a 2004-2005 exercise estimated not more than 100 tigers in areas along the borders with Lao PDR and Cambodia (GTF 2007). One of the key factors threatening tigers is hunting and trade of tigers. The use of tiger bone as a balm in Vietnamese traditional medicine (VTM) is a substantial threat to tiger populations in Vietnam (Nguyen Xuan Dang 1999).

Wild populations of Asian Elephant (*Elephas maximus*) remain in Vietnam, China, Lao PDR Cambodia, Thailand, Myanmar, Malaysia, Indonesia, Sri Lanka, Nepal, India, Bhutan and Bangladesh. Since the early 1990s, the elephant population in Viet Nam has dropped from 500 wild elephants down to 160 by 1997 (FFI 1997). Only a small population persists now, and there are no wild elephants in northern Vietnam, apart from those occasionally moving in from Laos in Son La province. Lam Dong and Dong Nai are two of a handful of provinces in Vietnam where wild elephants exist (Choudhury *et al.* 2008). The rapid decline of wild elephant populations is the consequence of deforestation, illegal poaching, human-elephant conflict and the illegal trade in elephants and elephant products. Elephants are hunted illegally for various reasons but their ivory is the most economically valuable product. Whole tusks are traded both domestically and internationally and their is a substantial market for ivory products in souvenir shops in Hanoi, Ho Chi Minh City and Da Lat. Ivory products are sold in the form of statues, chopsticks, pipes, combs and other goods.

Lam Dong and Dong Nai provinces are located in important traffic routes from the Central Highlands to Ho Chi Minh city and other Southern provinces. These two provinces are well-known on illegal trade in tiger and elephant as both a source and consumer. It has been almost 10 years since the last surveys in tiger and elephant trade of TRAFFIC (1999 and 2000) and despite an increased level funding, and new legislation to reduce trade in these species, there are indications the trade in these species has not reduced. Previous surveys highlighted Da Lat city, lam Dong province as a key location for both trade and retail of tiger and elephant products.

To evaluate the current situation on trade of and use of Tiger and Elephant products, a survey was conducted in September 2008 to achieve the following objectives:

- To identify tiger and elephant products (live tiger, elephant and their products manufactured in trade in Da Lat and some surrounding districts

- To analyze the dynamic of the trade network used for Tiger and Elephant as well as their products manufactured in Da Lat and some surrounding districts
- To evaluate the result of the implementation of state regulation on prevention of trade of tiger and elephant.
- To make recommendations on how to control further trade on Tiger and elephant in Da Lat and some surrounding districts

### **Methodology**

A team of two researchers (both Vietnamese) interviewed a selection of people believed to have knowledge about the trade in Tiger and elephants in the survey area. This included people from the following: Tourist souvenir shops, TVM shops, Hotels, Wholesale Wildlife traders, and staff from local scientific museums.

The main survey method involved a semi-structured interviews with the above sources and first hand observations of animals/products in the trade. The survey team attempted to collect data on the following areas:

- Quantities of tigers, tiger products and elephant products being traded in the two provinces (annually, recent years);
- Key wildlife traders and retail outlets selling tigers, tiger products and elephant products and their modus operandi identified (names, addresses, storage points, collection and delivery, sales, possible links to other countries);
- Main supply sources (hunting areas, commercial breeding farms, or imported);
- Means and main routes by which tigers, tiger products and elephant products are transported and to where;
- Main consumer groups for tigers, tiger products and elephant products, and reasons for their purchase;

The survey team adopted an undercover approach in most situations posing as a trader, yet also as Hanoi University Museum staff in some cases with good results. Both researchers were fortunate in having friends and relatives in the survey areas and thus were able to get introductions to key sources and gained trust rapidly, increasing reliability of the data collected. Some real specimens as well as pictures of canines, tiger penis, Ivory, wild pig canines were taken with the researchers to field work for comparisons and to strengthen the cover story.

The survey team spent one day discussing interview techniques and information recording (voice digital recorder, note-taking and photographs). They also visited the museum of Vietnam National University-Hanoi (HNU) to study skeletons of elephant and tiger, and other mammal skeletons in order to identify correctly tiger and elephant bones and to differentiate them from other bone. This work also allowed researchers to have a detailed look at tiger parts such as claws, canines-which again helped to distinguish between other animal products on the market. The training course was supervised by Prof., Dr. Le Vu Khoi, a HNU mammal expert.

The survey was conducted over 15 days (September 23 - October 6 2008) in the following districts/cities of the survey area: Da Lat, Bao Loc, Di Linh, Da Nang in Lam Dong province and in Bien Hoa, Vinh Cuu, Trang Bom in Dong Nai.

## Results

### *Art and souvenir shops:*

There are around 70 art and souvenir shops selling fake elephant and tiger products in Da Lat. Every shop has a minimum of 20-30 products including canines, claws, and fake ivory products. All of these shops also sell other wildlife products including bear claw, wild pig canines, and deer antlers. Some shops have a hundreds of fake tiger/bear canines and claws and wild pig canines.

All products from elephant and tiger being openly sold were confirmed to be substitutes through observation and also from admission of shop owners. One shop owner in Mong Mo Hill, one of the biggest shop with most product diversity said frankly "... the forest has been almost totally destroyed, canines of wild pig have run out now.... so how can I get real tiger canines?!" These substitute products are of good quality in terms of color, shape and weight and many retailers reported to have imported them from Ho Chi Minh City. The price of fake goods varied between shops and also as retailers explained between sales. They often try sell substitute products for a higher price to poorly informed consumers, in an attempt to pass them off as real tiger or elephant (Table 1).

We do not see any real tiger and elephant products, even saying that we are willing to pay at high price. About 5% of shops have real wild pig canines which they stated to have bought from local ethnic minority groups.

Table 1: Prices of wildlife products for sale in souvenir shops in Da Lat city, Lam Dong province, Sept 2008.  
NB: 1US\$ = 16500VND

Product	Quality	Size	Cost (VND)
Tiger claw	Fake	Large	300-400,000
Bear claw	Fake	Large	200-300,000
Tiger canine	Fake	Large	350-450,000
Bear canine	Fake	Large	200-300,000
Wild pig canine	Real	8-10cm	200-250,000
Wild pig canine	Fake - Plastic	10-12cm	100-200,000
Sambar horn	Fake	Large	500,000-1,000,000
Sambar horn	Real	Large	15-17,000,000
Gaur horn	Real	Large	15-20,000,000
Elephant ivory	Fake: White stone	35-40cm, well carved	400-500,000
Opium pipe	Fake: bone	25-40cm	150-200,000

We found less elephant ivory products than products from tigers. One shop owner in Mong Mo Hill said that elephant products are hard to sell to tourists, as they are on sale everywhere and the price of fake elephant products in Ho Chi Minh is cheaper, where the retailer explained most visitors to Da Lat are from. The retailer also explained that the large ivory displays are also too cumbersome to carry back to HCMC.

### *Da Lat University Natural History Museum*

All real canines of tiger and other mammals belong to felidae family in the museum are missing. Real canines for the tiger specimen have been replaced by modified canines of wild pigs. The trader who made these specimens and also a famous wildlife trader and in Da Lat said that real tiger canines are now sold for 3,000,000 VND and real tiger claw have a price of 1,500,000 VND. The trader stated that he believed that although in the past people believed tiger canines and claws provided the wearer good health, at present

these are a fashion for rich people. He also stated that many people want to buy it, but supply is very limited.



Figure 1: Fake elephant ivory



Figure 2: Fake tiger penises, canines, claws of tiger, bear, wild pig etc in a shop



Figure 3: Fake canines of tiger specimen in museum



Figure 4: Elephant skeleton in traders house



Figure 5: Cattle penis being advertised as tiger penis



Figure 6: Fake tiger claws

#### *Traditional Vietnamese/Chinese Medicine clinics/pharmacies*

Many Pharmacies were found to be selling wildlife products despite a local health official stating unequivocally that no wildlife is sold in Da Lat for medicinal purposes.

