Bear Markets: Japan

A summary of the findings of: 'Japan's illegal trade in bear products: A threat to bears worldwide' published by Japan Wildlife Conservation Society (JWCS), February 2002.

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Japan is one of the biggest consumer countries of bear gall and bile – there is virtually no regulation in the current Japanese legislation to restrict domestic trade in bear gall bladders.. There are 2,000-3,000 brown bears in Hokkaido, the northern Japanese island, and about 7,000 black bears in the other areas of Japan. Populations of both species are declining as their habitats are destroyed and fragmented. In Japan, over a thousand bears are killed annually for sport hunting and pest control, without the implementation of proper conservation control measures. In bear parks, bears are kept in inappropriate conditions, and some parks sell bear products, including gall bladders.

International trade regulations covering bears were strengthened in the early 1990s, but smuggling illegal bear products into Japan continues. There were 65 official seizures at customs relating to bears in 1999, and 122 cases in 2000. Products are believed to be from both wild bears and bears on Chinese bear farms.

From October 2000 to February 2002, JWCS examined the sale of bear products and found that 76.6% of the 128 TM (Traditional Medicine) pharmacies investigated were handling bear gall bladder, bear bile, or bile products. The cost ranged from around JPY8000 (US\$67)/g for intact gall, to around JPY10,000 (US\$83)/g for bear gall crystal or powder. Bile powder from Chinese farmed bears was sold at lower prices. (119JPY=1US\$).

Bear bile from bears in Chinese bear farms and wild bears is illegally entering Japan and being openly traded. There are therefore shocking implications of the Japanese bear bile trade to both animal welfare and the survival of bear species.





Intact bear gall on sale at a TM pharmacy.

Summary of Findings

The investigation revealed four different sources for the products:

- a) imported from wild bears; b) Japanese wild bears (sport hunting and pest control);
- c) Chinese farmed bears; d) bears from Japanese bear parks.

a) Imported from wild bears: It was found that 33TM pharmacies (25.8%) and 29 manufacturers (58.0%) were handling imported wild bear gall bladders. The main source of bear gall and bile in Japan is imported from wild bears, mainly from China, Himalayas, Canada and Russia. This suggests that the illegal international trade in bear gall and bile is extensive. It was found that Hong Kong is one of the important accumulation points for these products, suggesting that specialised traders are operating this illegal trade.

b) Japanese wild bears (sport hunting and pest control): It was found that 23TM pharmacies (18.0%) and 7 manufacturers (14.0%) were handling gall bladders or bear products taken Japanese wild bears. This is an important supply for TM pharmacies, most of them obtain the gall bladders directly from the hunters.

c) Chinese farmed bears: It was found that 14TM pharmacies (10.9%) and 19 manufacturers (38.0%) were handling bear gall or bear products from Chinese farmed bears. Even though these have been illegally imported, manufacturers rely on this source as a stable supply, and they encourage the use of them.

The TM industry is illegally importing Chinese farmed bear bile, instead of promoting a change to alternative treatments or synthetic drugs. Consumption of bear gall products is increasing in Japan, and sales over the Internet are increasing.

d) **Bears in Japanese bear parks:** None of the TM pharmacies, but 2 manufacturers (4.0%), were found to be handling gall bladders from Japanese bear parks. JWCS discovered the sale of bear gall bladders in a bear park.

As a result of this investigation, JWCS has confirmed that the demand for bear bile in Japan is still continuing at a level of at least 200kg per year. If we assume 20g of dried bear gall and bile is obtained from one bear, then in theory 10,000 bears must be killed to satisfy the demand. Even the farmed bears in China don't live for very long, and the captive stock needs to be supplemented with wild caught bears. The volume of official, legally imported products is only 2-8kg (obtained from CITES Appendix II bear species). There is clearly a major illegal trade in bear gall bladder and bile products being undertaken at present in Japan. JWCS believes that the demand has badly affected the survival of bears both inside Japan and internationally.

Current Japanese legislation does not control the marketing of bear gall, bear bile and processed medicines, so these products are still openly on sale in Japan. Furthermore, since the Japanese domestic legislation on bear trade has several loopholes, it is possible that illegally imported bear gall is mixed with domestic products in the market place. This also has a negative effect on the implementation and enforcement of CITES.

Current status of bears in Japan

1. Brown bear (*Ursus arctos*): The brown bear in Japan is found only on Hokkaido, and its estimated population is placed less than 2,247~3,628¹. Its habitat ranges from the coastal regions to the mountains, but today the habitats are being fragmented and are shrinking in size. It is listed in Appendix II of CITES. One population of the Japanese brown bear (found in the western Ishikari region of Hokkaido) is listed as an 'endangered regional population' in the Japanese Red List. The Japanese population has yet to be listed in IUCN Red List.



In Japan there is virtually no proper conservation and wildlife management policy in place, and human-animal conflict problems, including attacks on humans and damage to agricultural crops, are not adequately controlled. Therefore, when bears appear in human settlements, where there are no means of preventing damage by bears, the animals are immediately treated as pests and dealt with accordingly. Even when no damage has taken place or there have been no specific risks, bears are hunted or captured in the name of 'preventive pest control'.

There is the additional problem of the high commercial value attached to the gall bladders, taken from hunted bears.

History of bear hunting

In the Edo period (1603-1867), during which the effect of bear gall bladder as a Traditional Oriental Medicine (TM) came to be known and the demand for it increased dramatically in Japan, a class of hunters called matagi, who would conduct hunting with strict rituals, in traditional and secret ways, came to be recognised. This tradition was handed down through the generations as a specialised professional occupation, and gave improved social status. However, in the Meiji period (1868-1912) anybody was allowed to be engaged in hunting activities, if carried out within the legal framework. Today the industrial structure has changed, and matagi as a traditional profession no longer exists. However, since the Meiji period until today, the Asiatic black bear and brown bear have always been the objects of both sport hunting and pest control.

Bear hunting legislation

Hunting of wild animals within Japan is regulated by the Game and Hunting Law, which classifies such activities into sport hunting and hunting for other purposes, particularly pest control.

Sport hunting of mammals, except for marine mammals, rats and moles and birds, is only allowed for those animals designated as "*target animals for hunting*". This includes the bear species. Those who have a proper hunting qualification and permit are allowed to hunt bears for sport within a hunting period, and outside certain designated protected areas. However, the government (Ministry of Environment) prohibits hunting of the Asiatic black bear in 17 of the 46 prefectures, where the animals are believed to be found (in some of these prefectures the species may be extinct). In Hokkaido, which is the only prefecture where the brown bear is found in Japan, hunting of this animal is not prohibited. Trapping for sport of either bear species is prohibited.

The pest control of game mammals and birds is allowed by permission granted by the individual prefectural governments, with great discretion left to the authorised official as to how, and on what grounds, the permit is issued. Some of the prefectures entrust this to the municipal governments. The Ministry of Environment offers certain guidelines for setting criteria pest control permits, but the prefectural governments are not bound to adopt these. Unlike sport hunting, there is no restriction on when or where pest control takes place. Therefore, it can happen within protected areas. There is also restriction on the use of traps, except where they may be detrimental to human safety.

Apart from the Game and Hunting Law, the Law for Conservation of Endangered Species of Wild Fauna and Flora (LCES), regulates hunting of listed domestic endangered species. However, the LCES does not list the brown bear and Asiatic black bear as endangered species in Japan, thus applying no control over the hunting of these animals.

