

Observations on Wildlife Trade in Viet Nam

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*Wild animals and their products are widely available in markets throughout Viet Nam, especially in Ho Chi Minh City (formerly Saigon). In 1989, the Ministry of Forestry brought in a regulation prohibiting killing and trade in certain animal species, but this is not enforced. Unless the Vietnamese vigorously enforce their laws, endangered species such as the Javan Rhino *Rhinoceros sondaicus*, White-headed Leaf Monkey *Trachypithecus leucocephalus*, Douc Langur *Pygathrix nemaeus*, Siamese Eld's Deer *Cervus eldi siamensis*, and Roosevelt's Muntjak *Muntiacus rooseveltorum*, may be extirpated in the wild because of habitat destruction and their use in commercial trade.*

On behalf of the World Wide Fund for Nature (WWF) and IUCN - The World Conservation Union, and with the support and co-operation of Professor Vo Quy and other staff of the University of Hanoi, the author first visited Viet Nam in March 1990 in order to carry out a study of the wildlife products offered for retail sale. The survey focused on Hanoi, but visits were made to Ho Chi Minh City. In January 1991, the author returned to Ho Chi Minh City and other areas in the southern part of the country.

INTRODUCTION

Viet Nam is one of the largest countries in Southeast Asia, extending in a north-south direction for 1368 km. Excluding the coastal plain, the Red River delta in the north and the Mekong delta in the south, much of the remaining topography consists of mountains and plateaux, which in many parts are forested. Millions of trees were destroyed during the Viet Nam war, and today there is a need to clear yet more land for crops to support the expanding human population of about 69 million. The percentage of the country covered in forest declined from 44% in 1943 to 24% in 1990. Perhaps only 10% of relatively primary forest remains (J. MacKinnon, pers. comm.).

In and around the forested areas there is still much wildlife, but recently there has been a considerable amount of commercial hunting. In some forests, all larger birds and mammals have been shot or trapped, and winter migrants are also killed (J. MacKinnon, pers. comm.).

Rare large mammals are also poached. In the 1950s, the Javan Rhino (the rarest rhino species) may have numbered in the low hundreds in Viet Nam (G. Schaller, pers. comm.). By the mid-1970s, with the effects of the Viet Nam war and poaching, hardly any Javan Rhinos were left. Nevertheless, poaching continued, and by 1988 there were an estimated 10-15 Javan Rhinos in Viet Nam (Schaller *et al.*, 1990; Santiapillai, 1991).

The White-headed Leaf Monkey has been exploited for trade and food, and today fewer than 100 remain in the

wild, all at Cat Ba Island near Haiphong. In 1991, six specimens were for sale in one market (Kemf, 1991).

No detailed surveys of Viet Nam's wildlife trade had been carried out and documented until the author's work was undertaken. Several people had described the trade, however, in general terms. MacKinnon wrote in 1990:

"Hunting pressure affects many wildlife species. Despite the fact that official protection is given to some species by the Government, a Government trading company, NAFORIMEX, is actively encouraging people to shoot and trap a wide range of species for export of skins, horns, antlers, etc. A survey team found kouprey horns, gibbon and langur pelts, and other animal products in NAFORIMEX stores in 1989".

Kemf, visiting Viet Nam in 1991, made these observations:

"During a recent interview in Hanoi, Professor Vo [Quy] expressed concern over the region's burgeoning wildlife trade which is draining Indo-China of some of the rarest animals in the world. Wildlife markets in both Ho Chi Minh City and Hanoi are spilling onto the sidewalks... Last month, four Malayan sun bears, three clouded leopards, dozens of swamp turtles and crocodiles, wild dogs, pelicans and several seriously threatened species of primates were literally sold down the Saigon River to Japanese, Thai, Taiwanese and Singaporean traders".