The An Duong shop (or Green Crab) at 11B Nguyen Thi Minh Khai, Da Lat city, the owner is Manh Anh Chuong herb (previously, Herb Quynh Quan is owner) is an example. The doctor here explained that Tiger bone balm is priced according to the proportion of tiger bone claimed to be in the balm. Many pharmacies stated that they only sell tiger bone



balm to patients after asking about their ailment/disease to ensure they were real customers. This pharmacy also distributed Tiger bone balm to other pharmacies in the province. When asked about the origin of the tiger bone balm, the owner of the An Duong clinic answered quickly that the tiger was trapped before the war time and so it is not illegal. He also explained that patients prefer bone balm made from Indochinese tiger from tiger imported from other country as Russia.

A previous owner of a TVM clinic in Da Lat told the team that around 10 years ago the source of tiger bone glue was mainly HCMC, and also some products were imported from Hong Kong and sold at 200,000 VND/100g.



Image 7: Tiger bone glue of Con Cua TVM shop, Lam Dong, Vietnam

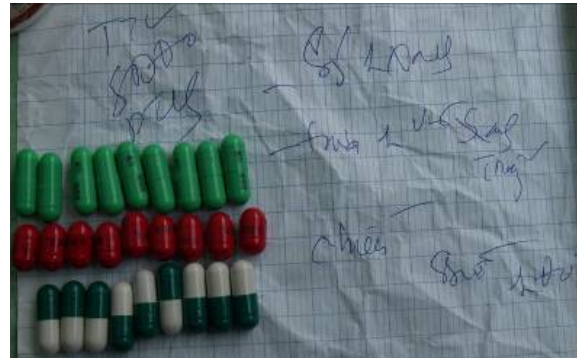


Image 8: Medicine and prescription for tiger based medicines in Con Cua TVM shop, Lam Dong, Vietnam

We also encountered many shops and pharmacies selling fake tiger penis. On clear sign that this was a fake is that it was displayed with cheap products and the retailers did not mind people holding it out of sight of the owner. A former curator of the museum of Central Highlands Biology Institute told us that all these dried fake tiger penis are made of domestic buffalo or cow penis.

Table 2: Price of medicine made from tiger products Pls help to do this.

Name	Status	Size	Price (VND)
Tiger glue I	1st class	100gr	1,200,000
Tiger glue II	2nd class	100gr	600,000
Tiger penis	Fake	Dry, 35-40cm	1,500,000-2,500,000
Tiger skeleton	Real	Kg	10,000,000

#### *The trade in live elephants*

Keeping elephants for tourist purposes can raise high profits for owners. In Prenn Waterfall and Dam B'ri tourist parks visitors can have their picture taken with an elephant (10,000 VND), feed an elephant (10-15,000 VND) and ride an elephant (100-150,000 VND), and the owners explained that many foreign visitors would ride the elephants. The costs of keeping elephants is very low as food is collected and the only real cost is for the elephant trainer (\$100/month). Due to the high profits from elephants in tourist parks there is competition between the tourist Parks. The owners of a male elephant in Prenn Water Fall Park that died stated that it was poisoned by competitors. Owners now keep elephants under tight security and on short chains to keep them safe.

The owner of the elephants in Prenn Water Fall Park stated that trading domestic elephants is as easy as trading domestic cows and FPD assist in arranging permits. The owner plans to buy more elephants but supply is limited and previous elephants were from a circus in Hai Duong and a 20 yr old blind elephant from Dak Lak. He stated that he had paid around 200 million VND (12,000USD) but after 6 months, owner could get back this investment.

#### *Observations from surrounding Districts*

It is fair to state that any tourist location or souvenir shop we visited in other locations also sold fake claws and canines of tiger, wild pig, bear etc with same shape and price in Da Lat City. We suspect they all originate from a single source.

In Tho Xuan Duong, a VTM shop in Di Linh District that sale tiger bone glue, but guest have to pay a deposit first, the owner will “help” to buy it from Da Lat (in Con Cua VTM shop). The women owner stated that rarely has someone ask to buy tiger bone balm here, because the buyers do not believe quality of tiger bone balm in such district. She decorates her shop with stuffed pangolin and musk-deer antlers, dry geckos, and is located next door to a district police station.

#### **Conclusion**

We found very little open trade of genuine tiger or elephant products in Da Lat or surrounding districts, yet a very large trade in substitutes for these. This could be due to enforcement or reduced supply, or a combination of the both. Pharmacies are still selling tiger bone balm, but it is unclear how much of this is tiger bone and on the sources of this.

Previous studies by TRAFFIC for tiger trade in 1999 and ivory trade in 2000 reported high numbers of both products openly sold in Da Lat. If these reports are accurate and real products were not mistaken for substitutes then there has been a total shift from real to fake products in the market.

The trade in tiger products is carried out very carefully and people were nervous to speak to the survey team about this. There is a high level of awareness to the illegality of the trade. There was very little trade in ivory, and no elephant products in TVM/TCM clinics. The primary trade purpose affecting elephants is the trade in live elephants for tourist sites.

Wholesale wildlife traders that the lead surveyor is familiar with stated that wildlife populations in the area are so reduced that they are not trading as much in these types of products as before. They stated that tiger and ivory consumption is now focused on large cities like HCMC where traders can import from other countries and people have more money to buy these products.

**Appendix 1: List of interviewees during surveys on tiger and elephant products in lam Dong province in September 2008.**

No	Name	Products	Address
1	La Tulipe shop	Teeth, fang, claw of tiger, bear, wild pig	Da Lat market
2	Con cua TCM shop	Dry seahorse, monitor, tiger bone glue, bear bile	Da Lat market
3	Specific products shop	Scorpion and snake wine	Da Lat market
4	Hoang Hong souvenir shop	Fang of wild pig, tiger, claw of bear, tiger, deer horn, stone - ivory	14 Phan Boi Chau, Da Lat city
5	Bac Trung Nam Wine shop	Deer horn, wine	Da Lat market
6	Love valley tourist place	Fang of wild pig, tiger, claw of bear, tiger, chamois horn, muntjac horn, stone ivory	Da Lat city
7	Mong Mo Hill tourist place	Fang of wild pig, tiger, claw of bear, tiger, chamois horn, muntjac horn, stone ivory, deer feed	Da Lat city
8	Preen Water fall tourist place	Fang of wild pig, tiger, claw of bear, tiger, chamois horn, muntjac horn, stone ivory, deer feed, tiger penis, wildcat stuff, deer horn	Da lat city
9	Da Lat museum	Wildlife varia	Da lat city
10	Da Lat flower garden	Nothing	Da Lat city
11	Dam Ri tourist place	Fang, teeth, claw of tiger, bear, wild pig, tiger penis	Bao loc district
12	Suoi tien Madagui tourist place	Long tail macaque, crocodile	Da Huoai district
13	Mr. Tu – wildlife and antique trade	Wildlife stuff, real deer horn, bull horn, gaygal horn, ca tong deer horn, flying squirrel, big head turtle, eagle, tiger bone	Da Lat city
14	Tu Loan Zoo	Wild cat, cây vàng, rái cá, bò rừng, gấu chó, gấu ngựa, Beo lửa, báo hoa mai, lợn rừng, bò rừng xuong nai...	Suburb Da Lat
15	Mr. Nguyen Van X	Interviewee	Officer of Health department
16	Mr. Tran Xuan Y	Interviewee	Officer of province government
17	Tho Xuan Duong TCM shop	Pangolin, musk-deer, bear bile, monitor, tiger bone glue	Di Linh district
18	Tay Nguyen biology institute	Wildlife specimens	Da Lat city
19	Truc Mai eco guest house	Wildlife wine, eel tank	Da The
20	Truong Man family	Interviewee, many cages in ground	Da The
21	Ngo family	Stuff: Deer head, bird, snake, monitor	Di Linh
22	Xuan Phuong wild pig farm	Wild pig	Da Huoai
23	Nguyen Thi Thanh Long	Interviewee	Officer of museum
24	Ngoc family	Stuff: deer haed, muntjac head, eagle, black squirrel, cay van, cay huong, musk-deer	Bao Loc
25	Hoang Van T	Elephant owner	Preen
26	Dong truong tourist places	Bird	Vinh An town