The bear hunting statistics

According to recent statistics, the number of bears annually hunted for the purpose of sport hunting and pest control is 1,217 for Asiatic black bears and 299 brown bears⁴. From 1992 to 1998, the annual numbers of Asiatic black bears and brown bears hunted for pest control exceeded those killed for sport. In 1996, the number of Asiatic black bears killed in the name of pest control was 2.5 times the number killed by sport hunting. (Table 1)

There is no established effective monitoring system for data collection with the statistics based on basic reports by the hunters themselves. It is suspected that there is illegal hunting or manipulation of the figures. The number of trapped bears are not recorded.

number of Asia	atic Black	k Bears a	and Brow	n Bears	by Sport	hunting	and pest	t control.			
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1989~1998
											total
Sport hunting	761	869	811	578	553	448	728	479	539	492	6,258
Pest control	1,266	658	1,086	1,148	666	1,080	658	1,246	667	725	9,200
Total	2,027	1,527	1,897	1,726	1,219	1,528	1,386	1,725	1,206	1,217	15,458
Sport hunting	76	132	173	98	118	72	107	126	94	141	1,137
Pest control	108	88	94	124	169	105	122	210	112	158	1,290
Total	184	220	267	222	287	177	229	336	206	299	2,427
	number of Asia Sport hunting Pest control Total Sport hunting Pest control Total	Number of Asiatic Black 1989 Sport hunting 761 Pest control 1,266 Total 2,027 Sport hunting 76 Pest control 108 Total 108 Total	number of Asiatic Black Bears a19891990Sport hunting761Pest control1,266Total2,027Sport hunting7610888Total184220	number of Asiatic Black Bears and Brow 1989 1990 1991 Sport hunting 761 869 811 Pest control 1,266 658 1,086 Total 2,027 1,527 1,897 Sport hunting 76 132 173 Pest control 108 88 94 Total 184 220 267	Number of Asiatic Black Bears and Brown Bears 1989 1990 1991 1992 Sport hunting 761 869 811 578 Pest control 1,266 658 1,086 1,148 Total 2,027 1,527 1,897 1,726 Sport hunting 76 132 173 98 Pest control 108 88 94 124 Total 184 220 267 222	number of Asiatic Black Bears and Brown Bears by Sport 1989 1990 1991 1992 1993 Sport hunting 761 869 811 578 553 Pest control 1,266 658 1,086 1,148 666 Total 2,027 1,527 1,897 1,726 1,219 Sport hunting 76 132 173 98 118 Pest control 108 88 94 124 169 Total 184 220 267 222 287	number of Asiatic Black Bears and Brown Bears by Sport hunting 1989 1990 1991 1992 1993 1994 Sport hunting 761 869 811 578 553 448 Pest control 1,266 658 1,086 1,148 666 1,080 Total 2,027 1,527 1,897 1,726 1,219 1,528 Sport hunting 76 132 173 98 118 72 Pest control 108 88 94 124 169 105 Total 184 220 267 222 287 177	number of Asiatic Black Bears and Brown Bears by Sport hunting and pest 1989 1990 1991 1992 1993 1994 1995 Sport hunting 761 869 811 578 553 448 728 Pest control 1,266 658 1,086 1,148 666 1,080 658 Total 2,027 1,527 1,897 1,726 1,219 1,528 1,386 Sport hunting 76 132 173 98 118 72 107 Pest control 108 88 94 124 169 105 122 Total 184 220 267 222 287 177 229	number of Asiatic Black Bears and Brown Bears by Sport hunting and pest control. 1989 1990 1991 1992 1993 1994 1995 1996 Sport hunting 761 869 811 578 553 448 728 479 Pest control 1,266 658 1,086 1,148 666 1,080 658 1,246 Total 2,027 1,527 1,897 1,726 1,219 1,528 1,386 1,725 Sport hunting 76 132 173 98 118 72 107 126 Pest control 108 88 94 124 169 105 122 210 Total 184 220 267 222 287 177 229 336	number of Asiatic Black Bears and Brown Bears by Sport hunting and pest control. 1989 1990 1991 1992 1993 1994 1995 1996 1997 Sport hunting 761 869 811 578 553 448 728 479 539 Pest control 1,266 658 1,086 1,148 666 1,080 658 1,246 667 Total 2,027 1,527 1,897 1,726 1,219 1,528 1,386 1,725 1,206 Sport hunting 76 132 173 98 118 72 107 126 94 Pest control 108 88 94 124 169 105 122 210 112 Total 184 220 267 222 287 177 229 336 206	number of Asiatic Black Bears and Brown Bears by Sport hunting and pest control. 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 Sport hunting 761 869 811 578 553 448 728 479 539 492 Pest control 1,266 658 1,086 1,148 6666 1,080 658 1,246 667 725 Total 2,027 1,527 1,897 1,726 1,219 1,528 1,386 1,725 1,206 1,217 Sport hunting 76 132 173 98 118 72 107 126 94 141 Pest control 108 88 94 124 169 105 122 210 112 158 Total 184 220 267 222 287 177 229 336 206 299

Figures compiled from "Statistics of Game Hunting" of the Environment Agency

The reality of bear hunting

'Preventive pest control' and bear trapping are two major factors greatly affecting the conservation of bear populations.

Preventive pest control: 'Spring Bear Hunting'is carried out in April and May, when Asiatic black bears come out from their wintering dens. This continues a hunting practice from the matagi period. It is easy for the hunters to move around as there is less snow and the bears are slow moving following hibernation. In addition, the bears are thought to have rich, concentrated bile in their gall bladders. However, the hunting season is limited to November 15th – February 15th (October 1st - January 31st in Hokkaido). Consequently, local governments have granted permission for 'preventive pest control', assuming that a certain number of bears might cause problems after spring. Local government officers are given great discretion when granting permission, with virtually no scientific or systematic basis for the decision. The way in which the bears' natural denning activities are invaded, is very different to the purpose of pest control and effectively extends the official hunting period.

Trapping: When allowed for pest control, the use of snares, with which a number of bears can be caught, is allowed. The hunts are indiscriminate and even female bears in their breeding cycle and bear cubs can also become victims. A certain number of Asiatic black bears are predicted to be caught as by-catch, following the trapping of wild boars (especially with wire traps). Hunters must know that such a by-catch may occur, because of the overlapping distribution of these animals.

Legal and illegal importation of wild bear gall bladder into Japan

The regulation on international trade for the implementation of CITES is governed by the 'Law for International Exchange and International Trade'. The customs authorities, acting on the 'Customs Law', take the main responsibility for monitoring the enforcement of 'Law for International Exchange and International Trade' and should stop any imports lacking the necessary permit and

other related documents. They also order the administrative penalty and bring the case to the attention of the prosecutor. The police take responsibility for the investigation once the smuggled freight has entered into Japan.

The Customs Statistics of Japan⁵ show a drastic decline in the importation of bear gall bladders after 1991. In 1993-94 there was no official record of bear gall imported into Japan. As a background to this trend the following points are considered:

- In 1990 China prohibited unauthorised hunting of the Asiatic black bear, brown bear and sun bear in China.
- The CITES ban on the international trade in the Sloth bear, now listed in Appendix I, came into effect.
- At the CITES COP8 in 1992, all bear populations in China, including those of the brown bear, were listed in Appendix I, while other brown bear populations in the world and the American black bear entered Appendix II.

Thus the regulations concerning the international trade in bears, bear parts and derivatives were strengthened.

However, imports started again in 1995 and continue, mainly from Canada and Russia (Table 2). It should also be noted that the prices for imported goods are now far higher, when compared with the prices before import controls were tightened (Table 3).

xport Countries	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada	>840	1,127	550	503				3,574	1,997	6,061	564	>1,122	
Calleda	(>U\$\$7,059)	(US\$9.471)	(US\$4,622)	(US\$4,227)				(US\$30,034)	(US\$16,782)	(US\$50,933)	(US\$4,739)	(>US\$9,429)	
Queeia										3,586		3,961	2,91
Nusaid										(US\$30,134)		(US\$33,286)	(US\$24,479
Hong Kong	1,093	2,138									4,638		
Hong Kong	(US\$9,184)	(US\$17,966)									(US\$38,975)		
China	920	830	1,254		460								
Of ite lia	(US\$7,731)	(US\$6,975)	(US\$10,538)		(US\$3,866)	!							
North Korea			166										
North Northa			(US\$1,395)										
India	127												
W ICHL	(US\$1,067)							l					

In 1994 an incident of illegally imported TM, containing bear bile powder from China, was found and prosecuted in Japan. This has been the only case of illegally imported bear products that has been punished as a violation of the Customs Law. However, the number of cases of attempted smuggling of these products, which have been detected but not necessarily punished or prosecuted, is clearly increasing. In 1999 there were 65 violations of the Customs Law, involving the illegal importation of bear parts or products. Of these, 61 cases involved the smuggling of TM. In 2000, there were 125 similar violations involving bear parts or products. Of these, 122 cases involved the

attempted illegal importation of TM, containing bear bile, twice as many as in the previous year. (Ministry of Finance) (Table.4).

