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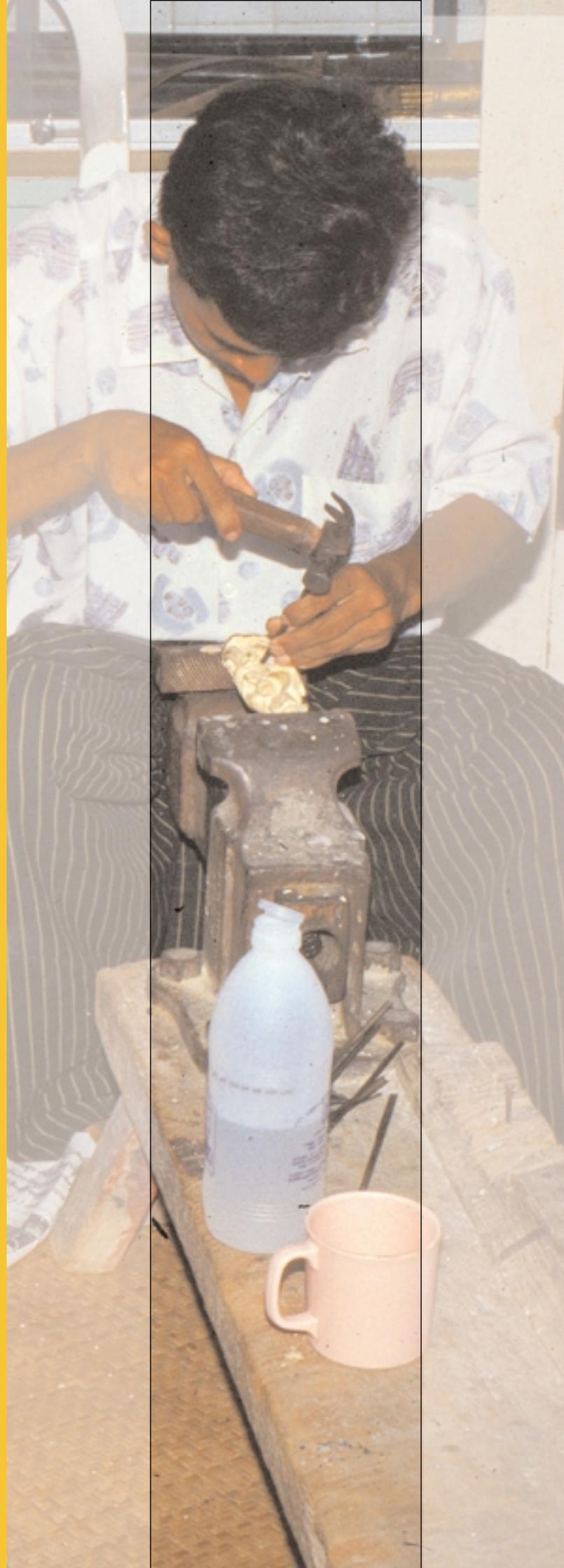
## The Trade of Elephants and Elephant Products in Myanmar

Prepared by

Chris R. Shepherd

TRAFFIC Southeast  
Asia

August 2002



# TRAFFIC

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# The Trade of Elephants and Elephant Parts in Myanmar

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**Chris R. Shepherd**

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*August 2002*

*Credit: Neil Morrison/WWF UK*



**Wild Asian Elephant family *Elephas maximus***

## CONTENTS

<b>Executive Summary</b>	i-ii
<b>Introduction</b>	1
<b>Methods</b>	2
<b>Protection of Elephants in Myanmar</b>	3
<b>Sources of elephants and products in trade</b>	3
Live elephants	3
Meat	4
Ivory	5
Medicinal uses	7
<b>Locations selling elephant products</b>	9
<b>Conclusions</b>	15
<b>Recommendations</b>	15
<b>References</b>	16

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## EXECUTIVE SUMMARY

The Asian Elephant *Elephas maximus* was listed on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) at the first Conference of the Parties (CoP1) in 1976. At the same time, the African Elephant *Loxodonta africana* was placed on CITES Appendix II, but with the rapid decline in wild populations during the 1970s and 1980s, was up-listed to CITES Appendix I in 1989 – thereby affecting a ban on all commercial trade of elephants, their products and derivatives.

Myanmar, formerly known as Burma, acceded to CITES in 1997. It has the second largest population of wild Asian Elephants (after India) and the largest number of domesticated elephants in Asia. Myanmar has a long tradition of using domesticated elephants, thought to number as many as 6000-7000 in 1997, as working animals for the logging industry. In 1995, Myanmar banned the capture of wild elephants although some sources indicate that capture still continues.

This report was produced as a component activity under the WWF initiative known as the Asian Rhino and Elephant Action Strategies (AREAS), to better understand the trade dynamics in Asian Elephants, ivory and elephant derivatives in Myanmar.

Myanmar has a long history of ivory carving, with artisans learning several distinct techniques or styles in order to be considered an accomplished ivory carver or master. This tradition continues today, despite lower availability of ivory but as domestic use of elephant products is negligible and ivory, for the most part, is not purchased by locals, the continued production of worked ivory is believed to supply predominantly foreign market demand.

Myanmar's legislation allows trade of products derived from domesticated elephants, which creates a potential loophole in which wild-caught elephants and elephant parts from Myanmar, as well as other countries, could be "laundered". Enforcement agencies are not capable of determining the actual source of elephant products, and are therefore unable to prosecute. This loophole appears to be knowingly exploited by traders.

The results of the survey team's work in Myanmar showed that trade in ivory still continues, involving both domestic and imported sources. Traders openly acknowledge that ivory is being imported from India and other source countries, but the exact quantities are unknown. Myanmar's increasing popularity as a destination for visitors on business and tourist itineraries has exposed the country to a range of potential buyers for these products. Exports of worked ivory are known to be routed out of Myanmar into Thailand, and dealers reported that buyers from Japan, Taiwan, China, Italy, and Germany, in addition to Thailand, are among the biggest purchasers of ivory when visiting Myanmar.

Enforcement at official border crossings between Myanmar and India, China, Thailand, Bangladesh and Lao PDR remains severely lacking, and is not believed to operate at all for the more informal border crossing points.