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**Appendix 2: Prices of wildlife reported during surveys by Vietnamese FPD rangers during undercover surveys in Lam Dong and Dong Nai province December 2007.**

Date	Species / product	Sale size (kg)	Sale unit	Cost/unit (VND)	Position in trade chain	District	Transaction
10-Dec-07	Asiatic Black Bear		Bile (cc)	80,000 - 100,000	Wildlife farm	Vinh Cuu	S
10-Dec-07	Asiatic Black Bear	150	Indv	70,000,000	Wildlife farm	Vinh Cuu	B
10-Dec-07	Asiatic Black Bear	71	Indv	32,000,000	Wildlife farm	Vinh Cuu	B
14-Dec-07	Bear		Bile (cc)	80,000	Restaurant	Long Thanh	S
10-Dec-07	Bear		Bile (cc)	120,000	Wildlife farm	Da Huoi	S
10-Dec-07	Bear		Meat (kg)	500,000	Wholesale trader	Da Huoi	S
15-Dec-07	Bear		Nail	350,000	Souvenir shop	TX Bao Loc	S
10-Dec-07	Chim cat		Meat (kg)	25,000	Restaurant	Thong Nhat	S
11-Dec-07	Chinese water dragon	0.5 - 0.7	Indv	30,000	Restaurant	Thong Nhat	S
9-Dec-07	Chinese water dragon		Meat (kg)	60,000	Wholesale trader	Tan Phu	S
11-Dec-07	Chinese water dragon		Meat (kg)	80,000	Restaurant	Dinh Quan	S
16-Dec-07	Chinese water dragon		Meat (kg)	360,000	Restaurant	Trang Bom	S
12-Dec-07	Chuot dong		Meat (kg)	60,000	Restaurant	Duc Trong	B
10-Dec-07	Civet	1	Indv	500,000	Restaurant	TP Da Lat	S
11-Dec-07	Civet	1.5	Indv	400,000	Restaurant	Thong Nhat	S
12-Dec-07	Civet		Live (kg)	250,000	Wholesale trader	Bao Lam	B
13-Dec-07	Civet		Live (kg)	340,000	Wholesale trader	Bao Lam	B
15-Dec-07	Civet		Live (kg)	300,000	Wholesale trader	Bao Lam	B
11-Dec-07	Civet		Live (kg)	280,000 - 320,000	Wholesale trader	Bao Lam	S
11-Dec-07	Civet		Live (kg)	400,000	Restaurant	Bao Lam	S
12-Dec-07	Civet		Meat (kg)	100,000	Wholesale trader	Bao Lam	B
13-Dec-07	Civet		Meat (kg)	120,000	Wholesale trader	Bao Lam	B
12-Dec-07	Civet		Meat (kg)	120,000	Wholesale trader	Bao Lam	B
13-Dec-07	Civet		Meat (kg)	120,000	Wholesale trader	Bao Lam	B
15-Dec-07	Civet		Meat (kg)	120,000	Wholesale trader	Bao Lam	B
9-Dec-07	Civet		Meat (kg)	200,000	Wholesale trader	Dinh Quan	B
12-Dec-07	Civet		Meat (kg)	190,000	Restaurant	Dinh Quan	B
13-Dec-07	Civet		Meat (kg)	80,000	Restaurant	Lac Duong	B
9-Dec-07	Civet		Meat (kg)	320,000	Commercial	Tan Phu	S

					hunter		
13-Dec-07	Civet		Meat (kg)	310,000	Commercial hunter	Tan Phu	S
11-Dec-07	Civet		Meat (kg)	80,000 - 100,000	Wholesale trader	Bao Lam	S
11-Dec-07	Civet		Meat (kg)	120,000	Wholesale trader	Lam Ha	S
11-Dec-07	Civet		Meat (kg)	150,000 - 180,000	Wholesale trader	TP Da Lat	S
9-Dec-07	Civet		Meat (kg)	340,000	Wholesale trader	Tan Phu	S
11-Dec-07	Civet		Meat (kg)	100,000 - 120,000	Wholesale trader	Bao Lam	S
9-Dec-07	Civet		Meat (kg)	270,000	Wholesale trader	Dinh Quan	S
13-Dec-07	Civet		Meat (kg)	90,000	Wholesale trader	Dam Rong	S
10-Dec-07	Civet		Meat (kg)	300,000	Restaurant	Thong Nhat	S
10-Dec-07	Civet		Meat (kg)	120,000	Restaurant	Bao Lam	S
10-Dec-07	Civet		Meat (kg)	120,000	Restaurant	Bao Lam	S
11-Dec-07	Civet		Meat (kg)	120,000 - 150,000	Restaurant	Bao Lam	S
13-Dec-07	Civet		Meat (kg)	190,000	Restaurant	Di Linh	S
15-Dec-07	Civet		Meat (kg)	200,000	Restaurant	Di Linh	S
10-Dec-07	Civet		Meat (kg)	350,000	Restaurant	Don Duong	S
9-Dec-07	Civet		Meat (kg)	320,000	Restaurant	TP Da Lat	S
10-Dec-07	Civet		Meat (kg)	320,000	Restaurant	TP Da Lat	S
10-Dec-07	Civet		Meat (kg)	350,000	Restaurant	TP Da Lat	S
10-Dec-07	Civet		Meat (kg)	320,000	Restaurant	TP Da Lat	S
10-Dec-07	Civet		Meat (kg)	420,000	Restaurant	Trang Bom	S
16-Dec-07	Civet		Meat (kg)	480,000	Restaurant	Trang Bom	S
17-Dec-07	Civet		Meat (kg)	480,000	Restaurant	Trang Bom	S
12-Dec-07	Civet		Meat (kg)	700,000	Restaurant	Da Huoi	S
14-Dec-07	Civet		Meat (kg)	500,000	Restaurant	TX Bao Loc	S
12-Dec-07	Civet		Meat (kg)	350,000	Restaurant	Dinh Quan	S
13-Dec-07	Civet		Meat (kg)	150,000 - 160,000	Restaurant	Long Khanh	S
16-Dec-07	Civet		Meat (kg)	150,000	Restaurant	Long Khanh	S
11-Dec-07	Civet		Meat (kg)	80,000	Restaurant	Dam Rong	S
14-Dec-07	Civet		Meat (kg)	90,000	Restaurant	Dam Rong	S
12-Dec-07	Cobra	2	Indv	1,800,000	Wholesale trader	Da Huoi	S
13-Dec-07	Cobra	1.2 - 2.5	Meat (kg)	500,000	Wholesale trader	Bao Lam	B
13-Dec-07	Cobra	> 2.5	Meat (kg)	300,000 - 400,000	Wholesale trader	Bao Lam	B