In particular, Russia has been witnessing a large increase in poaching of Asiatic black bears and the brown bear, since the collapse of the Soviet Union. Gall bladders, harvested from the poached bears, are an important smuggled item

Table.4	The numb	er of offi	cial seizu	re of be	ar parts a	and deriv	atives a	t the custom		
)	Year		1996	1997	1998	1999	2000			
Numbe	er of cases	43	39	48	61	65	125			
	Claw	-	-	-	-	0	1			
detail	Bone	-	-	-	-	1	0			
	Foods	-	-	-	-	3	2			
	ТСМ	-	-	-	-	61	122			
	Source : Ministry of Finance									

from Russia, along with weapons and other items. In November 1995 a Russian sailor was found to be trying to sell bear gall bladders in plastic bags in Hakodate, Hokkaido; he was bartering them for used cars. It is reported that the port of Otaru, also in Hokkaido, is becoming the largest black market for such smuggled items from Russia (The Hokkaido Newspaper, 6th June 1995)⁶.

Problems of bear parks in Japan

The first bear park in Japan was opened in 1958 in Noboribetsu, Hokkaido. Today there are a total of eight bear parks across the country (four in Hokkaido, two in Akita Prefecture, and one each in Gifu and Kumamoto Prefecture). These are mostly tourism-oriented leisure facilities, where visitors can see various shows performed by bears. All the bear Japanese bear parks have low animal welfare standards: tiny cages, with concrete floors, overcrowding leading to fighting and injuries, deficient feeding regimes, and unplanned breeding, etc.

The Ani Bear Park, located in the area of Akita Prefecture where 'Spring Bear Hunting' is regularly carried out, is run by the local government, in order to accommodate bear cubs orphaned due to this hunting. Despite the fact that the facility is already overcrowded, it is reported that the municipal office intends to increase the number of bears kept at this bear park (ALIVE 1997). Apparently this park is seen as a necessary facility for continuing the 'Spring Bear Hunting'.

Furthermore, it is suspected that there is trading of the parts from dead bears (including bear gall bladders) in Japanese bear parks^{7,8}.

Smuggling of bear bile from Chinese bear farms

In 2000 WSPA reported that, although the Chinese authorities stated that no bear parts or products containing bear bile were being exported from China, in reality these products were found in many countries. Additionally, workers in the Chinese bear farms told WSPA investigators that they were exporting their bear bile products to many parts of Asia, including Japan)¹¹.

As discussed in the following chapter, the bear bile powder products from the Chinese bear farms have a relatively fine texture and a yellow colour. In comparison, most of the products produced in other places look quite different, with a rougher texture. However, from their external appearance some products look similar to those from the Chinese bear farms (e.g. some products obtained from the Canadian brown bear), and therefore identification by mere appearance is not always accurate. Therefore, it is possible that the wild bear products may be easily mixed with bear bile products from Chinese bear farms. If the trade in bear bile products from Chinese farms was legalised, it could activate an international black market for bear gall bladders (it should be noted that bile powder from

wild bears is more valued than that from farmed bears, and believed to have greater medicinal properties) thus increasing the poaching of wild bears.

Legislation for the regulation of the domestic trade in wildlife in Japan

One of the measures to control the demand and supply, is the strict regulation of the domestic trade in bear bile. The 'Pharmaceutical Affairs Law', regulates the manufacture, import and sale of medical products that improve health and sanitation. Other legislation includes the 'Law for Conservation of Endangered Species of Wild Fauna and Flora (LCES)' and 'Game Protection and Hunting Law', which aims to conserve endangered wild species, protect some wild animals, and to regulate the domestic trade in some wildlife. Additionally, the 'Customs Law' details the penalties for carrying, obtaining and acting with intention concerning smuggled freight.

Investigation of the bear bile trade in Japan

TM pharmacies in Tokyo, Osaka and Kanagawa were searched on Internet Town pages. Then TM pharmacies were selected which either specialised in general TM or whose advertisements indicated they dealt with TM. Tokyo is the capital of Japan and Osaka is the biggest city in the Western part of Japan. Kanagawa is a suburban town in the metropolitan area and has the largest China Town in Japan. 128 TM pharmacies investigated – 45 in Tokyo, 24 in Kanagawa, 22 in Osaka, 19 in Toyama and 18 in Kobe (in Hyogo Prefecture).

Using Japanese medical society lists and other documents, JWCS selected manufacturers mainly in Toyama, Nara, Osaka and Tokyo. These have a historical background and characteristics of having been involved in the development of TM manufacture and wholesale. JWCS also included other manufacturers that were mentioned by those TM manufacturers and TM pharmacies, during the investigation. The number of companies chosen were 50 in total – 20 in Toyama, 30 in other areas (14 in Nara, 7 in Osaka, 7 in Tokyo, and 2 in other areas).

The forms of bear gall products looked at were:

Intact gall: The gall bladder is removed from the bear and dried, without removing the bile.

Crystal/powder form of bear bile: After the intact gall is dried, its contents are then taken out. The contents are made into an irregular shaped crystal/powder form, by shaving or pulverising. Alternatively, the bile powder has come from bears, held captive in bear bile farms in China.

Processed medicine derived from bear bile: This is TM which uses crystal/powdered bear bile and other TM components which are made into capsule or tablet form. The main products are: Yu-tan-yen (gastrointestinal medicine derived from bear bile and other TM components); Roku-shin-gan (cardiant/analeptic derived from bear bile, Toad venom, cow bezoar,etc); Kiou-gan (pediatric sedative derived from bear bile and other TM components).

The TM pharmacies were visited/telephoned, and questioned about the products and prices. With regard to intact gall and bile crystal/powder, they were also asked from whom they purchased the items, the source of the supply, and country of origin.

The manufacturers were questioned about: their dealings with intact gall and bile crystal/powder, as the ingredients of processed medicines: from whom they bought the items; their domestic marketing circulation; the source of supply; country of origin. Additionally, they were asked if they would sell the items to the investigator. JWCS also conducted academic research from company information data sources, manufacturers websites, published material – papers, books, articles.

Background to TM in Japan

Japan has been using the body parts of bears for a very long time. Fur and meat had previously been used, but the gall bladder remains the most valuable item. During the Heian era, from the end of the 8th century to the 9th century, a book, 'Shinno Honso', written in 6th century China detailing the benefits of bear/bear bile as a medicine, was brought to Japan. However, it was after the early years of the Edo era, from the end of the 17th century to the turn of the 18th century, that the bear and its body parts started to be used as a galenical for medicines. In the 19th Century the virtue of bear gall was commonly known, and since then the demand for bear bile has drastically increased, and bear gall started to be distributed as a precious medicine. Today it is still widely used as one of the animalderived TM galenicals.

In China, there has been a complete medical system since ancient times. It is thought that around the beginning of the 5th century, this Chinese medicine first came over to Japan. Since then, Japan has imported the medical culture either via the Korean Peninsula or directly from China. Besides medicine of Chinese origin, Japan had gradually improved its own original medicine after the Japanese traditional medical knowledge was





Top: Traditional box from the 19th century used for the medicine-distribution system to homes.

Below: A modern box used for 21st century medicine-distribution system.

combined with western medicine. For a long time, traditional medicine had been central to Japanese medicine. To distinguish the original Chinese medicine from the Japanese one, they are sometimes given different names - Chinese medical science is called Cuigaku, TM of Chinese origin is called Chuseiyaku.