A SURVEY OF THE TRADE

The surveys concentrated on the two principal cities in the country - Hanoi and Ho Chi Minh City. Although Hanoi in the north is the capital of Viet Nam, it is not the largest city, having only three million people, compared with four million in Ho Chi Minh City in the south. Hanoi has had a socialist economy since 1954; Ho Chi Minh City has a centrally-planned economy, set up in 1975 only, which is less strict than that of Hanoi. When the Government liberalized the economy in the late 1980s - by further devaluing the Vietnamese currency (dong), allowing private ownership of certain businesses, relaxing price controls, encouraging some foreign investment, and facilitating the acquisition of entry visas for foreigners - the souvenir business began to grow in Ho Chi Minh City. There are many consumer goods in the shops (some of which have been smuggled in from neighbouring countries) and tourism has greatly stimulated the trade in wildlife products; over 100 000 foreigners visited Ho Chi Minh City in 1990 from countries in Asia, Europe and North America. Hanoi, with its small tourist trade, has fewer retail outlets for the sale of such goods.

Hanoi

The craftsmen who produce the greatest variety of items for foreign tourists in Hanoi are the ivory carvers. The most skilled master craftsmen work from home. Some families have been in the business for over 50 years; one 72-year-old ivory craftsman had been carving ivory for 57 years using skills learnt from his father who, in turn, had

Item	US\$
Small earring	1
Finger ring	2
Elephant figure, 8 cm	12
Cigarette holder, 10 cm	19
Sculpture of man holding lantern, 9 cm	19
Sculpture of kneeling woman, 9 cm	24
Beaded necklace	25-52
Chopsticks (pair)	33
Buddha figure, 15 cm	35-160
Bangle, 1.3 cm thick	38
Crucifix, 15 cm	56
Two human figures, 15 cm	95
Cup, 10 cm	100
Carved tusk, 30 cm	250
Carved tusk, 41 cm	480
Multi-armed figurine, 18 cm	620
Elaborately-carved lamp, 25 cm	1500
Intricately-carved tusk, 7 kg, 91 cm	2500

Table 1. Ivory carvings for retail sale in Hanoi, March 1990. Survey by the author

learnt from his grandfather. In the early 1950s, this man employed many craftsmen who utilised 6000 kg of raw ivory a year, mostly imported from France and presumably of African origin. Now, as a result of the difficulty of obtaining new pieces of raw ivory and the decrease in the number of foreigners visiting northern Viet Nam since 1954, his consumption has dropped to 100 kg of raw ivory a year. Most of his new stocks of raw ivory come from Laos or Viet Nam which, between them, have about 3500 to 5000 wild elephants (Santiapillai and Jackson, 1990). Owing to the small amounts of raw ivory available from Viet Nam and Laos (which has its own ivory carving industry), and the overall scarcity of ivory following the transfer of African Elephant *Loxodonta africana* to CITES Appendix I in 1990, the wholesale price for good quality tusks doubled to US\$200 a kg from early 1989 to late 1990.

Souvenir shops

The aforementioned ivory craftsman and his family are still carving very elaborate ivory items, such as intricately-carved tusks, lamps and statues, which are sold to souvenir shops in Hanoi and to private collectors (Table 1). The artisans only use hand tools which means that carving a 25 cm-high lamp takes one man one month to complete. Such an item costs US\$1500 and US dollars are specifically requested, not Vietnamese currency. After much bargaining by the author, an intricately-carved tusk weighing seven kg was priced at US\$2500. As the average monthly salary in Hanoi is US\$14, only foreigners can afford these prices.

During the period of the survey in 1990, the US dollar price was based on the official exchange rate of 4200 dong to one US dollar; the unofficial rate was 4400 dong. In 1991, it was based on the official exchange rate of 6825 dong to one US dollar; the unofficial rate was 7500 dong.