13-Dec-07	Cobra	1 - 2.5	Meat (kg)	700,000	Wholesale trader	Bao Lam	B
13-Dec-07	Cobra	> 2.5	Meat (kg)	400,000 - 550,000	Wholesale trader	Bao Lam	B
14-Dec-07	Cobra		Meat (kg)	180,000	Restaurant	Dinh Quan	B
14-Dec-07	Cobra		Meat (kg)	150,000	Restaurant	Dinh Quan	B
14-Dec-07	Cobra		Meat (kg)	700,000	Wholesale trader	Tan Phu	S
10-Dec-07	Cobra		Meat (kg)	800,000	Wholesale trader	Da Huoi	S
10-Dec-07	Cobra		Meat (kg)	300,000	Wholesale trader	Da Huoi	S
11-Dec-07	Cobra	1.5 - 3	Meat (kg)	800,000	Wholesale trader	Bao Lam	S
15-Dec-07	Cobra		Meat (kg)	550,000	Restaurant	Di Linh	S
8-Dec-07	Cobra		Meat (kg)	800,000	Restaurant	Vinh Cuu	S
13-Dec-07	Cobra		Meat (kg)	700,000 - 800,000	Restaurant	Vinh Cuu	S
9-Dec-07	Cobra		Meat (kg)	500,000	Restaurant	Vinh Cuu	S
11-Dec-07	Cobra		Meat (kg)	520,000	Restaurant	Da Huoi	S
10-Dec-07	Cobra		Meat (kg)	350,000	Restaurant	Trang Bom	S
16-Dec-07	Cobra		Meat (kg)	450,000	Restaurant	Trang Bom	S
17-Dec-07	Cobra		Meat (kg)	450,000	Restaurant	Trang Bom	S
14-Dec-07	Cobra		Meat (kg)	350,000	Restaurant	Dam Rong	S
11-Dec-07	Cobra		Meat (kg)	250,000	Restaurant	Bao Lam	S
11-Dec-07	Cobra	1 - 2.4	Meat (kg)	750,000	Restaurant	Bao Lam	S
11-Dec-07	Cobra	> 2.4	Meat (kg)	450,000 - 600,000	Restaurant	Bao Lam	S
14-Dec-07	Cobra		Wine	1,600,000	Restaurant	Dinh Quan	S
10-Dec-07	Crocodile		0.3m indiv	230,000	Wildlife farm	Thong Nhat	B
11-Dec-07	Crocodile		0.4m indiv	500,000	wildlife farm	Vinh Cuu	B
14-Dec-07	Crocodile		0.8-1.2m indiv	500,000 - 700,000	Wildlife farm	Trang Bom	B
14-Dec-07	Crocodile		0.8-1.2m indiv	600,000 - 800,000	Wildlife farm	Trang Bom	B
10-Dec-07	Crocodile		0.8-1m indiv	500,000 - 800,000	Wildlife farm	Trang Bom	S
12-Dec-07	Crocodile		1-1.2m indiv	700,000 - 800,000	Wildlife farm	Trang Bom	B
10-Dec-07	Crocodile		Indv	200,00 - 250,000	Wildlife farm	Thong Nhat	B
11-Dec-07	Crocodile		Indv	500,000	wildlife farm	Vinh Cuu	B
16-Dec-07	Crocodile		Meat (kg)	120,000	Wildlife farm	Long Thanh	S
10-Dec-07	Crocodile		Meat (kg)	70,000	Wildlife farm	Thong Nhat	S
10-Dec-07	Crocodile		Meat (kg)	70,000 - 80,000	Wildlife farm	Thong Nhat	S
16-Dec-07	Cu dat		Indv	150,000	Restaurant	Trang Bom	S
17-Dec-07	Cu dat		Indv	150,000	Restaurant	Trang Bom	S



16-Dec-07	Da Da		Indv	250,000	Restaurant	Trang Bom	S
16-Dec-07	Da Da		Meat (kg)	300,000	Restaurant	Trang Bom	S
12-Dec-07	Bamboo Rat		Meat (kg)	120,000	Wholesale trader	Bao Lam	B
13-Dec-07	Bamboo Rat		Meat (kg)	130,000	Wholesale trader	Bao Lam	B
12-Dec-07	Bamboo Rat		Meat (kg)	180,000	Restaurant	Dinh Quan	B
11-Dec-07	Bamboo Rat		Meat (kg)	90,000	Restaurant	Da Teh	B
9-Dec-07	Bamboo Rat		Meat (kg)	105,000	Restaurant	Dam Rong	B
13-Dec-07	Bamboo Rat		Meat (kg)	100,000	Wholesale trader	Dam Rong	S
11-Dec-07	Bamboo Rat		Meat (kg)	270,000	Restaurant	Dinh Quan	S
12-Dec-07	Bamboo Rat		Meat (kg)	270,000	Restaurant	Dinh Quan	S
8-Dec-07	Bamboo Rat i		Meat (kg)	180,000	Restaurant	Vinh Cuu	S
8-Dec-07	Bamboo Rat		Meat (kg)	220,000	Restaurant	Vinh Cuu	S
13-Dec-07	Bamboo Rat		Meat (kg)	250,000	Restaurant	Vinh Cuu	S
11-Dec-07	Bamboo Rat		Meat (kg)	105,000	Restaurant	Dam Rong	S
12-Dec-07	Bamboo Rat		Meat (kg)	250,000	Restaurant	Di Linh	S
13-Dec-07	Bamboo Rat		Meat (kg)	250,000	Restaurant	Di Linh	S
9-Dec-08	Bamboo Rat		Meat (kg)	180,000	Restaurant	Don Duong	S
12-Dec-07	Bamboo Rat		Plate	70,000	Restaurant	Vinh Cuu	S
12-Dec-07	Elephant		Ivory	100,000,000	Wholesale trader	Da Huoi	S
11-Dec-07	Ga nuoc		Whole animal	70,000	Restaurant	Dinh Quan	S
10-Dec-07	Gecko		Indv	4,000 - 7,000	Wholesale trader	Xuan Loc	S
10-Dec-07	Gecko		Meat (kg)	100,000	Wholesale trader	Xuan Loc	S
12-Dec-07	Gecko		Whole animal	70,000	TCM pharmacy	Dinh Quan	S
9-Dec-07	Giant asian pond turtle		Meat (kg)	400,000	Restaurant	TP Da Lat	S
16-Dec-07	Hill myna		Indv	700,000 - 5,000,000	Pet shop	TX Bao Loc	S
9-Dec-08	Hoang		Meat (kg)	200,000 - 250,000	Restaurant	Don Duong	S
15-Dec-07	Khuou mai		Indv	50,000 - 60,000	Pet shop	Xuan Loc	S
15-Dec-07	Khuou trong		Indv	200,000	Pet shop	Xuan Loc	S
9-Dec-07	Langur		4 or 5 portions	200,000 - 350,000	Restaurant	Xuan Loc	S
8-Dec-07	Langur		Dry meat (kg)	600,000	Restaurant	Vinh Cuu	S
8-Dec-07	Langur		Meat (kg)	210,000	Restaurant	Vinh Cuu	S
12-Dec-07	Langur		Wine (lit)	12,500	Restaurant	Xuan Loc	S
12-Dec-07	Macaque		Bone (100g)	1,500,000	Wholesale trader	Da Huoi	S
13-Dec-07	Macaque		Meat (kg)	240,000 - 350,000	Wholesale trader	Tan Phu	B

