Summary
For the purposes of traditional Chinese medicine (TCM), the bear is a walking drugstore. Many parts of the bear, from fat to brain to spinal cord, have been used for millennia. The most coveted medicinal part of the bear is the bile within the gall bladder, which gram for gram can exceed the cost of narcotics.

There is increasing evidence that the Asian demand for bear gall bladder is impacting bears in nearly all of their diverse habitats around the world. This report examines the markets for bear gall bladder in East Asia, which is the centre of world demand. The markets for bear gall bladder in the People's Republic of China, Hong Kong, Japan, Macau, the Republic of South Korea and Taiwan are examined, comparing their current situation with that documented by TRAFFIC USA in the 1991 report The Asian Trade in Bears and Bear Parts.

Discussions in the full report address bear farming in China, Hong Kong's gall bladder registration scheme, biological implications of the legal trade in bear gall bladders in Japan and Taiwan's efforts to monitor its domestic market for bear gall bladder. Finally, recommendations are given for actions necessary to better understand, monitor and control the trade in bear gall bladders and bile to ensure that it does not decimate wild bear populations, if not entire species.

Bears as medicine
Contrary to popular references of bear gall bladders being used to stimulate sexual potency, bear bile is not prescribed as an aphrodisiac in the classic tenets of TCM. Medical applications include treatment of life-threatening cancers, burns, pain and redness of the eyes, asthma, sinusitis and pain in general. Bear gall bladder is also used to treat serious liver ailments and as a tonic to prevent liver damage from over-consumption of alcohol.

Bears are the only mammals to produce significant amounts of the bile acid tauro ursodeoxycholic or UDCA. The Giant Panda is the only exception to this rule in that it produces no UDCA, and anecdotal evidence suggests this is the only bear species not hunted
specifically for its gall bladder. Today, UDCA made synthetically from cow bile is used in Western medicine to dissolve gallstones and has shown promise in treating a fatal form of cirrhosis.

China, Japan and South Korea together consume nearly 100 tonnes of synthesized UDCA every year -- well over half the world's annual consumption. However, no documentation attests as strongly to the continuing popularity of bear gall bladder in East Asia as does China's bear bile farms, where nearly 10,000 bears are kept and bile is routinely drained from live bears through devices implanted surgically in their gall bladders.

Chinese medical texts recommend the Asiatic Black Bear or the Brown Bear of Asia as sources of medicinal bile. Due to this preference and perhaps simple proximity, East Asia's bears have been the hardest hit by the demand for gall bladder. The combined pressures of commercial demand, excessive hunting, habitat destruction and nuisance animal control have depleted most of Asia's bear species.

Four of Asia's five bear species -- the Sun Bear, Sloth Bear, Asiatic Black Bear and Giant Panda -- along with the Brown Bear populations of Bhutan, China and Mongolia are banned from international commercial trade under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). However, domestic trade remains legal in some cases and there continues to be an international black market for both legally and illegally obtained bear gall bladders.

The East Asian markets
TRAFFIC East Asia researchers surveyed the markets in China, Hong Kong, Japan, Macau and South Korea in 1994 and 1995. The information in this report on the current market in Taiwan is taken from government surveys in 1994.

In China, where the sale of gall bladders from wild bears is prohibited, bear bile is mass produced. About half of the bears on China's farms are milked of their bile, producing an estimated 10,000kg of bile every year. One farmed bear is said to have a five-year production life, during which it produces bile equivalent to that from the gall bladders of 220 wild bears. To date, however, any conservation benefit to the status of wild bears has not been documented.

TRAFFIC visited seven Chinese cities to assess the availability of farmed bile versus whole gall bladders. Farmed bear bile was found in each of the cities and was also being sold on the train from
Guangzhou in southeastern China to Shenzhen. It was also being sold in the duty free area of Beijing International Airport, which is most likely a CITES infraction as all of China's bears are banned from international commercial trade. In all, TRAFFIC found 27 brands of farmed bear bile products, including 18 brands of bile, six tonics and three wines. Farmed bile sold for up to US$9 per gram.

Gall bladders were found in Heihe, a market town along the Sino-Russian border. One merchant offered a gall bladder allegedly from a Russian bear for US$90, and claimed to have up to seven others. In Changchun, one gall bladder labelled as coming from near the Sino-North Korean border was seen in the airport. Guangzhou was the only other Chinese city where gall bladders were openly sold in 1995. In total, three merchants in three cities offered gall bladders for sale, priced up to US$8.83 per gram or US$500 or more per whole gall bladder.

The influx of large, dependable supplies of farmed bile has stabilized prices for both bile and gall bladders in China, with prices for both being nearly equal. In 1991, gall bladders were selling for six times the price of farmed bile. However, what this stabilization has meant to the demand for availability of gall bladders from wild bears needs further examination. While low compared to those in other East Asian countries, the prices quoted for bear gall bladder are still high enough to offer economic incentive for a black market.

In Hong Kong, where the import, export, possession or sale of bear gall bladder and bile has been prohibited without a licence since January 1994, TRAFFIC visited 61 shops that had sold alleged or real bear bile in 1991. Of the 61 revisited in 1995, only four sold bear gall bladders. Prices ranged from US$17.31 to US$45 per gram, averaging US$29.43 -- a rise of 33.77 per cent over the average price for authentic gall bladders in 1991. None of the four shops held licences to sell bear gall bladder, and two could now face prosecution.