This report makes the following recommendations to better enforce legislation in place to protect elephants and to control the trade of elephants and their parts and derivatives:

1. TRAFFIC Southeast Asia should continue to monitor the trade in Asian Elephant products in Myanmar, especially at key exit locations such as Tachilek. Information gathered during monitoring activities should be passed on to the relevant authorities. Enforcement agencies in Myanmar, as well as from neighbouring countries, should be encouraged to act upon information given to them and be encouraged to take further actions against the illegal trade.

## The Trade of Elephants and Elephant Products in Myanmar

2. Implementation of national legislation needs to be reviewed and weaknesses addressed. TRAFFIC is in a good position to begin dialogue with the CITES Management Authority in Myanmar, to explore the needs of the country to improve its legislation, and enforcement thereof, relating to elephant conservation and trade in elephants and their products.
3. Authorities in India should be made aware of the fact that ivory is being smuggled out of India into Myanmar and appropriate action should be taken to address this.
4. Authorities in Thailand should be made aware of the fact that ivory continues to be smuggled into Thailand for sale. Thailand's enforcement agencies should be encouraged to increase efforts to prevent wildlife from being smuggled into Thailand from Myanmar through increased surveillance of border markets and key trans-boundary supply routes.

### INTRODUCTION

The Asian Elephant, *Elephas maximus*, was once found from the Tigris-Euphrates in West Asia eastward through Persia and the Indian sub-continent, South and Southeast Asia including the islands of Sri Lanka, Java, Sumatra, Borneo, and into China northwards to the Yangtze River. It has disappeared from West Asia, Persia, Java and most of China (Sukumar, 1989). Remaining populations are under constant pressure from man. Habitat loss and hunting are among the most severe threats. Populations of Asian Elephants have been reduced to 34,000-51,000 animals, less than one tenth of the estimated population of African Elephants, *Loxodonta africana* (Kemf and Jackson, 1995). Furthermore, much of the total Asian Elephant population is highly fragmented.

In response to the severe decline of Asian Elephants (and Asian Rhino species) the World Wide Fund for Nature (WWF) has developed the Asian Rhino and Elephant Action Strategy (AREAS) to enhance the chances of long-term survival for these species. Key locations with potential for long term, viable populations have been selected to be the focus of AREAS. The TRAFFIC Network aims to support the WWF conservation activities at the selected AREAS locations and to conserve the species overall, throughout Asia, by enhancing trade controls for elephants and rhinos. This will be done through a variety of activities, including gathering information on the trade to increase understanding of the overall dynamics of the trade.

This report looks at the trade of Asian Elephants and their parts, much of which is ivory, in Myanmar (formerly Burma). Myanmar, regardless of large-scale deforestation, still has large tracts of forest. These remaining forests support one of Asia's largest populations of wild Asian Elephants, second only to India, with as many as 25% to 50% of Southeast Asia's total population. Elephants are found throughout much of the country, but are mostly concentrated in the north. While no accurate comparable figures are available, it is obvious that the numbers of Asian Elephants in Myanmar are declining and will continue to do so unless action is taken to prevent this. The elephant population in Myanmar is estimated to be as low as 3,000 (Caughley, 1980) to as high as 10,000 (Sukumar, 1989). Kemf and Jackson (1995) estimate the population to be between 5,000 and 6,000 as does the Forest Department of Myanmar (anon. *pers. comm.* to Shepherd, 2000). However, until a reliable population census is carried out, all estimates are deemed as being no more than educated guesses. Further studies are needed to determine the actual number of elephants surviving in Myanmar and to determine the impact illegal trade is actually having on the wild populations.

Myanmar has an additional population of domesticated Asian Elephants, in fact the largest number of domesticated elephants in Asia. Registered working elephants, numbering 4,600 (Kemf and Jackson, 1995) are used in the timber industry. According to Lair (1997), there are as many as 6,000 to 7,000 domesticated elephants in the country, many being privately owned. As much as 50% of all timber in Myanmar is extracted by working elephants (Santiapillai and Jackson, 1990). Elephants are captured from the wild to sustain this large working population. While the government has set quotas to control the numbers of wild elephants captured to maintain the working population, it appears that these numbers are more than the wild population can sustain. In recent years, the numbers captured appear to be declining, therefore suggesting that both the wild populations and the captive populations are declining (Santiapillai and Jackson, 1990). Finally, in 1995, the capture of wild elephants was banned (Lair, 1997). Other sources, including ivory dealers in the area, claim that the capture continues. It is hoped that with improved methods, captive bred elephants will sustain the working population.

## The Trade of Elephants and Elephant Products in Myanmar

While habitat loss and capture for the logging industry play a large role in the decline in wild populations, poaching is also a prominent threat. Elephants are poached for numerous reasons, the main reason appearing to be for their ivory. Ivory is heavily traded in Myanmar, as is, to a lesser extent, skin and other parts for leather and traditional medicines. Live elephants are also sometimes traded. In Asian Elephants ivory is carried only by the male, unlike African Elephants in which both sexes have tusks. Female Asian Elephants rarely have tusks, which are small and usually do not project beyond the jaw. The small tusks sometimes carried by female Asian Elephants are known as “tushes” (Yin, 1967).

### PURPOSE

The objective of this study was to gather information on the trade in elephants and their parts in Myanmar. An examination of the Myanmar ivory trade was published as part of an overview of wildlife trade in that country in the *TRAFFIC Bulletin Vol. 17 No. 1* (Martin, 1997). Martin observed in that report, that much of the wildlife trade in Myanmar was illegal, as was observed in this more recent TRAFFIC survey, carried out in 2000. During the 2000 survey, illegal wildlife trade was observed throughout the regions visited. Wildlife dealers in many of these locations stated that numerous species, including elephants, are becoming scarce as a result of over-hunting. This was also observed in Martin’s report. If the illegal trade in wildlife is allowed to continue, the obvious result is that more species will vanish from their former habitats and could eventually be extirpated altogether from Myanmar. Elephants are no exception. Elephants are protected in Myanmar, with the exception of trade in Government-registered ivory. However, as this report shows, despite protection, illegal trade of elephants and their derivatives in Myanmar remains a widespread problem.

The purpose of this report was to investigate and examine the trade in Asian Elephants and their derivatives within Myanmar and with neighbouring countries. Where possible, current market trends and trade routes were investigated and reported. In addition, this report attempts to determine how much of the trade is local and how much is international. This study examines where elephant products are being sold to and what routes are being used to move these products. The report also looks at ways in which dealers, to facilitate illegal trade, are misusing the current legislation covering the trade of elephants and ivory in Myanmar.