However, at the beginning of the Meiji era, at the start of the 20th century, medical licenses only became available to those who completed Western medical studies. Oriental medical science disappeared from the medical world and became to be dealt with mainly by TM pharmacies. Yet recently, oriental medical science has started to receive attention again, because of an orientation towards nature and concern about the side effects of western medical science. Because there are few medical doctors in Japan who can deal with TM, it is rare for TM to be provided after a medical examination. Instead, TM pharmacies have a great role to play by circulating TM, such as those prescribed which compound galenicals of TM, in order to treat a patients' symptoms. Furthermore, TM produced in tablet or powder form, containing manufacturers medicines (Yu-tan-en, Roku-shin-

Table.5 Produ Medicine dist	uction of medicines for ribution (1999)	Production of medicines for medicine distribution (1999)
Prefecture	Production	
Toyama	JPY 29,712 (US\$ 24,681)	Others
Nara	JPY 8,895 (US\$ 74,748)	34%
Others	JPY 20,217 (US\$ 74,748)	
Total	JPY 58,824 (US\$ 494,319)	Toyama
	Unit:Million 119JPY=1USD	51%
Prefecture	Production	
Toyama	29,712	
Nara	8,895	Nara
Others	20,217	15%
Total	JPY 58,824	Same Holin of France
		Source: Ministry of Finance

gan etc.) mixed with a certain amount of galenicals, are widely circulated, just like the Western medicines produced in the factories.

From the first half of the 18th century, dealers selling drugs, which are used as raw materials for medicines, started to gather in Do-sho town and Hirano town in Osaka. They started distributing TM all over Japan, after having first evaluated its quality and determined its price. The TM included medicines imported at Nagasaki (the only port trading with foreign countries in the Edo era) and Chinese-Japanese medicines from all around Japan. In addition, in the Edo period (Tokyo used to be called Edo) some drug dealers in Sakai, Osaka, came to Edo (the old Tokyo) and many pharmacies opened there later. From that time, the commercial base for circulating medicines was established, by expanding the production of domestic medicines and providing people with medicines that are good quality and cheap in price. These merchant towns have become the basis of the current medicine industry in Tokyo and Osaka.

It is said that around the 17th and 18th centuries, a system of medicine-distribution was started in Japan. Medicine dealers in Toyama started to expand their business area to almost the entire country. They would visit consumers' homes and leave a boxed set of medicines for various symptoms, returning at regular intervals to receive payment for what had been used, and replenish supplies for future use (use first and pay later). Also, in Nara the system developed in a similar way, and at the same time as 'Yamato TM'.

Today this system is not so popular, but in some areas it is still an important method of medicine distribution. In 1999, the cost nationwide of medicines produced for the medicine-distribution system was 58.8 billion Japanese yen (0.9% of the total for all medicines). Toyama produces 50.5% (around 29.7 billion yen) and Nara produces 15.1% (around 8.9 billion yen) of medicines for the medicine-distribution industry (Table.5, Fig.1). Also, the number of people who worked for the medicine-distribution industry in 1999 was 34,000, in the whole of Japan, according to Health and Welfare department website of Toyama Pref¹⁴.

Particularly in Toyama, the medicine-distribution industry is still active today, as it has a long history. Toyama has many medicine manufacturers, especially of TM. The medicines that combine bear bile with other ingredients, such as gastrointestinal medicines (Yu-tan-en and Yu-jin-gan) and analeptic medicine (Roku-shin-gan), are historically, important medical products. They use a large quantity of bear bile as a raw material. It is said that about half of the annual consumption of 100kg to 200 kg of bear bile in Japan is used by manufacturers in Toyama¹⁵.



A Japanese manufacturer displays farmed bear bile (left) and imported crystals from wild bears.

Bear gall and bile as a TM in Japan

Bear bile is called "Yu-tan" in Japanese (Bear Bile, FEL URSI) and is described as 'dried bile of Ursus arctos Linne or its cousins (Ursidae)'. It is listed as "galenicals" in the Japanese Pharmacopoeia 13th (1996)¹⁶. The clinical application of it is presented in the Pharmacopoeia as the material for stomachic, intestine and antispasmodic.

Bear bile is used as internal medicines for: stomachic, analgesic, antispasmodic, cholagogic, antiphlogistic, and antifebrile. It is used as external medicines for ophthalmic and hemorrhoidal diseases, and tumour pains. More recently it is sometimes advertised as having anti-cancer and gallstone-dissolving properties. The Japanese pharmacopia describes it as being used as a stomachic and as an ingredient for antispasmodic compound medicines. The active medicinal chemical component of bear bile is tauroursodeoxycholic acid, of bile acid. It is supposed to be taken as a bitter stomachic and digestive medicine, 0.5g per day for an adult, before or between meals.

Bear bile is sold as: the intact gall; an irregular shaped crystal made by cutting the gall bladder; a powder made from dried bile extracted from a farmed bear; and/or medicines containing bear gall and other ingredients. Popular TM derived from bear bile are: Yu-tan-yen a gastrointestinal medicine derived from bear bile and other TM components; Roku-shin-gan a cardiant/analeptic derived from bear bile with toad venom (Bufonis Venenum), cow bezoar (Bezoar Bovis); Kiou-gan a pediatric sedative derived from bear bile and other TM components.

While intact gall, and its crystal/powder form, are usually sold at TM pharmacies, processed medicines derived from bear bile are sold at pharmacies that mainly deal with ordinary Western medicines.

In Japan, it is generally recognised that TM (especially medicine with galenicals) has less side effects than Western medicines and that it has to be taken over a long period of time to get the medical effects. Therefore, people will take gastrointestinal medicines and cardiant medicines, derived from TM components such as bear bile, as a regular medicine as well as a remedy.

Although it is not easy to estimate the quantity of latent demand for bear bile from the quantity that was imported before it was banned, there are reports that the annual consumption of bear bile for medical manufacture is 200kg (Matsushita 1995) or between 100 kg and 200 kg¹⁷. It is possible to

estimate that the potential demand of gall bile is at least 200 kg per year if the quantities of intact gall and bile that are sold at pharmacies are also included.

However, the annual supply of bear gall from bears hunted in Japan is estimated to be only between 30kg and 60kg, assuming 20-30g per animal is taken from the 1,500-2,000 bears hunted each year. This is far less than the demand. The stock of bear bile, which was supposedly stored until the 1990s by manufacturers, must have decreased considerably. This suggests that supplies from foreign countries are possible, but recent legal imports have stayed between 2kg and 8kg per year (Table 2). Hence it can be assumed that Japan is relying on illegally imported bear gall such as those from foreign wild bears, and powder from Chinese farmed bears, in order to satisfy the current demand¹⁸.

Bear product sales in TM pharmacies

Of the TM pharmacies surveyed (128 in total), 98 pharmacies (76.6%) were dealing with the bear gall, crystal/powder form of bear bile, or processed medicines derived from bear bile (including order sales). Consumers can easily obtain these items at three quarters of the TM pharmacies surveyed. In Toyama almost 90% of the pharmacies were selling these items, which was slightly higher than was found in the other cities (Table 6).

It was found that 48 of 128 TM pharmacies (37.5 %) were dealing in intact gall (including order sales). in more particular than 50% of pharmacies in Osaka. Toyama and Kanagawa also exceeded 40% (Table 6). Since intact gall is very expensive, it is not sold regularly. Manv

Table.6 Tr	ade in bear ga	I, bile and	processe	d bile medic	ines in TM pharma	cy				
	Number of	Tra	ade	Form						
	TM pharmacy	Yes	No	intact gall	Bile crystal/powder	Bile medicines				
Total	128	98	30	48	85	61				
%		76.6%	23.4%	37.5%	66.4%	47.7%				
Tokyo	45	34	11	12	31	27				
%		75.6%	24.4%	26.7%	68.9%	60.0%				
Kanagawa	24	18	6	10	17	10				
%		75.0%	25.0%	41.7%	70.8%	41.7%				
Osaka	22	18	4	13	14	10				
%		81.8%	18.2%	59.1%	63.6%	45.5%				
Toyama	19	17	2	8	12	14				
%		89.5%	10.5%	42.1%	63.2%	73.7%				
Kobe	18	11	7	5	11	0				
%		61.1%	38.9%	27.8%	61.1%	0.0%				
NB	1) Percentage	s calculate	d from the	e total numb	per of pharmacies re	elevant to that ca				
	2) Some pharr	nacies sol	d more that	an one type	of product					

pharmacies dealing in it obtain stock from suppliers when they get an order.

