n spite of an international trade ban on ivory by the Convention on International Trade in Endangered Species (CITES), which came into effect in 1990, ivory continues to be smuggled around the world. There are reports from African wildlife authorities that elephant poaching is on the increase following the CITES decision at its last conference in November 2002 to allow a second 'one-off' sale of 60 tonnes of tusks from three southern African countries (South Africa, Namibia and Botswana) after May 2004. So, was this a wise decision?

Our three ivory trade surveys carried out in 27 African and Asian countries between 1999 and 2002, sponsored by Save the Elephants, show clearly that there was an ivory market crash in 1990-91 caused by the CITES ban, followed by a resurgence in ivory carving and trading in certain places. Southern China, Thailand, Egypt and Cameroon-Nigeria were traffic hotspots in 2002. But Thailand cracked down on ivory carvers in December 2002, almost shutting down ivory production there. Egypt and China have also recently been paying more attention to ivory smuggling in the face of adverse publicity, but the carving in China continues.

Our investigations in 2002 in Japan, China, Hong Kong, Taiwan and South Korea found more than 54,000 worked ivory items for sale in the 11 cities visited. Hong Kong with almost 36,000 pieces had by far the most ivory on display, followed by China with more than 9,000 items seen in the three largest cities (Beijing, Shanghai, Guangzhou). Tokyo and Osaka had a total of about 7,500 articles. The ivory trade is dying in Taiwan (1,850 pieces in four cities) and is already dead in South Korea (36 pieces in Seoul).

#### Trends

Hard data from East Asia in the 1980s are sketchy, but it seems certain that the number of ivory carvers in all of the countries visited is considerably fewer now than then, suggesting that ivory production has dropped from pre-ban days. This good news was corroborated by interviews with ivory retailers who reported that business had fallen markedly

since the late 1980s, particularly in Japan, where the number of carvers is down from about 300 in 1980 to around 100 today.



# **Enter, China's 'Ivory Triangle'**

Part of China's Guangdong Province has become the ivory producing hub of Asia, and is supplying illegally carved African ivory to the world. **Daniel Stiles** and **Esmond Martin** report on their latest findings . . .

The bad news is that in China ivory manufacturing has shifted from a few large government factories employing hundreds of carvers, principally in Beijing and Guangzhou, to an unknown number of smaller private workshops, most of which are in the triangle between Guangzhou, Hong Kong and Macau.

The government factories were easy to monitor, but the private ones set up since the mid-1990s are largely illegal, secretive and hard to control. There are perhaps seven workshops in this Ivory Triangle employing about 150 ivory carvers with at

least two more in Fujian Province, one in Tianjin and one in Henan Province. They disguise their work on elephant ivory by also carving mammoth ivory and jade, then shipping some of it to Hong Kong or Macau where it is smuggled out to Europe, the US, Japan and other parts of Asia.

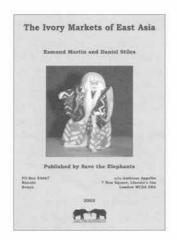
The number of fulltime ivory craftsmen in Hong Kong has dropped from nearly 1,000 in

1989 to none today, with maybe half a dozen who still occasionally carve pieces on request. The same is true of Taiwan and Singapore, previously active ivory carving centres which, along with Shanghai and Beijing, buy almost all their carved ivory from the Ivory Triangle.

The raw ivory source is Africa. Pre-1990 legal raw ivory stocks owned by the Chinese government are nearly exhausted, and seizures of illegal African ivory destined for China totalled more than 50 tonnes between 1996 and the end of 2002, a dramatic increase over seizures made in 1990-95 (only 854 kg). China produces large numbers of ivory figurines, jewellery and miscellaneous items such as chopsticks, cigarette holders and name seals (chops), aimed mostly at foreign buyers.

In Japan ivory wholesalers, craftsmen and retailers are organised into associations. Almost all ivory production in the country is sold internally and remains there. Strict supervision is in place and records are kept of all the ivory used by members of the associations. Because of Japan's reputed control over its ivory trade, CITES granted Japanese traders exclusive rights to buy all of the 50 tonnes of ivory auctioned by southern Africa in 1999.