13-Dec-07	Macaque		Meat (kg)	80,000	Wholesale trader	Dinh Quan	S
13-Dec-07	Monitor Lizard		Meat (kg)	220,000	Wholesale trader	Tan Phu	B
15-Dec-07	Monitor Lizard		Meat (kg)	500,000	Wildlife farm	Trang Bom	B
11-Dec-07	Monitor Lizard		Meat (kg)	200,000	Restaurant	Da Teh	B
9-Dec-07	Monitor Lizard		Meat (kg)	260,000	Wholesale trader	Tan Phu	S
9-Dec-07	Monitor Lizard		Meat (kg)	245,000	Wholesale trader	Tan Phu	S
14-Dec-07	Monitor Lizard		Meat (kg)	230,000	Wholesale trader	Tan Phu	S
12-Dec-07	Mouse-deer		Meat (kg)	80,000 - 90,000	Wholesale trader	Bao Lam	B
13-Dec-07	Mouse-deer		Meat (kg)	90,000 - 100,000	Wholesale trader	Bao Lam	B
15-Dec-07	Mouse-deer		Meat (kg)	110,000	Wholesale trader	Bao Lam	B
13-Dec-07	Mouse-deer		Meat (kg)	100,000	Wholesale trader	Duc Trong	B
11-Dec-07	Mouse-deer		Meat (kg)	70,000	Restaurant	Da Teh	B
9-Dec-07	Mouse-deer		Meat (kg)	70,000	Restaurant	Dam Rong	B
13-Dec-07	Mouse-deer		Meat (kg)	90,000	Restaurant	Lac Duong	B
9-Dec-07	Mouse-deer		Meat (kg)	75,000	Wholesale trader	Tan Phu	S
13-Dec-07	Mouse-deer		Meat (kg)	100,000	Wholesale trader	Tan Phu	S
10-Dec-07	Mouse-deer		Meat (kg)	160,000	Wholesale trader	Xuan Loc	S
11-Dec-07	Mouse-deer		Meat (kg)	80,000 - 100,000	Wholesale trader	Bao Lam	S
11-Dec-07	Mouse-deer		Meat (kg)	70,000	Wholesale trader	Da Teh	S
13-Dec-07	Mouse-deer		Meat (kg)	70,000	Wholesale trader	Dam Rong	S
13-Dec-07	Mouse-deer		Meat (kg)	150,000	Wholesale trader	Duc Trong	S
11-Dec-07	Mouse-deer		Meat (kg)	180,000	Wholesale trader	Lam Ha	S
11-Dec-07	Mouse-deer	1.5 - 2	Meat (kg)	150,000 - 170,000	Wholesale trader	TP Da Lat	S
11-Dec-07	Mouse-deer		Meat (kg)	100,000	Restaurant	Thong Nhat	S
8-Dec-07	Mouse-deer		Meat (kg)	170,000	Restaurant	Vinh Cuu	S
13-Dec-07	Mouse-deer		Meat (kg)	240,000	Restaurant	Vinh Cuu	S
11-Dec-07	Mouse-deer		Meat (kg)	250,000 - 350,000	Restaurant	Xuan Loc	S
12-Dec-07	Mouse-deer		Meat (kg)	180,000 - 190,000	Restaurant	Xuan Loc	S
10-Dec-07	Mouse-deer		Meat (kg)	90,000 - 100,000	Restaurant	Bao Lam	S
10-Dec-07	Mouse-deer		Meat (kg)	95,000	Restaurant	Bao Lam	S
11-Dec-07	Mouse-deer		Meat (kg)	90,000 - 100,000	Restaurant	Bao Lam	S
11-Dec-07	Mouse-deer		Meat (kg)	60,000	Restaurant	Dam Rong	S
14-Dec-07	Mouse-deer		Meat (kg)	70,000	Restaurant	Dam Rong	S
13-Dec-07	Mouse-deer		Meat (kg)	100,000	Restaurant	Di Linh	S

12-Dec-07	Mouse-deer		Meat (kg)	180,000	Restaurant	Lac Duong	S
10-Dec-07	Mouse-deer		Meat (kg)	350,000	Restaurant	TP Da Lat	S
14-Dec-07	Mouse-deer		Meat (kg)	300,000	Restaurant	TX Bao Loc	S
14-Dec-07	Mouse-deer		Meat (kg)	250,000	Restaurant	TX Bao Loc	S
12-Dec-07	Mouse-deer		Plate	60,000	Restaurant	Vinh Cuu	S
12-Dec-07	Mouse-deer		Plate	60,000 - 100,000	Restaurant	Xuan Loc	S
9-Dec-07	Myna		Indv	60,000	Pet shop	Duc Trong	S
16-Dec-07	Myna		Indv	300,000 - 3,000,000	Pet shop	TX Bao Loc	S
12-Dec-07	Nai duong		Horn	15,000,000	Wholesale trader	Da Huoi	S
9-Dec-07	Oriental Magpie Robin		Indv	80,000	Pet shop	Duc Trong	S
16-Dec-07	Oriental Magpie Robin		Indv	70,000 - 80,000	Pet shop	TX Bao Loc	S
15-Dec-07	Oriental Magpie Robin		Indv	50,000 - 60,000	Pet shop	Xuan Loc	S
15-Dec-07	Oriental Magpie Robin		Indv	30,000 - 35,000	Pet shop	Xuan Loc	S
14-Dec-07	Ostrich		Indv	6,000,000	Wildlife farm	Duc Trong	S
14-Dec-07	Ostrich		Meat (kg)	250,000	Wildlife farm	Duc Trong	S
10-Dec-07	Pangolin	5	Indv	1,500,000	Wholesale trader	Xuan Loc	S
12-Dec-07	Pangolin		Indv	1,200,000 - 1,400,000	Restaurant	Xuan Loc	S
10-Dec-07	Pangolin	1	Indv	2,500,000	Restaurant	TP Da Lat	S
12-Dec-07	Pangolin		Meat (kg)	1,000,000	Wholesale trader	Bao Lam	B
13-Dec-07	Pangolin		Meat (kg)	1,200,000 - 1,400,000	Wholesale trader	Bao Lam	B
11-Dec-07	Pangolin		Meat (kg)	1,200,000	Restaurant	Da Teh	B
11-Dec-07	Pangolin		Meat (kg)	1,500,000 - 1,700,000	Wholesale trader	Bao Lam	S
10-Dec-07	Pangolin		Meat (kg)	1,700,000	Wholesale trader	Da Huoi	S
12-Dec-07	Pangolin		Meat (kg)	1,800,000	Wholesale trader	Da Huoi	S
11-Dec-07	Pangolin		Meat (kg)	1,000,000	Wholesale trader	Da Teh	S
11-Dec-07	Pangolin		Meat (kg)	1,600,000	Restaurant	Bao Lam	S
12-Dec-07	Pangolin		Meat (kg)	1,700,000	Restaurant	Da Huoi	S
10-Dec-07	Pangolin		Meat (kg)	350,000	Restaurant	Lac Duong	S
12-Dec-07	Pangolin		Meat (kg)	450,000	Restaurant	Lac Duong	S
10-Dec-07	Pangolin		Meat (kg)	2,200,000	Restaurant	TP Da Lat	S
14-Dec-07	Pangolin		Meat (kg)	1,700,000	Restaurant	TX Bao Loc	S
16-Dec-07	Pangolin		Meat (kg)	2,000,000	Restaurant	TX Bao Loc	S
12-Dec-07	Pangolin		Scale (kg)	400,000	TCM pharmacy	Dinh Quan	S
16-Dec-07	Parrot		Indv	500,000	Pet shop	TX Bao Loc	S

12-Dec-07	Porcupine		Breeding pair	6,500,000	wildlife farm	Vinh Cuu	B
10-Dec-07	Porcupine		Breeding pair	7,000,000	Wildlife farm	Long Thanh	S
13-Dec-07	Porcupine		Breeding pair	6,500,000	Wildlife farm	Long Thanh	S
13-Dec-07	Porcupine		Breeding pair	6,500,000	Wildlife farm	Long Thanh	S
10-Dec-07	Porcupine		Breeding pair	16,000,000	Wildlife farm	Long Thanh	S
16-Dec-07	Porcupine		Couple	7,000,000	Wildlife farm	Thong Nhat	B
16-Dec-07	Porcupine		Couple	16,000,000	Wildlife farm	Thong Nhat	B
16-Dec-07	Porcupine	20	Couple	8,000,000	Wildlife farm	Trang Bom	B
15-Dec-07	Porcupine		Couple	8,000,000	Wildlife farm	Xuan Loc	S
15-Dec-07	Porcupine	2	Couple	6,500,000	Wildlife farm	Bao Lam	S
10-Dec-07	Porcupine		Indv	1,500,000	Wildlife farm	Dam Rong	B
14-Dec-07	Porcupine		Indv	5,000,000 - 7,000,000	Wildlife farm	Lam Ha	B
10-Dec-07	Porcupine		Indv	3,500,000 - 7,000,000	Wholesale trader	Xuan Loc	S
10-Dec-07	Porcupine	3kg	Indv	2,500,000	Wholesale trader	Da Huoi	S
12-Dec-07	Porcupine	3	Indv	2,500,000	Wholesale trader	Da Huoi	S
12-Dec-07	Porcupine	< 2	Live (kg)	300,000 - 400,000	Wholesale trader	Bao Lam	B
12-Dec-07	Porcupine	> 2	Live (kg)	150,000	Wholesale trader	Bao Lam	B
13-Dec-07	Porcupine		Live (kg)	200,000 - 220,000	Wholesale trader	Bao Lam	B
11-Dec-07	Porcupine		Live (kg)	200,000 - 220,000	Wholesale trader	Bao Lam	S
12-Dec-07	Porcupine		Meat (kg)	120,000	Wholesale trader	Bao Lam	B
12-Dec-07	Porcupine		Meat (kg)	130,000	Wholesale trader	Bao Lam	B
13-Dec-07	Porcupine		Meat (kg)	130,000	Wholesale trader	Bao Lam	B
13-Dec-07	Porcupine		Meat (kg)	130,000	Wholesale trader	Bao Lam	B
11-Dec-07	Porcupine		Meat (kg)	300,000	Wildlife farm	Trang Bom	B
15-Dec-07	Porcupine		Meat (kg)	350,000	Wildlife farm	Trang Bom	B
16-Dec-07	Porcupine		Meat (kg)	500,000	Wildlife farm	Trang Bom	B
12-Dec-07	Porcupine		Meat (kg)	1,500,000	wildlife farm	Vinh Cuu	B
10-Dec-07	Porcupine		Meat (kg)	400,000 - 450,000	Wholesale trader	Xuan Loc	S
11-Dec-07	Porcupine		Meat (kg)	120,000 - 130,000	Wholesale trader	Bao Lam	S
13-Dec-07	Porcupine		Meat (kg)	150,000 - 200,000	Wholesale trader	Dam Rong	S
11-Dec-07	Porcupine		Meat (kg)	300,000	Wholesale trader	Lam Ha	S
9-Dec-07	Porcupine		Meat (kg)	420,000	Restaurant	Long Thanh	S
11-Dec-07	Porcupine		Meat (kg)	600,000	Restaurant	Nhon Trach	S
10-Dec-07	Porcupine		Meat (kg)	200,000	Restaurant	Thong Nhat	S