In most cases the price is determined per gram. It varies from 5,000 yen (US\$42) to 20,000 yen (US\$166), but most is sold at between 6,000 and 10,000 yen (US\$50~US\$83). Also the price depends on where the gall is produced. The expensive ones (around 10,000 yen (US\$83)/g) come from Japan, Tibet and China; the relatively inexpensive ones $(5,000 \sim 7,000 \text{ yen} (\text{US} \le 42 \sim 58)/\text{g})$ come from Canada, Russia, and the galls of polar bears (Table 7).

Table.7 Prices of Intact gall in	TM pharmacy		
Origin Countries	Lowest Prices	Popular Prices	Highest Prices
Japan	3,000yen/g (US\$25)	10,000yen/g (US\$84)	15,000yen/g (US\$126)
China, Tibet, Nepal, etc	3,000yen/g (US\$25)	8,000yen/g~10,000yen/g (US\$67-84)	20,000yen/g (US\$168)
Canada, Russia, etc	5,000yen/g (US\$42)	6,000yen/g~7,000yen/g (US\$50-59)	10,000yen/g (US\$84)
· · · · · · · · · · · · · · · · · · ·			119 J P Y = 1U S D

It was found that 85 of 128 TM pharmacies (66.4%) were selling **bear bile in crystal / powder form**, including order sales. The results were almost the same for the different cities. Most pharmacies sold the crystal/powder produced by manufacturers, while some specialised TM pharmacies pulverised the raw bear gall bladder and sold it. Also, 14 pharmacies were selling bear bile powder originating from Chinese bear farms.

The prices per gram varied from 2,000 yen (US\$16) to 30,000 yen (US\$250), but most were sold at around 10,000 yen (US\$83). This item was more expensive than intact gall because crystal/powder involves a manufacturing process and also the weight of intact gall includes the surface part which is useless as a medicine. Bile powder from Chinese bear farms was sold at around 3,000~6,000 yen (US\$25~50) per gram, which is less expensive than the type processed in Japan (Table 8).

Table.8 Prices of crystal / p	owder of bear bile in TM	pharmacy	
	Lowest Price	Popular Prices	Highest Price
Pharmacy original	2,500yen/g (US\$21)	5,000yen/g~8,000yen/g (US\$42-67)	10,500yen/g (US\$88)
Manufactured bile powder	4,600yen/g (US\$39)	10,000yen/g~13,500yen/g (US\$84-113)	30,000yen/g (US\$252)
Chinese farmed bile powde	3,000yen/g (US\$25)	4,000yen/g~6,000yen/g (US\$37-50)	8,000yen/g (US\$67)
			119 J P Y =1U S D

It was found that 61 of 128 TM pharmacies (47.7%) were selling **processed medicines derived** from bear bile.

All the medicines sold in Kobe did not contain bear bile but "animal bile", although the words "bear bile" were included as part of the name of the medicines. Such pharmacies seemed to recommend bile crystal/powder instead of processed medicines.

Popular medicines included gastrointestinal medicines such as Yu-tan-en, Yu-jin-gan, and analeptic medicines such as Roku-shin-gan. Also, some of the pharmacies were selling packets of bear gall mixed with other raw materials (such as cow bezoar (Bezoar Bovis), musk (Moschus), etc.); some of them were selling medicines made in China, such as Roku-shin-gan, Sei-shin-gan, and Hen-shi-kou.

The prices of these medicines depended on the type of medicine and also on the size of the package. Usually the price varied from 2,000 yen (US\$17) to more than 20,000 yen (US\$166). These are relatively expensive, compared to all types of medicines, because they contain galenicals (Table 9). The TRAFFIC survey report from 1994 to 1995, on TM pharmacies in 4 major cities of Japan,

showed that 30.7 % of pharmacies dealt with bear gall bladder in total: 35.5% in Tokyo; 47.4% in Osaka (Mills and Ishihara 1995)¹⁷. The JWCS investigation showed that 37.5% of the TM pharmacies investigated were dealing with bear gall bladder. Although direct а comparison of this data may not be possible, it is reasonable to assume that the figures indicate that the demand for bear gall

Table.9 Processed me	dicines derived from b	ear gall and the prices
Drug	Name of Drug	Price
	複方熊膽丸	2,000yen(US\$17)/ 240tablets
Invigoration of Stomach	保寿熊胆丸	10,000yen(US\$84)/ 86tablets
	虔修熊参丸	4,800yen(US\$40)/ 84tablets
	亀田六神丸	5,000yen(US\$42)/ 48tablets
	小児六神丸	1,000yen(US\$8)/ 32tablets
	新大宝心	5,000yen(US\$42)/ 60tablets
	六神丸	3,500yen(US\$29)/ 80tablets
Cardiant	虔修本方六神丸	16,500yen(US\$139) / 720tablets
carurant	快心	7,000yen(US\$59)/ 48tablets
	六神丸	2,400yen(US\$20)/ 100tablets
	精心丸	8,000yen(US\$67)/ 10tablets
	六神丸	40,000yen(US\$336)/ 1,000tablets
	回春仙	? yen(US\$?)/12~220tablets
	樋屋奇応丸 銀粒	2,000yen(US\$17)/ 315tablets
Pediatric sedative	樋屋奇応丸 銀粒	4,800yen(US\$40)/ 500tablets
	牛王丸	3,600yen(US\$30)/ 490tablets
		119 J P Y = 1U S D

bladder still exists. According to some TM pharmacies, most of the consumers purchasing these items were regular buyers and/or even young people who were recommended to buy them by their parents or grand parents.

The results of the JWCS investigation show that a large majority of TM pharmacies (around 70 %) were dealing with crystal/powder. This is probably because they can stock the crystal/powder as a major product because its quality is stable, while intact gall is an expensive product and it can be easily imitated. Also, crystal/powder is available to buy in small quantities and its price is low, with bear bile powder from Chinese bear farms being especially inexpensive. The trend of buying bear bile in crystal/powder is becoming common and it makes it easier for consumers to obtain bear bile. These facts seem to accelerate the demand for bear bile, together with the recent trend for TM products and their components.

Marketing, supply and sources of bear bile



Fig 3. Marketing system of Intact gall and crystal / powder form of bear bile to consumers

- Routes confirmed by JWCS investigation
- Routes suspected
- \star Targets of the investigation for source of supply and country origin of bear gall and bile

The manufacturers buy in intact gall and bile crystal/powder as materials for manufacture. After the manufacturing process, bear bile crystal/powder as a final product (which will be sold per gram at pharmacies), and processed bear bile medicines, enter the sales market through the medicine-distribution system or via general medicinal routes. Some manufacturers agreed to (unusually) sell bear bile directly to the JWCS investigator, as a consumer.

With regard to the importation of intact gall or bile crystal/powder, it is mainly specialised medicinal trading companies who are involved in this practice.

Fig.4 Marketing system of intact gall and crystal / powder form of bear bile as the material for manufacture



- Routes confirmed by JWCS investigation
- Routes suspected
- \star Targets of the investigation for source of supply and country origin of bear gall and bile

The TM pharmacies may buy in intact gall and bile crystal/powder direct form the importer or wholesaler. Imported bear gall or bile crystal/powder is mostly supplied through trading companies specialising in medicines. TM pharmacies also buy intact gall, obtained from wild bears in Japan, directly from hunters. Sometimes middlemen intervene.