There are very few people carving large and expensive ivory items now in Viet Nam because there is not the demand for them. Although Viet Nam is not a Party to CITES and will allow the export of these expensive ivory pieces, there would be great problems in importing items into most countries as a result of the trade restrictions on ivory. Therefore, most of the estimated 40 to 60 ivory carvers working within a 200 km radius of Hanoi are making small, inexpensive items such as bangles, necklaces, Buddha figures, crosses and rings. Compared with similar items produced in China, Hong Kong or India, the quality of workmanship is not high. The few buyers of carved ivory today are the Taiwanese, Singaporeans, French and Polish.

Ivory pieces are for sale in most of the 50 or so souvenir shops in central Hanoi, but other wildlife products are not common in these shops. This is probably because the few expatriates (mainly eastern Europeans and Russians) who are resident do not have the money nor interest in purchasing them, whereas in Ho Chi Minh City, there is a greater market for such items. Occasionally, one may see fake rhino horn, stuffed bears and pangolins *Manis*, but such occurrences are exceptional.

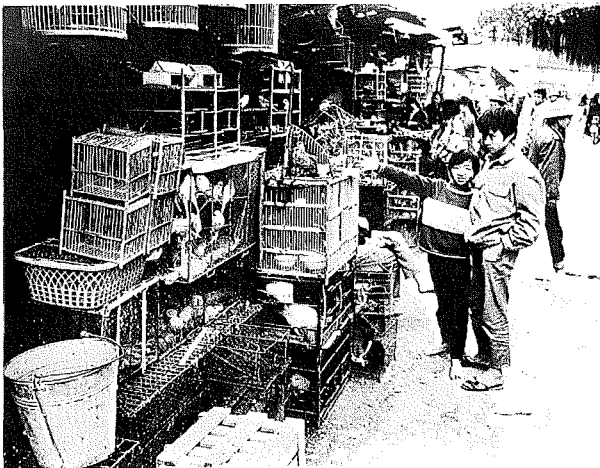
Medicine shops

Where one does see more wildlife products for retail sale in Hanoi, is in the oriental medicine shops, especially in the Lan Ong Street area which was traditionally the Chinese part of Hanoi. In the 1970s, many Chinese fled Hanoi, and Vietnamese took over some of the pharmacies. Although most of these small shops sell herbs, one can buy deer antlers to cure backache, Tiger *Panthera tigris* bones which are often boiled into a concentrate to cure rheumatism or backache, monkey skeletons to relieve general pain, pangolin scales to cure skin diseases, and dried geckos Gekkonidae as aphrodisiacs (Table 2). This traditional Vietnamese medicine is very similar to that practised in China.

Item	Use/cure	US\$
Gecko	Aphrodisiac	80 cents each
Tortoise shell	Kidney disease	2.5 (whole shell)
"Wild goat" skeleton	Pain	3/kg
Monkey skeleton	Pain	3/kg
Deer horn	Backache and pain in bones	8/kg
Pangolin scales	Skin diseases	12 (one animal)
Tiger bone	Backache and rheumatism	350/kg

Table 2. Wildlife products for retail sale in oriental pharmacies in Hanoi, March 1990. Survey by the author

One significant wildlife product expected to occur but missing from these pharmacies was rhino horn. On several occasions, the author returned to the many small shops in the congested Lan Ong Street area where shopkeepers had promised to supply rhino horn. On each occasion, they offered fake rhino horn at a fraction of the



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The bird market in Hanoi.

prices that genuine horn would have been worth. Some people interviewed said that they had sold real horn recently. The elderly ivory craftsman referred to earlier claimed to have sold horn in 1989, and the owner of a medicine shop in Lan Ong Street stated that he had bartered one horn weighing one kg with a man from China in 1989 for US\$5000 worth of packaged Chinese medicines. Some people from the mountains in Viet Nam had offered this man rhino horn quite recently. However, his information may not be reliable as few pharmacists or souvenir shop owners have much knowledge about rhinos or rhino products. Various people have approached Professor Vo Quy at Hanoi University with so-called rhino horn for him to verify but he has never been offered a genuine piece (Vo Quy, pers. comm.). It seems likely that because of the poor economy in Hanoi and elsewhere in Viet Nam, any trader who actually possessed rhino horn would either arrange to have it exported or would sell it to a foreigner. This is happening in neighbouring Laos where almost all rhino horn is bought by visiting Thais (Martin, 1992).