### METHODS

Many of the locations chosen and surveyed for this study were based on findings by Martin (1997). Locations surveyed by Martin were revisited during this recent survey. Comparisons were made and are discussed within this report. Other locations visited during TRAFFIC Southeast Asia surveys in 1999 were also revisited. Additional locations were identified and surveyed as well during this study. Wildlife dealers were very cooperative and helpful during this survey. Interviews were carried out, in Burmese language, with every wildlife dealer, ivory carver and traditional medicine practitioner encountered. Often people involved in the trade invited the surveyors to their homes or to other locations to view more ivory products or to meet other key people involved in the trade. Many of these people also went to great lengths to show in detail how ivory is carved and how to distinguish genuine ivory from imitations. Photographs were taken freely throughout the survey. Many also explained where they believe the ivory was coming from (both legal and illegal sources), where it was going to and how it was smuggled out of the country. One particular ivory carver in Mandalay gave a handout to the surveyors, outlining the ivory carving trade in Myanmar and promoting ivory carving as a tourist attraction. All of this information is described in greater detail in this report.

### PROTECTION OF ELEPHANTS IN MYANMAR

Myanmar became a signatory to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) on 13 June, 1997, which entered into effect on 11 September, 1997. The Asian Elephant is listed on Appendix I of CITES, which prohibits all international trade of the species, its parts and derivatives, except under certain circumstances. It is therefore the responsibility of the Forest Department of Myanmar, as Myanmar's Management Authority for CITES, to ensure that illegal international trade of this species is prevented.

The Asian Elephant is also protected by Myanmar's national legislation. It was first given protection in 1879, when the government under the British administration first regulated the capture of wild elephants. In 1902, under the Burma Forest Act, wildlife preservation became the responsibility of the Forest Department. Finally, the Burma Wildlife Protection Act of 1936 was implemented (Santiapillai and Jackson, 1990). On June 8 1994, the Forest Department implemented the Protection of Wild Life and Wild Plants and Conservation of Natural Areas Law. At this time the Forest Department announced that a fine of up to 50,000 Kyat (USD \$135.00) and/or a prison term of up to seven years would be imposed for the illegal possession, sale or export of protected species or their parts. A list of protected species was published shortly after, which includes the Asian Elephant. However, the trade in government-owned ivory is still permitted (Martin, 1997).

### SOURCES OF ELEPHANTS AND PRODUCTS IN TRADE

Poaching is one of the major threats to the survival of the Asian Elephant. Elephants are poached for their ivory, skin, meat, and other various parts that are used in traditional medicines. While the primary reason for poaching elephants is for their ivory tusks, there is also evidence of poaching for their hide (Santiapillai, 1997). Other elephants, especially calves, are illegally captured for export. Adult animals are also sometimes captured illegally for work or export. The various reasons for poaching are described in further detail in the following sections.

It should be noted that not all the elephant parts entering the illegal trade are from animals killed in the wild. When privately owned elephants die, the ivory, hide and various other parts are quickly taken and sold. According to a retired officer of the Forest Department in Myanmar, occasionally owners kill their elephants for hard currency. Other sources report that owners of elephants only kill them if the animal has a terminal illness or a wound that prohibits the animal from working.

#### LIVE ELEPHANTS

Live elephants are sometimes captured for export, often to neighbouring Thailand. Until Thailand's total ban on logging in 1990, many elephants were illegally taken from Myanmar and sold to Thai logging operations. While illegal logging still persists in Thailand, it is suspected that very few elephants are still coming from Myanmar for this purpose, since there is already high unemployment among existing, registered logging elephants.

Instead, the demand for live elephants in Thailand has switched from adult animals to small calves. Calves in Myanmar are considered somewhat of a financial burden, as they cannot work for many years. It is more profitable for Myanmar logging operations to acquire adult, working age animals. Calves are, however, in great demand in Thailand as tourist attractions and for entertainment. This demand has caused prices for very young

animals to surpass that paid for an adult. One individual, with knowledge of the trade, reported that approximately 50 calves enter Thailand from Myanmar each year (Lair, 1997). Lair observed on three occasions newly arrived calves, all approximately two years in age, purchased at the Myanmar border. The calves were purchased for between THB125,000-150,000 (USD5-6,000, 1997 conversion rates) with the specific intent of teaching them simple circus stunts and then selling them within a few months for THB200,000 (USD8,000). The author of this report also observed three young calves used for entertainment at the Pattaya Crocodile Farm in Thailand (Shepherd, 1999a). According to staff at the Pattaya Crocodile Farm, all three calves had been purchased from Myanmar and as far as the staff members knew, the calves had been taken from the wild. The calves were trained to do simple tricks, such as standing on their heads, for the amusement of tourists. When such calves become too old and large for such tourism attractions, they are sold and new calves are purchased (Lair, 1997).

While elephants are captured throughout most of their range, according to one retired officer of Myanmar's Forest Department, many are captured in the States of Kaya and Karen. He went on to say that both adults and young are captured, most of which are sold to Thailand. Domesticated elephants are often used to capture the wild calves. Pitfall traps are another method, although the risk of injury to the animal is much higher. Lair (1997) reports of stories where the cow elephant is actually killed in order to capture the calf. The majority of the people who capture these wild elephants are of the Karen ethnic group. According to various dealers, live elephants are seldom, if ever, sold to China – only elephant derivatives.

The Forest Department has also exported elephants. Between 1987 and 1994 a total of 44 elephants were sold to dealers in the Netherlands and Japan. While Myanmar insisted that these animals had been bred in captivity, this could not be proved. As a result, the CITES Secretariat issued a notice to the Parties recommending that import licenses from Myanmar should not be granted unless reliable evidence was given to prove that the animals had been captive bred. Despite this notice, however, the dealer in the Netherlands continued to purchase elephants from Myanmar (16 after the notice was given, between 1990 and 1994). These elephants were sold for between 13,000 and 18,000 USD each (Martin, 1997).