TM pharmacies and manufactures, dealing with the gall bladder and bile powder/crystal, were also asked about: the supply routes; the original wild habitats; and the species of bear from which the gall was taken. It was found that the source of supply of bear gall and bile powder/crystal, could be categorised as from: a) imported from wild bears; b) Japanese wild bears (sport hunting and pest control); c) Chinese farmed bears; and d) bears in Japanese bear parks.

	pharmacies	Information of su	ormation of source of supply Breakdown of source of supply					
	out of all the pharmacies JWCS	Yes	No	Imported wild bears	Wild bears in Japan	Bear farm in China	Bear par in Japar	
Tetel	90/128	53	37	33	23	14		
TOtal		58.9%	41.1%	25.8%	18.0%	10.9%	0.0	
Tokyo	33/45	16	17	11	5	4		
ТОКУО		48.5%	51.5%	24.4%	11.1%	8.9%	0.0	
Kanaanina	18/24	12	6	8	4	2		
Nanaya n a		66.7%	33.3%	33.3%	16.7%	8.3%	0.0	
Ocaka	16/22	12	4	6	6	5		
Osaka		75.0%	25.0%	27.3%	27.3%	22.7%	0.0	
Tovama	12/19	6	6	5	4	1		
тоуатта		50.0%	50.0%	26.3%	21.1%	<u>5</u> .3%	0.0	
Kobe	11/18	7	4	3	4	2		
Kobe		63.6%	36.4%	16.7%	22.2%	11.1%	0.0	

	Manu da churana	Informa source o	tion of f supply	Breakdown of source of supply						
	Manufacturers	VOR	No	Imported	Wild bears	Bear farm	Bear park			
		, yes	NO	wild bears	in Japan	in China	in Japan			
Total	50	39	11	29	7	19	2			
		78.0%	22.0%	58.0%	14.0%	38.0%	4.0%			
0.10000	20	17	3	8	3	12	1			
oyama		85.0%	15.0%	40.0%	15.0%	60.0%	5.0%			
Where	30	22	8	21	4	7	1			
Umers		73.3%	26.7%	70.0%	13.3%	23.3%	3.3%			

It was found that 90 of 128 TM pharmacies were handling bear gall bladder and bile powder/crystal. Information was obtained on the source of supply of intact gall and bile crystal/powder on sale in TM pharmacies. Supply source data was obtained from 53 TM pharmacies (16 in Tokyo, 12 in Kanagawa and 12 in Osaka, 6 in Toyama and 7 in Kobe.) (Table 10). Information was obtained on the source of supply of intact gall and bile crystal/powder as manufacturing materials. Data was obtained from 50 manufacturers (20 in Toyama and 30 in other areas). The data on the source of supply was obtained from 39 manufacturers (17 in Toyama and 22 in other areas) (Table 11).

It was found that 33 of 128 TM pharmacies (25.8%) and 29 of 50 manufactures (58.0%) were handling imported galls from wild bears (Tables.10, 11, 12).

		Source of	supply	
	Imported	Wild bears	Bear farm	Bear park
	wild bears	in Japan	in China	in Japan
Total	47.1%	32.9%	20.0%	0.0%
Total	50.9%	12.3%	33.3%	3.5%
Toyama	33.3%	12.5%	50.0%	4.2%
Others	63.6%	12.1%	21.2%	3.0%
1) Percenta	iges calculate	d from the to	tal number o	f
TM pharma	cies and man	ufacturers re	levant to that	t category
	Total Total Toyama Others 1) Percenta TM pharma	Imported wild bears Total 47.1% Total 50.9% Toyama 33.3% Others 63.6% 1) Percentages calculate TM pharmacies and mar	Source ofImported wild bearsWild bears in JapanTotal47.1%32.9%Total50.9%12.3%Toyama33.3%12.5%Others63.6%12.1%1) Percentages calculated from the toTom the toTM pharmacies and manufacturers re	Imported wild bearsWild bears in JapanBear farm in ChinaTotal47.1%32.9%20.0%Total50.9%12.3%33.3%Toyama33.3%12.5%50.0%Others63.6%12.1%21.2%1) Percentages calculated from the total number or TM pharmacies and manufacturers relevant to that1000000000000000000000000000000000000

The gall bladders of imported wild bears are still one of the main sources, although the quantity imported has declined since early 1990. Many TM pharmacies claimed the gall of a wild bear has special medicinal effects, different from the gall, bile powder from a farmed bear and other alternatives, so nothing can replace it. This suggests that demand for galls from wild bears will remain. Some manufacturers said they use stock imported before the CITES regulations were implemented.

Origins of imported galls from wild bears

According to the TM pharmacies and manufacturers, galls from wild bears came from China, Tibet, Himalayas, Nepal, Bhutan, India, Pakistan, Vietnam, Canada, Alaska and Russia, although a few pharmacies handled bear gall obtained from South Asia and Southeast Asia.

Asia: Thirteen out of 128 TM pharmacies use gall from Chinese wild bear species, and 16 out of 50 manufacturers use them. Apart from China, which was the main Asian origin of bear gall, bears in the Central Asian area around the Himalayan mountains (Tibet, Himalayan, Nepal, Bhutan and others) were often used (Table 13).

Table.13 Cou	Table.13 Country of origin of galls from wild bears outside Japan												
	China	Tibet	Nepal	Bhutan	Himalaya	India	Pakistan	Vietnum	Canada	Russia	Alaska	North America	
TM pharmacy	13	2	4	0	6	1	0	0	10	4	1	1	
Manufacturer	16	4	8	1	3	4	1	1	2	3	1	0	
NB	NB 1) Some pharmacies and manufacturers may have obtained gall and bile from more than one source												

According to the TM pharmacies, the gall obtained in China and the Himalayas seems to be of better quality than others, and the price of the intact gall from this area was higher. The quality of the gall is believed to be determined by the food that the bear eats – from China and Tibet is believed to be good because the bear only eats vegetable foods such as nuts. However, there were questions about the quality of Chinese gall because of counterfeits and tricks to increase weight.

Some TM pharmacies stressed the galls were legally imported, "*The Chinese gall has a certification* or an export warrant" or "At present, we cannot import it without a certification of export country." They said the Chinese bears were brown bears and Asiatic black bears, and that the Tibetan bears were Asiatic black bears.

Northern countries: Sixteen out of 128 TM pharmacies and 6 out of 50 manufacturers use bear gall bladders from Canada, Russia and Alaska (Table 13). In addition, 2 manufacturers admitted using polar bear gall but did not know where these had been killed.

The countries officially exporting bear gall to Japan have been mainly Canada and Russia since 1995, and both TM pharmacies and manufacturers use these products. There is much poaching of bears in Russia and some gall seem to be smuggled from there.

The bear bile from Russian bears is said to be of a low quality because it has a fishy smell, because the bears eat fish such as salmon. In particular, the gall of the polar bear is sold at a lower price than that of the other bears.

Supply routes of the gall from imported wild bears

Most of the intact galls were bought by importers, specialising in medicines, direct from the country of origin or via Hong Kong. Imports ranged from intact galls to manufactured TM products. One manufacturer said, "Since the import of the intact gall is against CITES, Japanese employees only take out the contents inside the gall bladder and bring it to Japan, from China or Hong Kong." They emphasised, "Such a way is not illegal." Another said, "I buy the gall from China and Hong Kong through reliable trading companies, even if it is necessary to pay commission fees, because there are too many counterfeits among the gall sold in China and Hong Kong." Some trading companies in Osaka seem to play an important role in the importation of gall. A manufacturer stated, "There are about 10 trading companies handling the gall" and we often heard, "We order from trading companies in Osaka for the gall of wild bears" at Kansai area (Osaka, Nara and Toyama).

Certain TM pharmacies that did not require a considerable amount of gall said, "I go to the Hong Kong market [TM pharmacies] periodically to buy it in small quantities, and if it is found at customs, I can say it is for personal use." In another case, they said, "I ask for Chinese acquaintances to bring it into Japan."