Live animals

Live animals are available in Hanoi in the Dong Xuan market (Table 3), and are sold for food or as pets. However, this market is small, and at the time of the survey, there were very few rare species available. Birds are the most popular purchase, usually bought by the

Vietnamese who keep them as pets. Certain common monkeys and the Slow Loris *Loris tardigradus* are also sold as household pets, while pythons *Python*, tortoises Testudinae, lizards Sauria, terrapins Emydidae and pangolins are bought as food. Professor Vo Quy has visited this market many times and confirms that few endangered animals are offered for sale here (Vo Quy, pers. comm.).

Ho Chi Minh City

By comparison with the Dong Xuan market in Hanoi, the main live animal market in Ho Chi Minh City, Cau Mong market (or Mong Bridge in English), handles a number of rare and endangered animals, and a great deal more wildlife products are for retail sale in the city. This is probably because it is easier to do business in the more open economy of the south, where there are more foreigners interested in buying.

Souvenir shops

In the mid-1980s, most of the souvenir shops, which are situated in and around the international hotels, were still closed following the nationalization of the economy in 1975. The few that were open sold antiques and some ivory tusks. However, business began to pick up when the Government liberalized the economy in the late 1980s.

There are now approximately 100 individual stalls or shops in central Ho Chi Minh City, covering an area of about 3 km². Just over half of these are located along Dong Khoi Street, and they sell antiques, bone, ivory and wood carvings, lacquer ware, and commodities made from domestic and wild game skins. Other tourist shops in the city also sell such items, particularly lacquer ware. In January 1991, 31 (about half) of the curio shops along Dong Khoi Street sold wildlife products, ivory being the most common (Table 4). It is carved in southern Viet Nam, and mostly in Ho Chi Minh City.

The largest ivory carving business is a family company which has been active for 40 years. In 1975, their enterprise closed down for 18 months. In 1977 it re-opened as a co-operative, and in 1987 returned to private ownership. At the time of this survey, 17 people were trained to work in ivory at this company, but owing to the decline in demand, most were in fact only working part-time with ivory. At least 10 of the 17 craftsmen were members of the same family which included one female carver. They are not paid a salary, but earn, when carving ivory, US\$117 to US\$220 a month, a very large sum in Viet Nam. The owner obtains his raw ivory privately from people's homes and from traders who have connections with people in the forests in Dac Lac Province. In early 1990, he paid US\$100 a kg for raw ivory. During that year, its scarcity increased and the price continued to rise - up to US\$180 in November - but by December 1990, the price declined slightly because of the greater difficulty in selling finished ivory pieces to foreign tourists. The ivory craftsmen use both machine-driven drills and hand tools

Common name	Scientific name	US\$
Terrapin	Emydidae	7/kg
Javan Pangolin	<i>Manis javanica</i>	7/kg
Pygmy Slow Loris	<i>Nycticebus pygmaeus</i>	5
Monkey, various	Primate	14
Indian Python	<i>Python molurus</i>	4/kg
Tortoise	Testudinae	2.5

Table 3. Live wild animals for retail sale in Dong Xuan market in Hanoi, March 1990. Survey by the author