The availability of gall bladders has decreased significantly in Hong Kong since 1991, when TRAFFIC found more than 100 gall bladders for sale in 17 stores and bile in 20 of the 21 shops visited. Several factors could account for the change, including the new requirement for licensing and registration and the government's seizure of 1,661 gall bladders since 1994 following a voluntary registration of existing stocks.

Japan is unique among the East Asian markets because it has its own substantial wild populations of Asiatic Black and Brown Bears. Hunting bears and selling their gall bladders is legal. On average, nearly 20 per cent of Japan's Asiatic Black Bear population and more
than 14 per cent of its Brown Bear population are killed each year for sport and nuisance animal control. Prices paid to hunters for gall bladders vary, ranging from US$2,000 to US$10,000 each.

Japan is also home to nine bear parks, zoo-like amusement concessions that can and do sell gall bladders and other parts from their exhibition bears. In 1993, these parks housed approximately 1,100 bears.

During surveys of Japan's TCM shops in four cities, TRAFFIC found bear gall bladders and bile openly for sale, with the average price for gall bladders set at US$35 per gram although some sold for up to US$120 per gram. Three bottles of farmed bear bile from China were also found on sale, a possible CITES infraction.

Japan's market seems little changed since 1991. Also of concern is the possible unsustainability of the Japanese bear hunt. In addition, since proof is not required that a bear was indeed killed because it was a nuisance, bears could be killed under the guise of nuisance animal control to supply the gall bladder trade.

In Macau, where authorities say there is "no significant trade of bear gall bladders or bile," the shopkeepers of 34 of 43 TCM shops visited in March 1995 said they stocked bear gall bladder. Gall bladders were seen in 19 of the shops and bile powder in 14. Prices ranged from US$0.68 to US$68.38 per gram.

The findings indicate that bear gall bladder is far more widely available in Macau than it was in 1991 and more so than in neighbouring Hong Kong. Given its proximity to Hong Kong and China, both of which have far more restrictive laws regarding trade in bear gall bladder, Macau may serve as an offshore source of illegally obtained bear gall bladder for its neighbours.

South Korea remains the East Asian market with the highest retail prices for bear gall bladder. TRAFFIC's 1995 survey of shops in three cities found a price range of US$10 to US$500 per gram, a significant rise over the 1991 price range of US$1 to US$210 per gram. An unreliable and increasingly scarce supply may be responsible for driving up the prices.

In Seoul, 11 of 43 shops surveyed quoted prices for bear gall bladder, but only six actually had bear gall bladders in stock and most kept their supply locked in safes. Two of five TCM medicine stalls outside the Chinese Embassy were selling vials of farmed bear bile from China priced at US$1.50 per gram, the import of which was probably a CITES infraction. Only 12 of 64 shops surveyed in two other cities claimed to sell bear gall bladder.
In Taiwan, the import, export, possession, trade, exchange or display for sale of bear gall bladders is prohibited. However, trade in American Black Bear parts and derivatives is possible with government approval. In 1994, the Department of Health launched its own markets surveys of bear gall bladder and bear bile, a move unprecedented in East Asia. The results, published for the first time in this report, indicate that prices are significantly higher than they were in 1991 but the availability of bear gall bladders and bile is somewhat less.

The findings of the last of three surveys indicate that Taiwan's TCM traders held a stock of between 311kg and 1,109kg of bear bile in 1994. Prices for genuine bear bile ranged from US$11 to US$75 per gram while the cost of farmed bear bile was US$5 to US$32 per gram. More than 75 per cent of 525 survey respondents said they used bear gall bladder.

**Recommendations**

While neither exhaustive nor statistically representative of the entire East Asian market, the surveys indicate that availability of bear gall bladders may be stable or even decreasing in some markets. However, prices have risen significantly in most countries and there continues to be illegal trade. The following are among TRAFFIC's recommendations:

- In East Asian countries, governments should adopt strict measures to combat illegal trade, including registration and marking systems for bear gall bladders and bear bile and requirements for proof of legal acquisition. More specific recommendations are given in the report for individual countries. China, for example, should undertake frequent and comprehensive monitoring of the illegal market for bear products. In addition, a status survey of wild bear populations in China needs to be done as a matter of urgency.

- On a national level to support trade regulation, governments in consuming countries should work with public health officials, TCM academics and TCM communities to establish ongoing monitoring of legal domestic trade.

- On a regional scale, further research must be carried out to gain a deeper understanding of the bear gall bladder and bile market. Such initiatives should include trade and economic studies of the nature of global demand and market dynamics and sociological surveys to document the demographics and attitudes of users.
• Measures should be taken to improve enforcement of import/export controls in consumer and producer countries.

• Law enforcement agencies in East Asia should initiate long-term covert investigations to interdict illegal shipments before they reach end-use consumers.

• Where legal trade is allowed, governments should make more extensive efforts to make consumers and traders aware of what constitutes legal versus illegal trade.

• In regard to bear farming, the captive production of bear products in China should be examined to assess any impact on wild bear populations. The following information will be of particular importance: the number, species and source of bears on each farm as well as reproduction and mortality records; China's current annual consumption of bear bile; details of government measures to prevent CITES infractions relating to export of farmed bear bile; and documentation of the claimed positive effects of bear farming on conservation of wild bear populations.

• Herbal and animal substitutes for bear bile should be studied more fully and actively promoted.