Most wild bear gall used in Japan was imported through the markets in Hong Kong where the galls are gathered not only from China but a variety of sources. In Hong Kong, the gall is sold at general TM pharmacies open to the public, where some Japanese pharmacies can obtain the gall. The origin of the gall sold at Hong Kong pharmacies, investigated in 1991, were found to be China, India, Alaska, Russia and others¹⁹, similar to the origin of the gall now used in Japan. Some pharmacies said, "*The trading routes through Hong Kong are not illegal but proper according to CITES regulations.*"



Intact bear gall in the process of drying.

Japanese wild bears (sport hunting or pest-control) as a source of products

Twenty-three of 128 TM pharmacies (18.0%) and 7 of 50 pharmaceutical manufacturers (14.0%) were handling the gall of Japanese wild bears (Tables 10, 11), brown and black.

Many TM pharmacies handled this gall, although by contrast, only a few manufacturers handled it. This is probably because manufacturers have difficult in obtaining a regular and reliable supply of consistent quality. Manufacturers using gall from wild Japanese bears are thought to also use the gall of imported wild bears and those from Chinese bear farms.

At the pharmacies, the gall of Japanese wild bears is often sold at a higher price than that of wild bears from other countries. It is claimed, "*The quality of domestic gall is much greater*" and some consumers only want domestic gall. So despite problems with supply, the domestic gall seems to be important.

Japanese wild bear gall was in most cases, brought directly into the TM pharmacies by hunters and brokers. About 10 wholesalers or manufacturers in the Kansai area, in the western part of Japan, and the Kanto area, in the eastern part of Japan, were reported to buy the intact gall²⁰. In this investigation JWCS heard from some pharmacies and an old hunter that, "*Brokers, buying the gall from hunters, are present.*" The hunter also said, "*The brokers are said not to be TM pharmacies but animal traders related to pet shops, and they trade the gall with other wild animals.*" Many pharmacies stated, "*The gall of domestic bears are traded only between hunters and they do not come widely to the market.*" However, JWCS confirmed that the galls of bears hunted as pest-control were sold at a drive-in of Hachimantai, in Akita prefecture.

One pharmacy said, "Domestic bears hunted as pest-control and Japanese gall are exported to other countries." Export from Japan is suspected, but evidence of such trade was not obtained during this investigation.



WSPA has revealed shocking conditions on Chinese bear farms.

Chinese farmed bears as a source of products

Fourteen of 128 TM pharmacies (10.9%) and 19 of 50 manufacturers (38.0%) claimed to use the bile of Chinese farmed bears (Tables 10, 11).

Over 30% of the manufacturers, who provided details, use these gall bladders (Table.12). Pharmacies that have several branch shops use this bile. Bile powder from farmed bears provides a constant and stable supply to manufacturers and was widely used. Considering the marketing of medicines containing farmed bear bile powder, it is thought that the use of farmed bear bile is very widespread. Some pharmacies explained, "*The importation of bile powder from farmed bears is legal since there is a certification from the Chinese government that the product is made without killing bears*" and "*The bears bred at farms for three generations are exempt from the CITES regulations*." Although one manufacturer commented, "Many bears in the farms die from excessive bile extraction of the gall bladder". The idea that "the bile is obtained without killing bears" appeared to make the trade seem more acceptable to some. The trade is illegal, but it has become stable.

Some pharmacies said, "*The drug effect of the bile from farmed bears is lower than that of the gall bladder from wild bears*", while others said, "*The drug effect is almost equal*". Some TM pharmacies stock the farmed bear bile because it is reliable, while a lot of counterfeit products are distributed, claiming to be the gall bladder of wild bears.

The Chinese farmed bear bile powder was supplied to wholesalers, manufacturers and TM pharmacies, via importers. One of the importing companies in Osaka seemed to exclusively handle gall bladders from farmed bears. It was said, "*This company is the largest importer of gall bile in Japan.*" The company seems to be mainly involved in the circulation of the farmed bear bile, from

which many wholesalers and TM pharmacies buy the bile. The company has an internet homepage. Although they do not mention bear bile directly, they say, "We are trying to keep the quality of imported medical compounds by realising local production and technical cooperation in several pharmaceutical factories in China, and dispatching our employees to the home."

In this investigation, the percentage of manufacturers using bear bile from Chinese farms was higher in the Toyama prefecture (12 of 20 manufacturers, 60%) than that in other prefectures (7 of 30 manufacturers, 23.3%) (Table 11). The medical manufacturing industry in Toyama seems to place great hope on such trade, and the major companies seem to promote these imports.

A recent large expansion of the circulation of Chinese farmed bear bile powder has occurred by mailorder selling and private importation through the Internet. At least 10 websites have been identified, and the number has been increasing. Some sell the gall bladder as a Chinese medicine and another sells it as a healthy food made in China. Prices vary, for example, on a site where the gall bladder is sold in blocks of 25g, the prices are 6,500 yen (US\$54), 11,300 yen (US\$95) and 20,000 yen (US\$168). The products that cost 6,500 yen and 20,000 yen, are made by the same manufacturer (an animal farm in the Sichuan Province) (Table 14).

T ()	T	hteresteret and	Duises		
Type of trade	I Trade name	Manufacture	Prices		
internet shop	bear bile powder	延辺朝鮮族自治州特産養熊場	70,000yen(US\$588) / 2bottles		
			630,000yen(US\$5,294) / 20bottles		
personal import procuration	bear bile powder	Sichuan Province(簡陽市動物養殖場)	20,000yen(US\$168) / 25		
personal import procuration	bear bile powder		30,000yen(US\$252) / 10g(black bile		
			30,000yen(US\$252) / 4g(yellow bile)		
personal import procuration	bear bile powder		3,050yen(US\$26) / 5g		
	bear bile powder		11,300yen(US\$95) / 5bottles		
	bear bile powder		800yen(US\$7) / 10tablets		
	bear bile drink	Heilongjiang Province(黒宝薬業股分公司)	2,200yen(US\$18) / 100m		
personal import procuration	bear bile powder		42,000yen(US\$353) / 25tablets x 12bottle		
internet shop	bear bile plaster	Sichuan Province	700yen(US\$6) / 12tablet		
internet shop	bear bile powder		6,000yen(US\$50) / 2bottles		
personal import procuration	bear bile powder		5,000yen(US\$42) / 1bottle		
			20,000yen(US\$168) / 5bottles		
internet shop	bear bile powder		22,000yen(US\$185) / 4g		
internet shop	bear bile powder		2,500yen(US\$21) / 1bottle		
internet shop	bear bile powder	Sichuan Province(簡陽市動物養殖場)	6,500yen(US\$55) / 25g		
			119 I P Y = 1 U S D		

Bears in Japanese bear parks as a source of bear products

No pharmacies and only 2 of 50 manufacturers (4%) were found to handle the gall bladder of bears from domestic bear parks (Tables 10,11,12). Many pharmacies stated, "*The quality of the gall bladder from the Japanese park is not good.*" Of the two manufacturers using these gall bladders, one purchased it from the other. So only one manufacturer in Toyama was identified buying the gall bladders directly from the Japanese bear parks. The manufacturer in Toyama seemed to have various ways in which to get gall bladders from Japanese wild bears, as well as from other countries.

In the investigation by Mills and others in 1991⁷, there were reports of the sale of the bear gall and meat, as souvenirs, at bear parks, and on the resale of the gall taken from a dead bear and sold to Korean buyers. A 1998WSPA investigation⁸ found bear meat being sold at two bear parks, but it was not possible to obtain sufficient information about the selling of bear gall.

A bear park told JWCS, "We sell the intact gall at a price of 6,000 JPY/g (US\$50). We have, at present, several intact gall weighing 8g, 40g, 45g, 25g and 30g. I have about 40 at home" and "The intact gall sold at a drive-in in front of this park includes those bought from hunters, and those sold

by this park." The owner said, "The intact gall was obtained from bears that had not died of disease but died in a scuffle or those which were so brutal, having no choice but to be mercy killed." But he also said, "If no preferable demanded, intact gall exists, I will provide you with one from a bear which shall be slaughtered this autumn".