There have also been some cases where live elephants have been taken from Thailand into Myanmar. In 1986, Thai Karen along with Myanmar Karen captured at least two elephants from forests in Thailand in the Sangklaburi District of Kanchanaburi Province. The Karen from Myanmar kept an adult female, the Thai Karen kept a juvenile male. In 1997, members of the Karen National Union or the Karen National Liberation Army were known to be entering Thailand and setting pitfall traps for elephants. The numbers of elephants captured is unknown. A year later, Karen from Myanmar were again blamed for capturing elephants with pitfall traps in the same area. These incidents apparently took place in the Thong Pa Pum District of Kanchanaburi Province in Thailand, across the border from the Tawei/Htaway area in Myanmar (Rob Steinmetz *in litt.* to Chris R. Shepherd, July 2000).

### MEAT

Eating of elephant meat in Myanmar appears to be quite uncommon. The Karen people apparently eat some elephant meat, but the extent of this is not known. Poachers will apparently eat some of the meat from animals they have killed for the more valuable parts, such as the hide or the ivory. According to one source, meat is sometimes taken from killed elephants, smoked and carried out of the forest. Whether this meat is sold or used by the hunters is unclear. It seems that the price paid for elephant meat is not worth the trouble of preparing and transporting it. Another source said that meat from captive elephants is sometimes consumed when the elephant

## The Trade of Elephants and Elephant Products in Myanmar

dies. It has been stated to the author by one source involved in elephant conservation in Thailand, who prefers to remain anonymous, that elephants from Myanmar may be sold to slaughterhouses in Thailand. According to this source, there is at least one slaughterhouse in northern Thailand in the province of Phrae (apparently there are no slaughterhouses in the southern part of the country). This place specializes in butchering large mammals such as cattle and is reputed to also slaughter elephants. When elephants are too old to work they are brought to this location to be butchered. It is not known whether or not poached animals are brought here to be sold. In any case, it appears that elephant meat consumption is mostly restricted to the northern and northwestern part of the country. It is not known whether any of the meat is exported to neighbouring countries. While it may be that elephants from Myanmar are sent to such end-use markets, this issue needs to be further investigated.

### IVORY

The majority of the elephants killed for commercial gain are killed for their ivory. Ivory taken from poached elephants throughout Myanmar (and reportedly from some other countries) is taken to the large towns (Mandalay and Yangon) for sale. In these centres the ivory is often carved and resold. Very little of this carved ivory is sold to locals, the majority being sold to foreign buyers for resale outside of Myanmar or to foreign tourists, in the form of carvings, jewellery, chopsticks and name seal blocks. Raw ivory is exported from these large centres as well, though quantities are unknown. Poachers and middlemen outside of these large centres will sometimes sell directly to dealers in border towns such as Tachilek. The majority of ivory observed during this survey was already carved. Dealers intended to sell it to foreign buyers, both tourists and foreign middlemen, who would then in turn take it out of the country.

While some of the ivory comes from illegal sources, some also comes from legal sources. The Forest Department auctions off ivory taken from wild animals that die of natural causes as well as from dead work elephants. Often the ivory is already spoken for before the animal dies. According to one source, ivory can be cut from living elephants, providing the animal's tusks are more than four feet long. Why this criteria is applied is not clear. This ivory may then be sold through Forest Department controlled auctions. What percentage of the ivory in the trade is actually from legal sources is unknown.

Carved ivory is sold in only a few outlets in Mandalay and Yangon, as well as in a few other centres (see Locations Surveyed section). According to carvers and dealers in these places, the numbers of carvers and dealers has decreased over the past few years. Many of the locations mentioned in Martin's report (1997) are no longer operating or have stopped dealing with ivory and now focus only on sandalwood. This is due to current high prices, higher than most carvers can afford. It also appears that certain carvers and dealers have established somewhat of a monopoly on the business.

The majority of the carved ivory observed for sale was sold in tourist souvenir shops, often situated near the entrances of pagodas or in tourist areas of the city. It is also available in large quantities in border towns, such as Tachilek. The ivory is sold in these locations as the target buyers are foreigners, not locals. During the survey in 2000, interviews were held with dealers throughout the region. According to dealers, the main buyers of carved ivory originate from Japan, Thailand, Taiwan, Italy, France and Germany. The main buyers of raw ivory originate from Japan, Thailand and Taiwan. Some dealers also reported that ivory is often sold to China as well.

### Ivory carving

Genuine ivory can be distinguished from imitations and similar products from other species by examining a

## The Trade of Elephants and Elephant Products in Myanmar

cross-section of the piece. True ivory has a pattern or hatch of concentrically arranged lines. Parts from other species that are similar to ivory in some respects, such as Walrus or Wild Boar tusks do not have this pattern. Bone products, often advertised as being made from ivory, can be distinguished by the lack of the hatch pattern.

There are four basic traditional techniques or styles in Myanmar's ivory carving: *Hathti*, *Gumbi*, *Na-yi* and *Ka-noke*. *Hathti* is the art of depicting the figure of an elephant. *Gumbi*, the figure of an ogre, *Na-yi*, the figure of a female and lastly *Ka-noke*, the lotus stems, buds and blossoms. Only when a sculptor has mastered these four techniques may he be regarded as an accomplished sculptor of ivory (Myint, 1997).



Credit: Chris R. Shepherd/  
TRAFFIC Southeast Asia

### Ivory carvers in Myanmar

Items commonly carved from ivory nowadays include small figurines of elephants, 'bridges' (carved whole tusks) that usually feature a procession of elephants or other animals, Buddha figures, chopsticks and name seals.

Traditionally, ivory carving in Myanmar has been perceived as a very specialized form of art, producing works of very high quality. Ivory carvings, more so than other sculpted materials such as wood or stone, are unsurpassed in quality. This is basically due to the fact that the material in which the sculptor is working with is far more valuable than other materials. Therefore much more skill and foresight are required when working with ivory.

The first step in carving the ivory is to cut the desired size piece from the tusk. Traditionally, the ivory carver works only with the inner core of the tusk. Therefore the outer layer of the tusk must first be removed. This is done by carefully filing. Care must be taken at this stage to ensure that all cracks and flaws of the outer layer are completely removed and that the scale-like surface of the core is removed. Once this is complete, the sculptor sketches the desired pattern of the carving onto the piece with pencil. Currently, as ivory becomes scarcer and more expensive, sculptors are often producing objects without removing the outer layer, thus producing a new style and quality of carving (Myint, 1997). Once the sketch is completed, fine grooves are chiselled along the pencil lines. Excess parts of the piece are removed, leaving a rough shape of the final desired product. Next, the piece is further worked, with details, although still rough, taking shape. Once a rough shape has been produced, the piece is washed with soapy water, to remove any dirt etc.