About 80 % of the ivory consumed in Japan is for name seals (hanko). Musical instrument parts and netsukes account for much of the rest. The netsukes and figurines carved in Japan are arguably the finest in the world and retail prices for



### **FINDINGS**







Private workshops like this one (facing page) have replaced China's government-owned factories of the 1980s. Above: Sculpted boats (example left) with dragon or bird-shaped prows are still a speciality of Guangzhou carvers, who supply much of the carved ivory now in the Beijing Friendship Store (above). Right: Japan's craftsmen produced some 100,000 ivory name seals in 2001.

worked ivory reflect this - they are the highest of any country in our surveys.

Although annual seizures of ivory destined for Japan have been generally decreasing in weight between 1990 and 2002, Japan is still a target for smugglers. Hong Kong businessmen along with a few members of Japan's ivory associations have been implicated in the smuggling. Weaknesses in the ivory registration procedures make it impossible to know the origins of all raw and worked ivory in Japan, nor the annual consumption figures. Japanese traders told us that about 10 to 15 tonnes a year are needed to satisfy present demand, which means the 50 tonnes imported from Africa in 1999 will have been used up by 2004, just in time for the next sale, though old stocks are available.

#### To sell or not to sell?

There has been heated debate in wildlife conservation circles about the advisability of allowing the limited sales of government ivory stocks from southern African countries. Proponent countries argue that they do not have an elephant conservation problem — quite the contrary. The newspapers of southern African countries are full of stories about wild elephants rampaging into farmers' fields, destroying crops and injuring or killing people.

Even Kenya, whose Kenya Wildlife Service has led the anti-trade fight, is experiencing an escalation of human-elephant conflict as the country's herds increase. In some parts of Africa there is simply not room enough for all the elephants to live in harmony with people. This problem is a result of effective wildlife management, claim trade advocates, so why should successful government action be penalized?

Elephants are living creatures and as such they die naturally. They leave behind their tusks. It is a waste of natural resources, trade proponents argue, not to make use of this ivory. African countries are poor and their conservation programmes are cash-strapped. Governments that want to sell ivory have promised to use the proceeds for wildlife conservation. It is expensive to store and guard ivory and stocks are accumulating continually. The shortage of legal ivory on the market leads to elephant poaching, say trade promoters, so to release African stocks periodically would remove the need to poach.

hese are powerful arguments, but trade opponents counter with the view that once even limited international trade is allowed, demand for ivory will be stimulated. Opening this Pandora's Box will inevitably lead back to the situation that prevailed in the 1980s, when elephants were slaughtered by the tens of thousands every year. Ivory supplied by natural deaths and culling operations would never be enough to satisfy demand, and poaching on an even larger scale than now would ensue. Anti-trade activists try to make the case that even the 1999 southern African limited sales provoked a wave of poaching, repeated after CITES' most recent sales approval. They also claim that government ivory management systems are weak and need be strengthened before renewed trade can be allowed.

Our investigations were designed to amass hard data from which to evaluate both scenarios in respect of the limited sales. Do these stimulate or satisfy demand? So far we have finished collecting only the baseline data. It takes two or more points in time to discern a trend, so we need to carry out a second round of surveys using the same methods with the same indicators in the same places to be able to see what has been happening.

Based on the scant data available from the 1990s before our studies began, and our findings and interviews with people in the ivory industry, we can state that there is no solid evidence that the CITES-approved ivory sales of 1999 stimulated widespread demand. For one thing, the ivory went only to one country – Japan.

#### The traffic pattern

The first prime raw ivory source area in Africa is the immense forest stretching from the Democratic Republic of the Congo through Congo-Brazzaville and Gabon into Cameroon. The Central African Republic and southern Sudan used to be part of this supply sump, but there are few large tuskers left in those countries. Much of this ivory then makes its way to Douala or Yaoundé in Cameroon, from where some of it travels on to Nigeria, Ivory Coast or Senegal.

Another share is worked in Douala and sold there, while a further quantity is shipped or flown as raw or worked ivory to Asia and Europe. Minor routes take raw ivory from central Africa to Egypt or into southern Africa, and carved ivory is flown from Lagos, Abidjan or Dakar to Europe and the US.