11-Dec-07	Porcupine		Meat (kg)	150,000	Restaurant	Thong Nhat	S
16-Dec-07	Porcupine		Meat (kg)	220,000	Restaurant	Trang Bom	S
9-Dec-07	Porcupine		Meat (kg)	450,000 - 500,000	Restaurant	Xuan Loc	S
12-Dec-07	Porcupine		Meat (kg)	200,000	Restaurant	Xuan Loc	S
10-Dec-07	Porcupine		Meat (kg)	120,000 - 150,000	Restaurant	Bao Lam	S
10-Dec-07	Porcupine		Meat (kg)	150,000	Restaurant	Bao Lam	S
11-Dec-07	Porcupine		Meat (kg)	250,000	Restaurant	Da Huoi	S
11-Dec-07	Porcupine		Meat (kg)	250,000	Restaurant	Dam Rong	S
13-Dec-07	Porcupine		Meat (kg)	220,000	Restaurant	Di Linh	S
12-Dec-07	Porcupine		Meat (kg)	320,000	Restaurant	Lac Duong	S
12-Dec-07	Porcupine		Meat (kg)	300,000	Restaurant	Lam Ha	S
9-Dec-07	Porcupine		Meat (kg)	200,000	Restaurant	TP Da Lat	S
10-Dec-07	Porcupine		Meat (kg)	280,000	Restaurant	TP Da Lat	S
10-Dec-07	Porcupine		Meat (kg)	250,000	Restaurant	TP Da Lat	S
10-Dec-07	Porcupine		Meat (kg)	280,000	Restaurant	TP Da Lat	S
14-Dec-07	Porcupine		Meat (kg)	400,000	Restaurant	TX Bao Loc	S
11-Dec-07	Porcupine	0.2 - 0.3	Plate	60,000	Restaurant	Xuan Loc	S
12-Dec-07	Porcupine		Plate	50,000 - 70,000	Restaurant	Xuan Loc	S
13-Dec-07	Porcupine		Plate	70,000 - 90,000	Restaurant	Xuan Loc	S
9-Dec-07	Porcupine	(wet season)	Stomach (set)	400,000	Wholesale trader	Xuan Loc	S
9-Dec-07	Porcupine	(dry season)	Stomach (set)	300,000	Wholesale trader	Xuan Loc	S
12-Dec-07	Porcupine		Whole animal	150,000 - 350,000	Restaurant	Long Khanh	S
12-Dec-07	Python	50	Indv	5,000,000	Wholesale trader	Da Huoi	S
13-Dec-07	Python		Meat (kg)	160,000	Wholesale trader	Tan Phu	B
16-Dec-07	Rabbit		Meat (kg)	160,000	Restaurant	Trang Bom	S
10-Dec-07	Rabbit		Skin (kg)	70,000 - 80,000	Wildlife farm	Trang Bom	S
10-Dec-07	Sambar		Breeding Indv	10,000,000	wildlife farm	Vinh Cuu	S
10-Dec-07	Sambar		Breeding Indv	10,000,000	wildlife farm	Vinh Cuu	S
12-Dec-07	Sambar		Dry meat (kg)	300,000	Wholesale trader	Da Huoi	S
8-Dec-07	Sambar		Dry meat (kg)	300,000	Restaurant	Vinh Cuu	S
8-Dec-07	Sambar		Indv	20- 30,000,000	Wildlife farm	Trang Bom	B
9-Dec-07	Sambar		Indv	15- 25,000,000	Wildlife farm	Trang Bom	B
9-Dec-07	Sambar		Indv	20- 25,000,000	Wildlife farm	Trang Bom	B
15-Dec-07	Sambar		Indv	20,000,000	Wildlife farm	Trang Bom	B

15-Dec-07	Sambar		Indv	17,000,000	Wildlife farm	Trang Bom	B
15-Dec-07	Sambar		Indv	15,000,000	Wildlife farm	Trang Bom	B
15-Dec-07	Sambar		Indv	15,000,000	Wildlife farm	Trang Bom	B
15-Dec-07	Sambar		Indv	20,000,000	Wildlife farm	Trang Bom	B
15-Dec-07	Sambar		Indv	10- 15,000,000	Wildlife farm	Xuan Loc	B
16-Dec-07	Sambar		Indv	15,000,000	Wildlife farm	Xuan Loc	B
16-Dec-07	Sambar		Indv	16- 35,000,000	Wildlife farm	Xuan Loc	B
10-Dec-07	Sambar		Indv	16,000,000	Wildlife farm	Long Thanh	S
12-Dec-07	Sambar		Meat (kg)	70,000 – 80,000	Wholesale trader	Bao Lam	B
12-Dec-07	Sambar		Meat (kg)	80,000 – 90,000	Wholesale trader	Bao Lam	B
13-Dec-07	Sambar		Meat (kg)	80,000	Wholesale trader	Bao Lam	B
13-Dec-07	Sambar		Meat (kg)	80,000	Wholesale trader	Bao Lam	B
15-Dec-07	Sambar		Meat (kg)	90,000	Wholesale trader	Bao Lam	B
14-Dec-07	Sambar		Meat (kg)	70,000	Restaurant	Dinh Quan	B
11-Dec-07	Sambar		Meat (kg)	90,000	Restaurant	Da Teh	B
9-Dec-07	Sambar		Meat (kg)	60,000	Restaurant	Dam Rong	B
11-Dec-07	Sambar		Meat (kg)	80,000 - 100,000	Wholesale trader	Bao Lam	S
10-Dec-07	Sambar		Meat (kg)	150,000	Wholesale trader	Da Huoi	S
11-Dec-07	Sambar		Meat (kg)	80,000	Wholesale trader	Da Teh	S
11-Dec-07	Sambar		Meat (kg)	200,000	Wholesale trader	Lam Ha	S
9-Dec-07	Sambar		Meat (kg)	180,000 - 200,000	Restaurant	Long Thanh	S
10-Dec-07	Sambar		Meat (kg)	190,000	Restaurant	Trang Bom	S
16-Dec-07	Sambar		Meat (kg)	180,000	Restaurant	Trang Bom	S
16-Dec-07	Sambar		Meat (kg)	200,000	Restaurant	Trang Bom	S
17-Dec-07	Sambar		Meat (kg)	250,000	Restaurant	Trang Bom	S
8-Dec-07	Sambar		Meat (kg)	170,000	Restaurant	Vinh Cuu	S
12-Dec-07	Sambar		Meat (kg)	180,000	Restaurant	Vinh Cuu	S
9-Dec-07	Sambar		Meat (kg)	200,000	Restaurant	Xuan Loc	S
12-Dec-07	Sambar		Meat (kg)	150,000 - 170,000	Restaurant	Xuan Loc	S
10-Dec-07	Sambar		Meat (kg)	110,000	Restaurant	Bao Lam	S
11-Dec-07	Sambar		Meat (kg)	110,000	Restaurant	Bao Lam	S
11-Dec-07	Sambar		Meat (kg)	170,000	Restaurant	Da Huoi	S
12-Dec-07	Sambar		Meat (kg)	150,000	Restaurant	Da Huoi	S
11-Dec-07	Sambar		Meat (kg)	50,000	Restaurant	Dam Rong	S