Finally a master sculptor carries out the carving of the fine details. All the steps involved in this process require great skill, knowledge and finesse. The master sculptor rarely carries out the entire process and usually relies on an apprentice or assistant to undertake the preliminary steps. Sometimes as many as three people work on the same carving, each handling a different phase of the sculpting progress. An apprentice takes five to six years to become a skilled carver (Martin, 1997)

Once the fine details have been completed, the piece is polished. This is done in a unique way, as described by Myint (1997). Traditionally, the carving is first soaked in water and rubbed with the scales of Hamilton's Carp or Mrigal, *Cirrhina mrigala*. Next it is rubbed with the culm sheath of giant bamboo. This brings out the colours of the ivory and enhances its appearance. The person polishing the piece will then rub red ochre between his hands until hot and varnish the carving with his hands until it has a very shiny appearance. The piece is then sponged with the fibre from the dried fruit of the sponge gourd. Lastly it is rubbed down with a white cloth to

## The Trade of Elephants and Elephant Products in Myanmar

complete the polish. Nowadays, sculptors in Myanmar use a more modern (and less intense) technique of polishing. The finished carving is sanded with a very fine-grain sandpaper. Next it is polished with the culm sheath of the giant bamboo. Foreign-made varnish is then applied, followed by being washed in water and finally rubbed with a white cloth (Myint, 1997).

The standard of ivory carving today is not as high as it once was (Martin, 1997). Many of the carvers seem to exercise very little originality in their work, instead trying to produce large quantities of simple similar pieces to supply the immediate market. Not only is the number of traditional works being produced decreasing, but so is the number of traditional carvers. The art of carving ivory, passed down for generations, is vanishing or being replaced by modern “quantity, not quality” attitudes. This may also be a result of the modern market. Traditionally much ivory was sold to people in Myanmar, as status symbols, and decorative items. Now very little of the ivory carved in Myanmar is sold to locals. The vast majority is sold as souvenirs and stamp blocks to people with, according to one carver, a much lower degree of appreciation for the real traditional works of art.

Credit: Chris R. Shepherd/TRAFFIC Southeast Asia



Ivory carvings on display in Yangon, Myanmar, 2000

How ivory carvings are priced depends on many things, including size, age, quality of the ivory used for the sculpture, weight and workmanship. In some of the larger outlets observed, especially outlets where the carving was also carried out, prices are fixed – no negotiating as is done when purchasing many items in Myanmar.

According to a brochure promoting Myanmar’s traditional ivory carving as a tourist attraction, the government has supported the establishing of the Myanmar Artists and Artisans Association, stating that “Myanmar’s traditional art of ivory sculpture is currently enjoying a renaissance”.

### MEDICINAL USAGE OF ELEPHANT PRODUCTS

Many species of wild animals are used as traditional medicines in Myanmar and elephants are no exception. Various parts of elephants were observed at Golden Rock, where there are numerous shops (27 in total) selling traditional medicines. Table 1 gives a list of elephant parts observed as well as the uses given by the dealers for each part in traditional medicines. According to dealers at Golden Rock, elephants are not killed to supply this market. Instead, dead elephants from forest reserves and government-owned logging operations are sold to these dealers. The medicine dealers also stated that the majority of the medicines derived from elephants offered for sale at this location are sold to locals, not to foreign buyers as is the case with ivory.

Additionally, one of the ivory carvers in Mandalay stated that all ivory dust and unusable ivory scraps are sold to a local dealer of Chinese traditional medicine. The dust and small pieces are ground into a fine powder, mixed with water and drunk to treat intestinal diseases. This particular medicine is apparently only used by Chinese. Burmese make a similar concoction to treat their intestinal ailments only instead of using ivory, they use the skin of the elephant. The skin is first dried, then fried, then ground into a fine powder. Then, like the ivory powder

medicine, it is mixed with water and drunk.

**Table 1**

**Elephant parts for sale as traditional medicines at Golden Rock, April 2000**

Part observed	Medicinal usage	Quantity observed in market
Sole of foot	Small pieces are rubbed against a stone, rubbing off fine pieces. Water is added until a sticky paste is formed. This paste is applied externally to treat hernias.	Six whole soles were observed.
Skin	A paste similar to that made from the sole is made from the skin. This is applied externally to treat fungal infections.	15 pieces were observed in four shops, estimated to amount to 5 kg.
Tail hair	Individual hairs from the tail of an elephant are made into rings. These are worn to protect the individual from supernatural attacks. They can also be worn by men to aid in attracting women.	Numerous (estimated 100 hairs)
Tail	The lower section of the tail is hung in homes. It is believed that this will bring success in business.	2
Leg bones	The bone is ground up and mixed with water to form a paste. This paste is used externally to treat piles.	2
Molars		22
Ivory dust	Ground to a powder and mixed with water. This solution is drunk as a treatment for intestinal diseases.	

### LOCATIONS SURVEYED FOR ELEPHANT TRADE

During a survey undertaken in April 2000, 11 locations were visited, often with many shops in each location. While the goal of this survey was to obtain information on the trade of elephants and their parts, numerous other species were observed. It was very obvious from this survey that the illegal wildlife trade in Myanmar is rampant. Only information pertaining to elephants is included in the summary of the survey results that follows.

#### TACHILEK

Tachilek, a town situated just inside the northeast Myanmar-Thai border, is well known as a wildlife market. A bridge over a small river is the official crossing at this location. While there are immigration and customs officers as well as Forestry staff stationed at this crossing, people crossing the border are seldom checked for illegal items purchased in the Tachilek market. According to an individual working for the Royal Forestry Department of Thailand at this border crossing, there are too few skilled people to handle the abundance of people crossing over daily. Additionally, he stated that staff have trouble correctly identifying wildlife products. The town of Tachilek has a very large market area in which many permanent shops sell wildlife parts. Parts and derivatives of numerous species, mostly mammals, were on display in these shops, including ivory. In April 2000, a survey was carried out by the author. A total of 23 shops selling wildlife parts were surveyed, 13 of which had ivory for sale. Only carved pieces of ivory were observed. Only one dealer claimed to have some raw ivory (quantity was not disclosed) and was asking THB20,000/kg (USD500). All of the 13 dealers stated that the ivory was from Yangon with the exception of one who stated that a portion of their stock of carved ivory came from Mandalay. One of the dealers stated that much of the raw ivory carved in both Mandalay and Yangon originated in India. Another dealer said that elephants near Bago are killed for their ivory. All dealers selling ivory in Tachilek claimed that the majority of the ivory sold was purchased by Japanese, Taiwanese and Thai buyers, with the remainder sold to European tourists. Many dealers claimed that it was “acceptable” for tourists to take up to five carved pieces of ivory each across the border into Thailand. Due to high prices, locals with the exception of occasional military officials, who often buy ivory as gifts, do not purchase ivory. The majority of the ivory carvings observed in this market were pieces 5-10cm in height, name seal blocks and chopsticks. Some other items, such as various pieces of jewellery were also available.