Items	Price US\$
Elephant ivory: small rings	1
Buddha statue, 6 cm	7
six dice	10
thin bangle	15
small-bead necklace	15
pipe holder, 10 cm	17
seal, 7.5 cm	17
engraved chopsticks (pair)	36
engraved cigarette holder, 18 cm	40
carved elephants on tusk, 48 cm	395
elaborately carved tusk, 61 cm	1025
Elephant hide: wallet	3
purse	14
Tortoiseshell: small rings	3
thin bangle	3
knife, 18 cm	9
comb, 19 cm	30
framed spectacles	78
fan, with 25 cm ribs	78
Snakeskins: belt	6
wallet	8
woman's shoes	11
purse	15
Miscellaneous: lizard skin wallet	10
crocodile skin belt	35
Clouded Leopard skin, with head	210-400
Leopard skin, with head	200-1400
Tiger skin, with head	1800-1900
Tiger tooth	9
Bear tooth	9
Tiger claw	10
Wild Boar tooth	14
Pangolin, stuffed	20
Palm civet, stuffed	25
Monitor lizard, stuffed	37
Malayan Sun Bear, stuffed	250
Various deer horns	Various

Table 4. Selection of wildlife products for retail sale in souvenir shops, Ho Chi Minh City, January 1991. Survey by the author

to make a wide variety of items, from jewellery to Buddha figures. To make optimum use of daylight hours, they work from 7am to 4pm, five days a week. The output is sold either directly to embassy staff, who often choose small pairs of tusks, to Taiwanese, who are some of the few foreigners still willing to buy ivory, or to Ho Chi Minh City's souvenir shops. Because of the fall in sale of ivory items, the owner of this family business has diversified into wood carving, taxidermy, and making Tiger-claw jewellery.

The tourist shops in Ho Chi Minh City are also supplied with ivory carved by a few other craftsmen in southern Viet Nam. One of these lives in Vung Tau, a beach resort 125 km southeast of Ho Chi Minh City. Most of his work, however, is sold at the small tourist enterprises in his home town. This man has carved ivory for 19 years; he obtains the tusks from Dac Lac Province or from traders who have bought them in Cambodia. In 1989, he paid US\$150 a kg and, in 1991, US\$200 a kg. In addition, he buys small pieces of scrap ivory for US\$30

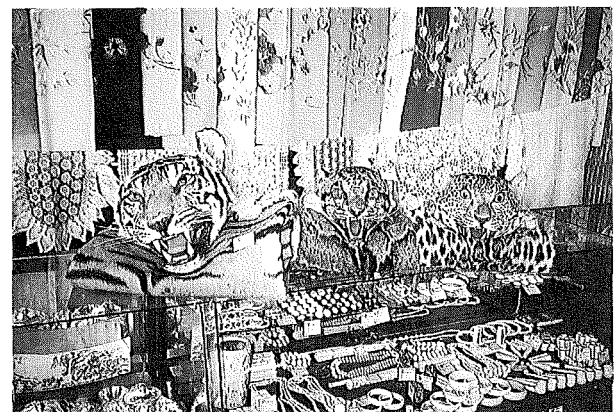
a kg to make tiny items such as earrings and finger rings. If he carves small pieces of ivory full-time, he can earn a profit of US\$147 a month, but if he carves a medium-sized tusk during the same time, he can earn up to US\$700. Since 1989, however, his work in ivory has declined.

Beach resorts, such as Vung Tau, are visited at the weekends by foreign residents and tourists. The kiosks along the coastal road sell many tourist items apart from ivory. In Vung Tau one could purchase pig teeth (30 US cents each), tortoiseshell bangles (US\$7), Tiger claws with silver clasps (US\$10), complete tortoise shells (US\$26), stuffed pangolins (US\$30), stuffed tortoises (US\$50) and tortoiseshell spectacles (US\$50).

Items made from tortoiseshell are commonly seen in curio shops. The raw product reportedly comes from Viet Nam or Singapore, and costs about US\$132 a kg. Some of the workmanship is carried out in factories in Ho Chi Minh City by craftsmen who formerly worked on ivory. They earn about US\$145 a month. Among the main buyers of tortoiseshell items are the Japanese who find the prices very reasonable. In Ho Chi Minh City, the hotel shops stock large amounts of tortoiseshell goods.