12-Dec-07	Sambar		Meat (kg)	170,000	Restaurant	Di Linh	S
10-Dec-07	Sambar		Meat (kg)	300,000	Restaurant	Lac Duong	S
11-Dec-07	Sambar		Meat (kg)	300,000	Restaurant	Lac Duong	S
9-Dec-07	Sambar		Meat (kg)	130,000	Restaurant	TP Da Lat	S
10-Dec-07	Sambar		Meat (kg)	130,000	Restaurant	TP Da Lat	S
10-Dec-07	Sambar		Meat (kg)	120,000	Restaurant	TP Da Lat	S
15-Dec-07	Sambar		Meat (kg)	270,000	Restaurant	TP Da Lat	S
14-Dec-07	Sambar		Meat (kg)	150,000	Restaurant	TX Bao Loc	S
15-Dec-07	Sambar		Meat (kg)	150,000	Restaurant	TX Bao Loc	S
16-Dec-07	Sambar		Meat (kg)	170,000	Restaurant	TX Bao Loc	S
11-Dec-07	Sambar		Plate	60,000 - 100,000	Restaurant	Xuan Loc	S
10-Dec-07	Sambar		Vevet (kg)	6,000,000	Wildlife farm	Long Thanh	S
8-Dec-07	Sambar		Vevet (kg)	5,000,000	Wildlife farm	Trang Bom	S
9-Dec-07	Sambar		Vevet (kg)	5,000,000	Wildlife farm	Trang Bom	S
10-Dec-07	Sambar		Vevet (kg)	3,500,000 - 4,000,000	wildlife farm	Vinh Cuu	S
10-Dec-07	Sambar		Vevet (kg)	3,500,000 - 4,000,000	wildlife farm	Vinh Cuu	S
15-Dec-07	Sambar		Vevet (kg)	5,000,000	Wildlife farm	Xuan Loc	S
16-Dec-07	Sambar		Vevet (kg)	6,000,000 - 6,500,000	Wildlife farm	Xuan Loc	S
16-Dec-07	Sambar		Vevet (kg)	5,000,000 - 6,500,000	Wildlife farm	Xuan Loc	S
10-Dec-07	Sika deer		Breeding Indv	8,000,000	wildlife farm	Vinh Cuu	S
9-Dec-07	Sika deer		Couple	15 - 24,000,000	Wildlife farm	Trang Bom	B
10-Dec-07	Sika Deer		Couple	26,000,000	Wildlife farm	Long Thanh	S
9-Dec-07	Sika deer		Couple	12,000,000	Wildlife farm	Trang Bom	S
8-Dec-07	Sika deer		Indv	17- 24,000,000	Wildlife farm	Trang Bom	B
9-Dec-07	Sika deer		Indv	18- 22,000,000	Wildlife farm	Trang Bom	B
10-Dec-07	Sika Deer		Vevet (kg)	7,000,000	Wildlife farm	Long Thanh	S
8-Dec-07	Sika Deer		Vevet (kg)	9,000,000	Wildlife farm	Trang Bom	S
9-Dec-07	Sika deer		Vevet (kg)	9,000,000	Wildlife farm	Trang Bom	S
10-Dec-07	Sika deer		Vevet (kg)	6,000,000	wildlife farm	Vinh Cuu	S
10-Dec-07	Sika deer		Vevet (kg)	6,000,000	wildlife farm	Vinh Cuu	S
10-Dec-07	Snake		Indv	220,000	Wholesale trader	Xuan Loc	S
9-Dec-07	Snake		Meat (kg)	70,000	Wholesale trader	Dinh Quan	B
13-Dec-07	Snake		Meat (kg)	120,000 - 140,000	Wholesale trader	Bao Lam	B
13-Dec-07	Snake		Meat (kg)	90,000 - 150,000	Wholesale trader	Bao Lam	B

9-Dec-07	Snake		Meat (kg)	150,000	Restaurant	Dam Rong	B
9-Dec-07	Snake		Meat (kg)	110,000	Wholesale trader	Dinh Quan	S
9-Dec-07	Snake		Meat (kg)	320,000	Wholesale trader	Xuan Loc	S
10-Dec-07	Snake		Meat (kg)	200,000 - 230,000	Wholesale trader	Xuan Loc	S
11-Dec-07	Snake		Meat (kg)	110,000 - 250,000	Wholesale trader	Bao Lam	S
13-Dec-07	Snake		Meat (kg)	120,000	Wholesale trader	Dam Rong	S
10-Dec-07	Snake		Meat (kg)	300,000	Restaurant	Thong Nhat	S
11-Dec-07	Snake		Meat (kg)	400,000 - 600,000	Restaurant	Xuan Loc	S
11-Dec-07	Snake		Meat (kg)	110,000 - 180,000	Restaurant	Bao Lam	S
11-Dec-07	Snake		Meat (kg)	350,000	Restaurant	Dam Rong	S
15-Dec-07	Snake		Meat (kg)	300,000	Restaurant	Di Linh	S
14-Dec-07	Snake		Meat (kg)	500,000	Restaurant	TX Bao Loc	S
16-Dec-07	Snake		Meat (kg)	450,000	Restaurant	TX Bao Loc	S
12-Dec-07	Snake		Skin (set)	20,000	TCM pharmacy	Dinh Quan	S
11-Dec-07	Snake	7	Whole animal	700,000	Restaurant	Dinh Quan	B
11-Dec-07	Snake	0.7	Whole animal	700,000	Wholesale trader	Dinh Quan	S
12-Dec-07	Snake		Whole animal	150,000 - 350,000	Restaurant	Long Khanh	S
12-Dec-07	Snake		Wine (lit)	6,500	Restaurant	Xuan Loc	S
9-Dec-08	Snake		Wine (lit)	6,000	Restaurant	Don Duong	S
12-Dec-07	Snake sp		Meat (kg)	300,000	Restaurant	Lam Ha	S
14-Dec-07	Soft-shell Turtle		Meat (kg)	330,000	Wholesale trader	Tan Phu	S
12-Dec-07	Soft-shell Turtle		Meat (kg)	300,000	Wildlife farm	Trang Bom	S
12-Dec-07	Soft-shell Turtle		Meat (kg)	250,000	Restaurant	Duc Trong	S
12-Dec-07	Soft-shell Turtle		Meat (kg)	200,000	Restaurant	Lam Ha	S
11-Dec-07	Squirrel		Indv	40,000	Restaurant	Thong Nhat	S
13-Dec-07	Squirrel		Meat (kg)	35,000 - 40,000	Restaurant	Long Khanh	S
16-Dec-07	Squirrel		Meat (kg)	35,000	Restaurant	Long Khanh	S
16-Dec-07	Squirrel		Meat (kg)	35,000	Restaurant	Long Khanh	S
13-Dec-07	Squirrel		Whole animal	30,000	Restaurant	Dinh Quan	B
13-Dec-07	Squirrel		Whole animal	30,000	Wholesale trader	Dinh Quan	S
13-Dec-07	Squirrel		Whole animal	70,000	Restaurant	Dinh Quan	S
12-Dec-07	Tiger		Bone (100g)	7,000,000	Wholesale trader	Da Huoi	S
10-Dec-07	Tiger		Nail	3,000,000	Souvenir shop	Lac Duong	S
15-Dec-07	Tiger		Nail	700,000	Souvenir shop	TX Bao Loc	S