In 1999 a survey of Tachilek by the author also found 10 of these shops selling ivory. Of 10 shops observed selling ivory, each shop had an average of 100-200 carved pieces. The carved pieces observed were mostly made up of small carvings 5-10cm in height, name seal blocks, chopsticks and bracelets, with a few larger carvings as well as tiny pendants to be hung on necklaces. also available. Dealers questioned during this survey stated that the ivory was carved in Myanmar and probably originated in Myanmar or India. One small pair of raw tusks (approximately 30cm in length) was observed during this survey. According to the dealer, the price of the tusks was THB70,000 (USD2,800.00) (Shepherd, 1999b).

The author also visited Tachilek in 1998 and observed numerous pieces of carved ivory for sale, as well as four raw tusks. One dealer interviewed during that survey stated that much of the ivory originated in Myanmar as well as some coming from India. He also claimed that African ivory was available in Tachilek, though no quantities were given. According to this dealer, a large portion of the ivory was carved in Yangon, (Shepherd, 1998).

A survey of Tachilek in 1994 found as many as 30 raw pieces of ivory for sale (Redford, 1994). One anonymous source in Thailand claimed to have reliable information regarding tusks being hidden in shops in Tachilek.

### MAE SAI, THAILAND

It should be noted that just across the border from Tachilek is the town of Mae Sai in Thailand. The two towns are separated only by a small river. While there is not a large, open wildlife market in Mae Sai as there is on the Myanmar side, carved ivory is sold in jewellery and souvenir outlets (as Thai law allows the sale of carved ivory



Ivory chopsticks and name seals, seen in Myanmar, 2000

Credit: Chris R. Shepherd/  
TRAFFIC Southeast Asia

from domestic elephants). In May 1999 the author surveyed all 43 of these jewellery and souvenir shops in Mae Sai. Of these, 26 were observed to have carved ivory for sale. A few of these shops had some imitation ivory for sale as well. Items observed included chopsticks, bracelets, cigarette holders, pendants and seal blocks. Dealers stated that the ivory was all from Myanmar – either Yangon or Mandalay. When questioned, these dealers stated that the ivory most likely originated from elephants in Myanmar or India (Shepherd, 1999b).

### KYITE HTI YO/GOLDEN ROCK

Kyite Hti Yo, also known as Golden Rock, is situated in the Mon State, near the Karen State. There are 27 shops at the Golden Rock selling wildlife parts, mostly as traditional medicines. Many of these shops had available parts from elephants. Elephant parts observed were molars, pieces of dried skin, bones, the lower portion of the tail as well as tail hairs. According to dealers at Golden Rock, elephants are not killed to supply this market. Instead, all elephant parts for sale originated from animals belonging to Government-owned logging operations or from forest reserves that had died from natural causes. However, the dealers in this market claimed they are forbidden by the Forest Department to purchase ivory, only other parts for use in traditional medicines. The medicines available in this market are sold to and used by locals. Table 1 gives a list of the uses of the various elephant parts in traditional medicines. Only one shop had a few pieces of carved bone (said to come from an elephant) for sale to tourists.

### BAGO

#### Pagodas in Bago

Two large Pagodas were visited in the town of Bago. Near these Pagodas were numerous shops selling wooden carvings and other crafts to the tourists. According to people working in these shops, ivory used to be carved here and sold, usually to tourists. However, when ivory prices climbed the local ivory carving industry collapsed. These people stated that the ivory carving industry moved into the major centres, such as Mandalay. No ivory or any other elephant products were observed near these two pagodas.

#### Bago – Myo Handicrafts

Myo Handicrafts is a store in Bago that sells mostly wooden carvings. According to the owner, they sold many ivory carvings in the past but as ivory prices climbed, they stopped. Remaining in stock were three ivory figurines, approximately 15cm in height, (USD 350.00/ea.) and four bead necklaces made from elephant bones.

## The Trade of Elephants and Elephant Products in Myanmar

All of these were said to have originated in Yangon. The owner stated that the ivory carving industry now only exists in Mandalay and Yangon, where a select few carvers and dealers seem to have a monopoly.

### SHWEDAGONE PAGODA

The Shwedagone Pagoda is a large pagoda in Yangon and has numerous shops selling sandalwood carvings, souvenirs etc. around and inside it. Ten of these shops were observed to have elephant products for sale. Of these, eight had considerable amounts of carved ivory, while the remaining two sold only bead necklaces and a few carvings made from what the dealers claimed was elephant bone. People working in all 10 shops stated that the ivory and elephant bone was carved in Yangon. Carvers bring their work to the pagoda for sale to these dealers. According to the dealers in this location, ivory is originally taken from elephants from three districts: Kachin State, Ayeyarwaddy Division and Bago Division.

Ivory carving prices ranged from USD3.25 for a small simple carving approximately 4cm in height to a large carved tusk 'bridge' reaching approximately one meter in length and costing USD2,703.00. Ivory bead necklaces cost USD22.00 each. Elephant bone necklaces cost USD4.00 each. Chopsticks cost USD24.50/set. The majority of the pieces were less than 10cm in height. Old ivory is more expensive than new ivory due to its antique value. New ivory carvings are also considered by some to be of poorer quality. Raw ivory is, according to these dealers, not allowed by the Forest Department to be sold by carvers or carving dealers. One carver, however, said he could supply raw ivory for USD108.00/kg. All dealers stated that ivory was not sold to locals, only foreigners. Dealers stated that while much of the ivory is sold to Japanese and Chinese, much is also sold to Europeans. Dealers stated that the ivory market was declining.