Some of the most expensive wildlife products for sale in Ho Chi Minh City are skins from rare and endangered wild cats. Tiger skins were displayed for sale in at least three of the curio shops during the 1991 survey. Also, according to the shopkeepers, skins from Leopards *Panthera pardus* and Clouded Leopards *Neofelis nebulosa* are often available. The Tigers originate from Viet Nam. Most of the buyers are Taiwanese, but also comprise visitors from Thailand, South Korea, Japan, Hong Kong and occasionally France. The skins are normally packed in personal hand luggage; if discovered the owners must pay a tax, but the skins are not confiscated. If shops arrange for the export of the skins as non-accompanied baggage, there can be complications. For example, in January 1991, a souvenir shop sold two Tiger skins and one Leopard skin to a Taiwanese person who requested their immediate export to Taiwan. They were packed in a box and sent to the airport but were back in the shop the following day because the shop attendants were unable to obtain any proper permits to export them.

Ivory, and heads and skins of Tiger, Clouded Leopard and Leopard for sale in souvenir shops in Ho Chi Minh City.



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Common name	Scientific name	Use	US\$ each
Binturong	<i>Arctictis binturong</i>	Live for display	117
Asiatic Brush-tailed Porcupine	<i>Atherurus macrourus</i>	Medicine	9
Small deer	<i>Cervus spp.</i>	Pet, meat	-
Turtles	<i>Chelonia</i>	Food	3
Siamese Crocodile	<i>Crocodilus siamensis</i>	Skin	750/metre
Tokay Gecko	<i>Gekko gekko</i>	Aphrodisiac	.70 cents
Malayan Sun Bear (baby)	<i>Helarctos malayanus</i>	Medicine	290
Javan Mongoose	<i>Herpestes javanicus</i>	Pet	12
Yellow-cheeked Gibbon	<i>Hylobates leucogenys gabriellae</i>	Live for display	1.5
Smooth Otter	<i>Lutra perspicillata</i>	Pet	12
Crab-eating Macaque	<i>Macaca fascicularis</i>	Pet	15
Pigtail Macaque	<i>Macaca nemestrina</i>	Pet	15
Malayan Pangolin	<i>Manis javanica</i>	Meat, medicine	6/kg
Ferret Badger	<i>Melogale personata</i>	Meat	12
Indian Muntjak	<i>Muntiacus muntjak</i>	Meat	1.5/kg
Asiatic Cobra	<i>Naja naja</i>	Medicine	6/kg
Clouded Leopard	<i>Neofelis nebulosa</i>	Live for display	590
Pygmy Slow Loris	<i>Nycticebus pygmaeus</i>	Medicine: cancer	6
Green snakes	Ophidia	Food, medicine: cancer	1.50
Common Palm Civet	<i>Paradoxurus hermaphroditus</i>	Meat	6/kg
Spot-billed Pelican	<i>Pelecanus philippensis</i>	Pet	44
Flying-foxes	<i>Pteropus spp.</i>	Medicine: cough and headache	3
Indian Python	<i>Python molurus</i>	Meat, medicine	15
Indian Python (albino)	<i>Python molurus</i>	Pet	3500
Lesser Mouse Deer	<i>Tragulus javanicus</i>	Pet	-
Water/Bengal Monitor Lizard	<i>Varanus salvator/V. bengalensis</i>	Meat, medicine	4/kg

Table 5. Wild animals for sale at Cau Mong market, Ho Chi Minh City, January 1991.

Survey by the author

Medicine shops

As well as the Vietnamese, there is a group of traders of Chinese origin who deal in wildlife merchandise in the Cholon area of Ho Chi Minh City. Before the change of Government in 1975, Cholon was the "Chinatown" of Ho Chi Minh City, with a large Chinese population. By 1975, most Chinese had fled, and soon afterwards most of their businesses handling wildlife were taken over by the new Government. With the liberalization of the economy in the late 1980s, some of the remaining Chinese began to rebuild Cholon and re-open their old enterprises. One of the busiest parts of Cholon today is the section where wholesale and retail medicines, including wildlife products, are sold. The medicine shops are similar to those found in other Southeast Asian cities, except that there are very few imported Chinese packaged medicines or raw animal products from China. However, some Chinese people from China do come to these shops to buy goods to take back to their country. One of the most expensive items they come for is rhino horn. During the time of the survey, a Chinese man had reportedly purchased a Black Rhino *Diceros bicornis* horn from a "raw medicine" shop in Trieu Quang Phuc Street in Cholon. The horn weighed