9-Dec-07	Wattle-neck softshell turtle		Meat (kg)	300,000	Restaurant	TP Da Lat	S
12-Dec-07	Wild cat		Bone (100g)	300,000	Wholesale trader	Da Huoai	S
13-Dec-07	Wild cat		Meat (kg)	90,000	Restaurant	Di Linh	S
15-Dec-07	Wild cat		Meat (kg)	300,000	Restaurant	Di Linh	S
12-Dec-07	Wild chicken		Meat (kg)	100,000	Restaurant	Dinh Quan	B
13-Dec-07	Wild chicken		Meat (kg)	70,000	Wholesale trader	Dinh Quan	S
9-Dec-07	Wild chicken		Meat (kg)	80,000	Wholesale trader	Tan Phu	S
13-Dec-07	Wild chicken		Meat (kg)	100,000	Wholesale trader	Tan Phu	S
11-Dec-07	Wild chicken		Meat (kg)	150,000	Restaurant	Dinh Quan	S
12-Dec-07	Wild chicken		Meat (kg)	150,000	Restaurant	Dinh Quan	S
12-Dec-07	Wild chicken		Whole animal	200,000	Restaurant	Long Khanh	S
10-Dec-07	Wild pig		Fang	500,000 - 700,000	Souvenir shop	Lac Duong	S
15-Dec-07	Wild pig		Fang	300,000	Souvenir shop	TX Bao Loc	S
12-Dec-07	Wild pig	2	Meat (kg)	350,000	Restaurant	Xuan Loc	B
12-Dec-07	Wild pig		Meat (kg)	80,000 - 90,000	Wholesale trader	Bao Lam	B
12-Dec-07	Wild pig		Meat (kg)	90,000	Wholesale trader	Bao Lam	B
13-Dec-07	Wild pig		Meat (kg)	90,000	Wholesale trader	Bao Lam	B
13-Dec-07	Wild pig		Meat (kg)	85,000	Wholesale trader	Bao Lam	B
15-Dec-07	Wild pig		Meat (kg)	80,000 - 90,000	Wholesale trader	Bao Lam	B
13-Dec-07	Wild pig		Meat (kg)	100,000	Wholesale trader	Duc Trong	B
15-Dec-07	Wild pig		Meat (kg)	270,000	Wildlife farm	Trang Bom	B
14-Dec-07	Wild pig		Meat (kg)	50,000	Restaurant	Dinh Quan	B
11-Dec-07	Wild pig		Meat (kg)	90,000	Restaurant	Da Teh	B
9-Dec-07	Wild pig		Meat (kg)	95,000	Restaurant	Dam Rong	B
10-Dec-07	Wild pig		Meat (kg)	100,000 - 120,000	Wholesale trader	Xuan Loc	S
11-Dec-07	Wild pig		Meat (kg)	90,000 - 110,000	Wholesale trader	Bao Lam	S
10-Dec-07	Wild pig		Meat (kg)	150,000	Wholesale trader	Da Huoai	S
12-Dec-07	Wild pig		Meat (kg)	1,500,000	Wholesale trader	Da Huoai	S
11-Dec-07	Wild pig		Meat (kg)	80,000	Wholesale trader	Da Teh	S
13-Dec-07	Wild pig		Meat (kg)	60,000 - 70,000	Wholesale trader	Dam Rong	S
13-Dec-07	Wild pig		Meat (kg)	120,000	Wholesale trader	Duc Trong	S
11-Dec-07	Wild pig		Meat (kg)	180,000	Wholesale trader	Lam Ha	S
11-Dec-07	Wild pig		Meat (kg)	150,000	Wildlife farm	Trang Bom	S
9-Dec-07	Wild pig		Meat (kg)	250,000	Restaurant	Long Thanh	S

11-Dec-07	Wild pig		Meat (kg)	150,000	Restaurant	Nhon Trach	S
10-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Thong Nhat	S
11-Dec-07	Wild pig		Meat (kg)	120,000	Restaurant	Thong Nhat	S
11-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Thong Nhat	S
10-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Trang Bom	S
16-Dec-07	Wild pig		Meat (kg)	160,000	Restaurant	Trang Bom	S
16-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Trang Bom	S
17-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Trang Bom	S
8-Dec-07	Wild pig		Meat (kg)	200,000	Restaurant	Vinh Cuu	S
12-Dec-07	Wild pig		Meat (kg)	220,000	Restaurant	Vinh Cuu	S
13-Dec-07	Wild pig		Meat (kg)	220,000	Restaurant	Vinh Cuu	S
9-Dec-07	Wild pig		Meat (kg)	150,000	Restaurant	Xuan Loc	S
12-Dec-07	Wild pig		Meat (kg)	150,000 - 170,000	Restaurant	Xuan Loc	S
10-Dec-07	Wild pig		Meat (kg)	100,000 - 110,000	Restaurant	Bao Lam	S
10-Dec-07	Wild pig		Meat (kg)	100,000	Restaurant	Bao Lam	S
11-Dec-07	Wild pig		Meat (kg)	150,000	Restaurant	Bao Lam	S
11-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Da Huoi	S
11-Dec-07	Wild pig		Meat (kg)	200,000	Restaurant	Da Huoi	S
12-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Da Huoi	S
11-Dec-07	Wild pig		Meat (kg)	95,000	Restaurant	Dam Rong	S
14-Dec-07	Wild pig		Meat (kg)	90,000	Restaurant	Dam Rong	S
12-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	Di Linh	S
13-Dec-07	Wild pig		Meat (kg)	200,000	Restaurant	Di Linh	S
15-Dec-07	Wild pig		Meat (kg)	220,000	Restaurant	Di Linh	S
10-Dec-07	Wild pig		Meat (kg)	150,000	Restaurant	Don Duong	S
9-Dec-08	Wild pig		Meat (kg)	200,000	Restaurant	Don Duong	S
10-Dec-07	Wild pig		Meat (kg)	120,000	Restaurant	Duc Trong	S
10-Dec-07	Wild pig		Meat (kg)	150,000	Restaurant	Lac Duong	S
11-Dec-07	Wild pig		Meat (kg)	170,000	Restaurant	Lac Duong	S
12-Dec-07	Wild pig		Meat (kg)	130,000	Restaurant	Lac Duong	S
12-Dec-07	Wild pig		Meat (kg)	150,000	Restaurant	Lac Duong	S
9-Dec-07	Wild pig		Meat (kg)	170,000	Restaurant	TP Da Lat	S
10-Dec-07	Wild pig		Meat (kg)	220,000	Restaurant	TP Da Lat	S
10-Dec-07	Wild pig		Meat (kg)	200,000	Restaurant	TP Da Lat	S

10-Dec-07	Wild pig		Meat (kg)	220,000	Restaurant	TP Da Lat	S
15-Dec-07	Wild pig		Meat (kg)	320,000	Restaurant	TP Da Lat	S
14-Dec-07	Wild pig		Meat (kg)	180,000	Restaurant	TX Bao Loc	S
14-Dec-07	Wild pig		Meat (kg)	220,000	Restaurant	TX Bao Loc	S
15-Dec-07	Wild pig		Meat (kg)	170,000	Restaurant	TX Bao Loc	S
16-Dec-07	Wild pig		Meat (kg)	200,000	Restaurant	TX Bao Loc	S
12-Dec-07	Wild pig		Plate	40,000 - 60,000	Restaurant	Xuan Loc	S
12-Dec-07	Wild pig		Plate	60,000 - 80,000	Restaurant	Xuan Loc	S
13-Dec-07	Wild pig		Plate	40,000 - 50,000	Restaurant	Xuan Loc	S
12-Dec-07	Wild pig		Whole animal	150,000 - 350,000	Restaurant	Long Khanh	S