According to dealers, a few years ago, carvers situated beside the pagoda produced numerous ivory carvings, as well as elephant bone and sandalwood. However, ivory carving has since stopped. A few of the carvers said that they would carve ivory if the customer brought the raw ivory to them, but they no longer buy ivory themselves to carve. Today, only sandalwood is carved in bulk here. Interestingly, according to the carvers, all the sandalwood originates in India, as apparently the fragrance is of higher quality. These ivory carvers also claimed to often carve items from marine turtle shells.

### Bogyoke Market

When this market was surveyed in 1997, there were 10 shops selling ivory (Martin, 1997). During the 2000 survey, only three shops had ivory, one of which had very little. The main two shops selling the ivory seemed to be doing a booming business. A detailed interview was carried out with one of these two dealers. The following notes are taken from this interview:

Due to the other ivory dealers in this market closing down (in addition to the carvers working near the Shwedagone Pagoda also closing down), the remaining two carvers have somewhat of a monopoly on the trade and do a very good business. The dealer stated that she sells an average of 100 pieces of carved ivory per week, representing her entire stock. Most ivory from this dealer is sold to Taiwanese, Japanese and Thai buyers, but a lot also goes to 'European' tourists as well. The only local people who buy ivory are government ministers, who often buy pieces as status symbols and as gifts for other officials, both local and foreign. While the interview was being carried out, an ethnic Chinese woman came and ordered some ivory chopsticks. The dealer had sold out of these earlier that day. Ivory chopsticks are believed to be able to detect poison in ones food. When the chopsticks come into contact with poisoned food, it is said they will turn black. Six large carved tusks or

“bridges” (as referred to by Martin, 1997) were available ranging in price from USD 600.00 - 1,200.00. According to the dealer, she sells as many as 12 of these bridges to tourists each year. Small carvings and figurines are often purchased by Thai buyers, who will sometimes buy the entire stock at one time for resale in Thailand. Ivory seal blocks are often sold in bundles of five. These are mainly sold to Taiwanese and Japanese buyers. It is not uncommon for buyers to purchase as many as 40 of these seals at once. According to the dealer, a Chinese-Myanmar military official bought out her entire stock (approx. 100 various carved pieces) approximately one week prior to this survey. Such officials are regular buyers. When asked if any ivory was sent to the Myanmar/China border, she stated that there was no money to be made in sending ivory there and that it was much more profitable to send the ivory to Tachilek, on the Thailand border, as the Thai buyers have much more money to spend. She went on to say that business in Yangon itself was enough as so many tourists come to her shop. According to the dealer, it is no problem to take ivory out of Myanmar. However, it may be more difficult bringing the ivory into other countries. When asked how foreign buyers usually take ivory out of the country, she stated that it is simply hidden in luggage or clothing. She also stated that government and military officials can carry ivory in their luggage without worry as it is common practice in this region not to search through such ranking people’s belongings.

Additionally, one more shop in the Bogyoke market had various wildlife parts for sale as tourist souvenirs, including four elephant teeth (large USD 100.00/each, small USD 50.00/each), a portion of an elephant’s jaw and two elephant ribs.

### IVORY CARVING SHOP – MANDALAY

The author visited this carving shop (also a dealership) in April 2000. The front portion of this shop was dedicated to selling antiques and souvenirs. Items included carvings from ivory and elephant bone, and numerous parts from other species. The rear portion of this establishment was a large ivory carving display area. Cases filled with numerous carvings lined the walls. Some of the ivory in cases was clearly very old (according to the owner, some pieces were more than 250 years old). Photographs of high-ranking military officials receiving gifts of carved ivory from the owners were hung on all the walls. This family has carved ivory for two generations. The young couple that owned the business was very keen to promote ivory carving as part of Myanmar’s tradition. The owner himself had written an article regarding the history of Myanmar’s ivory industry and its history. This has been translated into English and is given to all tourists visiting their shop. The owners claimed that they sell the vast majority of their ivory to tourists. According to them, their most prominent buyers are Taiwanese, Japanese, Thais and Italians. They also mentioned that German and French tourists often buy ivory. Local people with the exception of military officials, do not buy ivory, as it is too expensive. Military officials, according to this dealer, often buy ivory as gifts to show wealth and status.

As was stated by the patron of Mandalay’s other ivory carver, the owners of this shop stated that no ivory came from elephants killed in Myanmar. The ivory came from elephants that had died from natural causes and the ivory was purchased from the government through a commission system managed by the Department of Forestry. However, this dealer did state that some of the ivory used originates from elephants that had been killed in both India and Bangladesh. Raw ivory is smuggled from these two counties by land through Bangladesh and is sold illegally. Two smuggling routes are used most often. These are: India to Bangladesh to Arakan to Yangon to Tachilek and, less frequently, India to Mandalay to Tachilek. According to this carver, raw ivory is rarely sent to Yangon, because since 1988 there has been no ivory carvers based in the capital. Occasionally, sandalwood carvers in Yangon will carve ivory, however, these wood carvers do not purchase raw ivory. Instead individuals can bring raw ivory to them to be custom carved. Mandalay has always be known to produce higher quality ivory carvings than Yangon. In fact, Mandalay is known to produce the finest ivory carvings in the country.

## The Trade of Elephants and Elephant Products in Myanmar

According to the owner, they acquire 2-3 pairs of tusks from Myanmar elephants that have died of natural causes every three years. They acquire 2-3 pairs of ivory tusks from India and Bangladesh each year. Judging from the amount of carved ivory on display and from their apparent rate of sale, these numbers are most likely understated.

The owners of this shop carefully explained how one can tell the differences between real and fake ivory as well as bone. They also explained how some new ivory is made to look as though it was old. This 'fake old ivory' is especially popular with Italian tourists, who often believe it to be real. The owners carefully explained how to differentiate fake and real ivory carvings. Bone (which is also apparently only taken from elephants that have died from natural causes) is sometimes used for carving but can easily be identified by its colour, grain and smell. Bone is usually used only for small carvings and beads. African ivory is sometimes available but is seldom used as it is of much poorer quality. African ivory tusks are softer, have more hollow sections and are much more curved than Asian elephant ivory, all being undesirable traits for carving. Ivory dealers in Myanmar state that they are forbidden by law to sell raw ivory.