620 grams (g) and cost the equivalent of US\$5435 a kg which he paid for in gold. This information is lent credence by the fact that the proprietor of this shop showed the author the only real rhino horn seen during the entire survey. This horn weighed 2.35 kg, was also from the Black Rhino, and had just been sold for US\$7660 a kg to a businessman from Taiwan.

It is not surprising that the Taiwanese are interested in buying rhino horn in Ho Chi Minh City, as there is still a large demand for it in Taiwan. One Vietnamese businessman claimed to have recently been contacted by a Taiwanese trading corporation in Taipei offering to buy Asian rhino horn at a price of up to US\$10 000 a kg. In early 1991, this same Vietnamese was negotiating with the corporation to sell a small Asian rhino horn of 100 g. This man claims he has only seen three rhino horns in Ho Chi Minh City over the past few years, and he believes that only the Chinese traders in Cholon and he himself can distinguish them from fakes.

Cholon's Chinese medicine shop owners sell rhino horn copies to the souvenir shops in Ho Chi Minh City's tourist areas. Over 50 such fakes were on display in early 1991. Most of these were small, weighing under 300 g, and are easy to distinguish from real horns, being usually

hollow, with small carved bumps near the base. When the souvenir shops sell them as fakes the prices vary from US\$20 to US\$88 each, but when they believe them to be genuine or claim them to be, the shop owners try to obtain huge amounts of money, preferably in US dollars.

Less expensive animal products in Cholon's medicine shops include sea-horses Syngnathidae, deer antlers, tortoise shells, Tiger bones and pig teeth. Most of these come from Viet Nam and Cambodia and are sold to Vietnamese, who come from all over the country to buy them. Traders from China can allegedly obtain, on request, live animals such as Tigers, bears and gibbons from Cholon's wealthy Chinese businessmen.

Live animals

During three visits by the author to Cau Mong market in one week in January 1991, the species seen for sale included pelicans *Pelecanus*, pangolins, lorises *Nycticebus*, gibbons *Hylobates*, Clouded Leopards, Binturongs *Arctictis binturong* and Malayan Sun Bears *Helarctos malayanus* (Table 5). According to the shopkeepers, other species often sold at the market include Tigers, Fishing Cats *Felis viverrina* and civets Viverridae. The buyers are mostly from Singapore, Thailand, Taiwan, Hong Kong and South Korea and they export the animals to their home countries. The most expensive animal seen for sale was an albino python at US\$3500; the buyers were expected to be French or Italian collectors. Some of the animals, including pangolins, bears, tortoises and flying-foxes *Pteropus*, are bought by Vietnamese traders, some from the north, who transport them to the border with China in order to sell to Chinese traders. This may be because there are not enough such animals in northern Viet Nam to supply this market in China. Most of the animals seen at the privately owned stalls are kept in small wire cages and mortality, especially for birds, appears to be high. Some animals are in poor condition: a Clouded Leopard with a severe and untreated skin infection was being offered for US\$290, half the price of a non-diseased animal.

Street stalls also sell live animals, mainly for food (Table 6). The most common are pangolins, palm civets Viverridae, mouse deer *Tragulid*, porcupines Hystricidae, Wild Boars *Sus scrofa*, Sambars *Cervus unicolor* and mongooses *Herpestes*. There is a market specifically for these edible animals called Cho Pham Viet Chanh. It has six private stalls; one of the most successful owners told the author that she sold 100 kg of game meat a day. The animals originate from Song Be Province, Dong Nai Province and Pleiku in the highlands of southern Viet Nam and are brought by hunters and traders at least once a week. Game meat sells well, largely because it is the same price as beef or chicken; the most popular wild game meats are Sambar and Wild Boar. The shop owner sells some meat - Wild Boar, Sambar, muntjak *Muntiacus* and porcupine - to traders for export to Thailand. Occasionally, she will sell live tortoises, pangolins, and Slow Lorises to middlemen who send them by train to Hanoi for eventual sale in China.