The second principal ivory source is the vast savannah ecosystem extending from

Kenya in the north, through Tanzania into Zambia, Zimbabwe and Mozambique. Poaching in Kenya is nominal with fewer than 100 elephants lost in 2002, but since Zimbabwe's political crisis started in 2001 poaching there has skyrocketed. Much of this ivory goes to Durban, South Africa, where it is shipped via Singapore to China or Japan, or it goes north to Ethiopia and Djibouri, where some of it makes its way to China or Thailand. There are occasionally shipments out of Nairobi, Mombasa and Dar es Salaam to the Far East.

In Asia the main sources of tusks are India and Burma. Laos and Cambodia used to supply large quantities, but few tuskers remain after heavy poaching in the 1990s, some say as a consequence of the African ivory ban. Some 28,000-33,000 wild elephants remain in India and Burma, up to two-thirds of all Asian wild elephants. The scale of the Indian ivory market is not known, but Burma's is second only to Thailand in South East Asia.

We found that small amounts of Indian worked ivory are smuggled to Sri Lanka, Nepal and Singapore and a few tusks end up in Burma. Exported Burmese tusks go mainly to Thailand, with a few to China, and worked ivory travels to Yunnan in China, and Thailand and India.

#### Conclusions

The 1990 CITES international trade ban lowered overall demand for ivory, particularly in Europe and the US, which used to be the main buyers of African and most Asian worked ivory. The plunge in demand was reflected in a concomitant drop in elephant poaching in Africa, though perhaps a rise in parts of Asia. There persists a worrisome base level of desire for ivory carvings, principally in Asia but also in Europe and America. We found 270,000 worked ivory items for sale in our three regional surveys.

The case for limited ivory sales stimulating elephant poaching has not yet been proved. But whether so or not, ivory trafficking will continue as long as there are buyers. China and Japan still have active ivory markets and as such will continue to attract illegal ivory. The added problem with China is that it is also an engine of illegal ivory production.

Repeated 'one-off' sales only muddy the waters of the ivory trade debate. The Parties to CITES need to come up with a clear policy on ivory. Either ban the international trade completely, or allow it under certain well-defined conditions.



## Out of the water

A marine centre in Watamu, Kenya, is creating a splash by bringing a precious local coastal environment to life, writes **Marisa Meizlish**.

t is dawn and countless species are just beginning their predator-prey games for another day. It is here, day after day, that some of eastern Africa's most dynamic and diverse wildlife activity takes place – and there's not a lion, wildebeest or hyaena in sight.

This is the coast, whose astonishingly varied habitats and wildlife so often play second fiddle to the big cats and other attractions of the grasslands of the hinterland, but which boast a fauna and flora no less spectacular. Here, whale sharks and manta rays stand in for the Big Five; white sand beaches counter the inland savannahs, and coastal birds and sea turtles depend on the shore the way giraffes and antelopes rely on watering holes.

No fewer than 55 % of all Kenya's threatened mammalian species and 38 % of the country's threatened plant species are found in coastal environments, while – offshore – these waters support some of the richest wildlife habitats in Africa.

At Watamu, 15 km south of Malindi on Kenya's north coast, the uniqueness of these coastal habitats is being recognised – and celebrated. A conservation group, Local Ocean Trust (LOT), has just opened a Local Ocean Marine Centre dedicated to promoting marine conservation and to sensitising people, residents as well as tourists, to the wonders of this inimitable marine environment. The Centre has the advantage of offering both information and

interactive sections, along with a resource library and video access.

Watamu's coastal environment is considered to be especially dynamic in that it boasts a delicate balance of interacting ecosystems: ocean, coral reefs, mangroves, the Arabuko-Sokoke coastal forest, Mida creek, and wide beaches where endangered sea turtle species nest. In 1968 the Kenya Government recognised the locality's importance by making this the site of the country's first marine reserve and park. Global recognition, in the form of designation as a UN Biosphere Reserve, followed soon afterwards.

Such diverse habitats make Watamu the ideal setting for a Centre promoting marine awareness and engendering passion about coastal environments. Since education is an essential component of any conservation effort, the Centre is aimed at both tourists, who enjoy Watamu's great scenic beauty, and locals who live with – and off – its natural riches.

The Centre offers something absorbing for everyone, even the unconverted. On murals depicting Watamu's varied ecosystems, local information is combined with a wealth of general marine data. You are taken on a fascinating virtual tour from Mida's mangroves, through the inter-tidal and reef systems, and on out into the open ocean. And, such is the sound accompaniment (of whales calling and a splashing tide), you might be forgiven if you find