Credit: Chris R. Shepherd/TRAFFIC Southeast Asia



Ivory carving on display in Mandalay, Myanmar

The owners stated that they regularly export ivory for foreigners. All ivory sold to tourists is accompanied by a certificate which guarantees that the carving is made from buffalo bone. A sign on the store's door states that anything in the shop can be sent anywhere in the world.

### SECOND IVORY CARVING SHOP – MANDALAY

The second of the two main ivory carving shops in Mandalay was also visited in April 2000. Both shops visited as well as various dealers in the city confirmed that there were only two ivory carvers in the city. According to the owners of this shop, members of this family had carved ivory for four generations. Traditionally the men do the carving. The man carving during this visit was very old and had been carving ivory all his life. The carving is done in the back room of the family's home, where a small display case shows off some examples of his work. When asked where the tusks came from, he stated that elephants were not illegally killed for the ivory trade in Myanmar. He stated that the government sold 'concessions' on wild elephants. When an elephant dies of natural causes, whoever had the rights to that animal claims the ivory for carving. A fee of USD2,703.00 is paid for each animal. Extra charges, basically 'red tape' adds on an additional USD1,351.50, bringing the total price paid by the carvers to USD4,054.50 per elephant. No other parts are taken by this carver and he was unsure if any other parts were used from these dead animals. These elephants, which have died of natural causes usually come from within protected areas. The carvers are given certificates describing the elephants which they have rights to. These certificates, issued by the forestry department (see photos), prove the legitimacy of the carvings and the business. The same system applies for government-owned domestic elephants as well, although the fee is considerably lower. When ivory is scarce, this carver turns to carving teak.

The raw tusks are marked, cut and carved. Once the carvings are complete, they are sold to ivory dealers in Yangon, such as those at the pagodas. This carver stated that he can finish two small simple carvings in one day, which sell for USD10.80 each. Some of the larger, more intricate pieces can take as much as 1½ months to complete and sell for USD1,756.75 each. Often he receives orders from the dealers for seals and chopsticks,

which sell for USD10.80 and USD22.00 respectively. Approximately 150 carved pieces were in a case, waiting to be purchased by the dealers. The majority of these were carved elephant figures 5-10cm in height, chopsticks and blocks for name seals. Four raw tusks were observed in a case in the back room. He stated that while he was aware of ivory coming into the country from India, he followed the government laws and did not use any of this illegal ivory.

The dust and scraps left over after carving a piece is sold to a local Traditional Chinese Medicine dealer. The dust and scraps are sold for USD27.00 per 1.6kg.

### **MANDALAY HILL PAGODA – IVORY SHOPS**

The Hill Pagoda in the city of Mandalay was visited during this survey. No ivory was observed for sale in any of the numerous shops surrounding the pagoda. Approximately 15 bead necklaces made from bone were available. According to the dealers, these were made from elephant bone.

### **MAHA MAYA MUNI BUDDHA TEMPLE, MANDALAY**

There are numerous shops at the entrance of the temple, 16 of which were found to have ivory for sale during a visit in April 2000. Most of the 16 ivory dealers at this location stated that their ivory was purchased from the government. Four or five of the dealers indicated that much of the ivory was actually purchased from illegal sources. Apparently raw ivory is smuggled into Myanmar from India through the town of Tamu. The ivory is then carved in Mandalay and then exported to Thailand and China. While two of the dealers questioned refused to answer, the others stated that they send considerable quantities of ivory to China through Ruili, and to Thailand through Tachilek. The dealers in these shops said that the carved ivory is seldom sold to locals, but is often sold to tourists, notable those from Japan, China, Italy and Germany. Some ivory also comes from elephants illegally poached within Myanmar. Poachers bring tusks and hides to Mandalay where they sell them to middlemen. Middlemen in Mandalay currently pay USD270.30-USD405.40 per 1.6kg of raw ivory.

## **CONCLUSIONS**

This study clearly shows that the trade in Asian Elephants and their derivatives in Myanmar continues. Elephant products, especially ivory, are acknowledged by traders to be imported illegally across borders from India and possibly elsewhere. Unknown quantities of ivory are entering Myanmar. Products, again mostly ivory, are exported out of Myanmar. Dealers have pointed to buyers from Japan, Taiwan, Thailand, Italy, China and Germany as being the biggest buyers of ivory. Ivory exports appear to go from Myanmar to Thailand, carried across the border on foot at Tachilek, and then onwards from there, likely by air from Thailand's international airports. Although there is an immigration post at this border crossing, there does not appear to be any inspections carried out to detect smuggling of ivory. It also appears that buyers on international flights carry carved ivory out of the country.

Domestic use of elephant products is small, limited to traditional medicinal uses and possibly some local consumption of meat. Ivory, for the most part, is not purchased by locals. The ivory carving industry does not appear to be shrinking, but instead seems to be run by fewer people than was the case in the past. These people have an apparent monopoly on the industry.

## The Trade of Elephants and Elephant Products in Myanmar

Enforcement at official Myanmar border crossings and other points of entry and exit is severely lacking. Without this enforcement, the trade will obviously continue unabated. Myanmar's legislation, which allows trade of products derived from domesticated elephants creates a large potential loophole in which wild-caught elephants and elephant parts from other countries could be "laundered". Ivory smuggled into Myanmar from India or elsewhere could be carved and then declared by the dealers as ivory originating from local, legal sources.

### RECOMMENDATIONS

The following recommendations are made following this study:

- TRAFFIC Southeast Asia should continue to monitor the trade in Asian Elephant products in Myanmar, especially at key exit locations such as Tachilek. Information gathered during monitoring activities should be passed on to the relevant authorities. Enforcement agencies in Myanmar as well as its neighbouring countries should be encouraged to act upon information given to them and be encouraged to take further actions against the illegal trade.
- Implementation of national legislation needs to be reviewed and weaknesses addressed. TRAFFIC is in a good position to begin dialogue with the CITES Management Authority in Myanmar, to explore the needs of the country to improve its legislation, and enforcement thereof, relating to elephant conservation and trade in elephants and their products.
- Authorities in India should be made aware of the fact that ivory is being smuggled out of India into Myanmar and appropriate action should be taken to address this.
- Authorities in Thailand should be made aware of the fact that ivory continues to be smuggled into Thailand for sale there. The Thai enforcement agencies should be encouraged to increase efforts to prevent wildlife from being smuggled into Thailand from Myanmar through activities such as increased checks at border markets.

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TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. It has offices covering most parts of the world and works in close co-operation with the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

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