Common name	Scientific name	US\$/kg
Asiatic Brush-tailed Porcupine	<i>Atherurus macrourus</i>	2
Sambar	<i>Cervus unicolor</i>	1.5
Javan Mongoose	<i>Herpestes javanicus</i>	3/animal
Himalayan Crestless Porcupine	<i>Hystrix hogdsoni</i>	2.50
Malayan Pangolin	<i>Manis javanica</i>	5
Burmese Ferret Badger	<i>Melogale personata</i>	-
Indian Muntjak	<i>Muntiacus muntjak</i>	1.5
Pygmy Slow Loris	<i>Nycticebus pygmaeus</i>	7 each
Common Palm Civet	<i>Paradoxurus hermaphroditus</i>	4.5
Indian Python	<i>Python molurus</i>	3
Wild Boar	<i>Sus scrofa</i>	1.5
Tortoise	<i>Testudinae</i>	5
Lesser Mouse Deer	<i>Tragulid javanicus</i>	2
Water Monitor	<i>Varanus salvator</i>	4

Table 6. Wild game meat for retail sale in Ho Chi Minh City, January 1991. Survey by the author

Many other places in southern Viet Nam have live animals and game meat for sale, but the quality is not generally as good as in Ho Chi Minh City. For instance, at the Long Thanh market, 50 km east of Ho Chi Minh City, deer, Sambar and Wild Boar are the usual selection.

CONCLUSION

From the wildlife trade surveys in Hanoi, Ho Chi Minh City (and Vung Tau), it is obvious that endangered species are openly offered for retail sale. One can only guess at what may be secretly available from wholesale sources. Over the last couple of years, the liberalization of the Vietnamese economy has contributed to an increase in the commerce of these wild animals and their products and consequently, from a conservation perspective, the situation has deteriorated. The Government does have laws protecting certain species from exploitation, such as the Ministry of Forestry Decision Number 276/QD, dated 2 June 1989, which forbids the hunting and trading of 38 species of forest animals. However these regulations are not well enforced; this is clearly demonstrated by the number of specimens or products of species seen for sale during the surveys which are included in this legislation, namely, *Crocodylus siamensis*, *Elephas maximus*, *Helarctos malayanus*, *Neofelis nebulosa*, *Nycticebus pygmaeus*, *Panthera tigris*, *P. pardus* and *Pygathrix nemaeus*.

The establishment and protection of parks and reserves in Viet Nam is relatively new and, at present, there are insufficient skilled people to guard them successfully from illegal hunters and farmers. Poaching and exploitation appear to be widespread in many forests in Viet Nam and will require greater resources to control.

In addition to addressing these matters, the Government should consider joining CITES in order to facilitate control of the international trade in endangered species indigenous to Viet Nam. Membership of CITES would also make it easier in the future for Viet Nam to export

wildlife and related products from legitimate captive-breeding enterprises, and from common species harvested on a sustainable basis from the wild. If the Government is to accede to the Convention, it must improve its law enforcement capabilities significantly, especially at airports, seaports and road exits. Presently, endangered species are being brought out of the country because there are inadequate controls at these check-points.

As well as implementing better law enforcement and improved trade controls, the Government needs to initiate a public awareness campaign. Few Vietnamese realize the damage that this largely uncontrolled trade is having on their country. More attention must be focused on the problem and how to combat it.

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TRAFFIC Southeast Asia has embarked upon a further comprehensive study of wildlife trade in Viet Nam, initial results of which will be published in late 1993. (Ed.)