The need for strict regulation on the domestic trade in bear bile



Bear bile from several sources (detailed earlier) is widely marketed

Bear bile on sale at a TM pharmacy

in Japan. Much of this is derived from imported wild bears or Chinese bear farms, therefore a certain percentage of these products are assumed to be illegally imported under CITES.

The first problem relates to the limited effectiveness of monitoring and enforcement by customs at the point of entry. Customs does not check all freight or luggage. In addition, there is no specialist inspector in charge of wildlife crime or the enforcement of CITES. There is also insufficient practical training of officials and a lack of identification manuals. Furthermore, there is no legislation for the customs officer to carry out a seizure of freight which violates CITES, without a court judgement.

The second problem is the difficulty in eliminating smuggled objects after they have entered the country. It is not easy to file the violation against the 'Law for International Exchange and International Trade' or the 'Customs Law' because it is not easy to prove the facts regarding the smuggling or non-permitted customs clearance. This means that eliminating smuggled wildlife products, once they have entered the Japanese market is unlikely.

With regard to bear bile produced internally, for example Japanese wild bears, it is important to control the source of the supply itself. It is necessary to improve the regulation of hunting, and the trade in hunted animals.

Illegally obtained bear bile is mixing in the Japanese market place, with legally obtained bile from CITES Appendix II listed species, or with material stockpiled from before the regulation was set in force. Therefore regulation, overseeing the marketing of all bear bile needs to be put in place.

It is therefore worth examining existing legislation and the problems with this.

The regulations for the manufacture, importation and sale of medicines under the 'Pharmaceutical Affairs Law'

The Pharmaceutical Affairs Law aims ensure the quality, validity and security of medicines, and prescribes the regulation for the 'manufacturer', 'importer', 'pharmacy' and 'medical sales business'.

The manufacture and importation of medicines comes under the permission of the Minister of HLW (prefectural governor, a part), and is conditional on the structure of the factory facility, or office, and the appointment of the manager. Permission should be acquired, per item for manufacture or import.

In addition, each medicine to be manufactured or imported must be approved by the Minister of HLW (prefectural governor, a part) by clearing the inspection, including the name, ingredients, volume, method, efficacy and so on.

The 'pharmacy' can dispense medicines according to the prescriptions, sell all medicines, and manufacture within a limited range. Permission from the prefectural government is needed for the establishment of the pharmacy on condition of a certain number of pharmacists, the structure of the facility and so on.

The 'Medical sales business', which is permitted by prefectural governments, is specialised in sales and has certain categories. The range of medicines to be handled varies between the different categories.

The traditional medicine-distribution system is permitted in the category of 'distribution sales business, with permission from the prefectural government handling the area of distribution.

It is prohibited to sell medicines, which are manufactured or imported, without permission. It is also prohibited to sell medicines without a description on the package, which includes the address, name, number of manufacture, volume and so on.

Application of the Pharmaceutical Affairs Law to bear bile

Bear bile known as "Yu-tan" in Japanese (Bear Bile, FEL URSI) is described as "Dried bile of Ursus arctos Linne or its cousins (Ursidae)", and is categorised as "galenicals" in the Japanese Pharmacopoeia. Accordingly, "Yu-tan" or bear bile is a "medicine" under the Pharmaceutical Law and approval is required when bear bile is included as an ingredient in processed medicine or when it is imported.

But, approval is not necessary if the bear bile is manufactured or imported "subject to being used only for manufacture of other medicines". In a case, the words "only for manufacture" should appear on the package of bear bile.

According to the MHLW in 2000, 355 bear bile 'medicines' were approved. Five have permission to be imported while the remaining 350 have permission to be used for manufacture. The first approval was issued in 1968. A total of 141 companies had obtained approval by February 1992. It has to be noted that since then some of the medicines are no longer manufactured, and quite a number of the medicines have switched from using bear bile to using the bile of cows and other animals, such as pigs.

However, approval and permission is needed when bear bile is manufactured or imported for the use of general consumers or for sale to hospitals. Manufacture and importation of such bear bile without approval/permission is illegal, and so too are the sales of it.

The pharmacy itself can manufacture bear bile, as a medicine that doesn't contain an effective constituent, other than powdered extract of bile, with the approval and permission of the prefectural government.

As mentioned earlier, bear bile is treated as a medicine under Japanese legislation, but not regarded as one to be handled with care. The Pharmaceutical Affairs Law assumes that bear bile will be marketed widely though manufacture, importation and retail, and is regulated in the same manner as a general medicine.

As a piece of general pharmaceutical legislation, the law does not function for the purpose of controlling the demand or source of a product (even if that source breaches CITES).



Regulation on the domestic trade in bear bile under the 'Law for the Conservation of Endangered Species of Wild Fauna and Flora (LCES)' and the 'Game Protection and Hunting Law'.

The function of these pieces of legislation are outlined earlier. The Asiatic black bear is listed as an "international endangered species" and so should be afforded protection by the LCES, although Japanese bears including the Asiatic black bear and brown bear have not been listed as "domestic endangered species". However, the trade regulation of "international endangered species" is exempted with regard to the two bear species when legally hunted under the Hunting Law.

Clearly, hunting outside Japan is not covered by Japanese legislation, however, the LCES should, in theory, remain relevant to CITES Appendix I listed species (regarded as "international endangered species"), even though species listed in CITES Appendix II and III are excluded. Accordingly, the brown bear (except for the populations of Bhutan, China, Mexico and Mongolia), the American black bear and the polar bear, all CITES Appendix II, are excluded. Unfortunately, body parts and derivatives, which are subject to the regulation under LCES include only fur (including fur products) and skin (including skin products). Therefore, bear bile is not subject to the regulation.

Evaluation of the current legislation

To control the demand and supply of bear bile, strict regulation and management is needed for all marketing of legally obtained bear bile, so that illegally obtained bear bile can be eliminated from the market. Prohibition of the trade in illegally obtained bile alone is not enough to eliminate the illegal trade.

Even such a regulation scheme in the present legislation is insufficient.

Prohibition of trade in illegally hunted "game" under Hunting Law has never been applied to bear bile.

The penalty for obtaining, and taking other actions, concerning smuggled freight under the 'Customs Law' has never been applied if the person involved did not know that the freight was smuggled.

Since regulation is not practical, there is no other way than the total prohibition of all domestic trade in bear bile.

Table.15 Application of domestic trade regulation to bears under LCES							
Wild bears legally hunted in Japan	Legally imported bears listed under CITES Appendix I	Legally listed Appendi:	imported under x II	bears CITES			
No regulation	No regulation except for; - Whole animal (live and dead) - Stuffed animal - Specimen - Fur - Skin - Fur products - Skin products	No regul	ation				

The regulation system itself is legislated in LCES. However, the law has never been applied to any bear bile other than the one that is obtained legally.

As clarified above, the domestic trade in bear bile has never been regulated. This means that controlling the demand and supply of bear bile is impossible at present. If the present situation continues, demand for bear bile in Japan will never stop having a severe detrimental affect on the survival of all bear species in the world, including Japanese bears.

TM industry and consumer understanding of CITES and bear conservation

According to the JWCS investigation of medical manufacturers and TM pharmacies, many knew about the CITES regulations concerning the sale of bear gall. However, most explanations were incorrect or insufficient, stating that CITES does not prohibit bear bile medicine nor bile from farmed bears. As some galenicals used for TM are restricted by CITES, those involved in the TM industry must be aware of it. However, current Japanese legislation does not control the marketing of bear gall nor bile, so retailers have no reason to question selling them, and they are openly on sale. In addition, explanations such as "gall bladders of pest controlled bears" and "bear bile obtained from farmed bears without killing them" tend to hide the fact that demand for bear gall threatens wild bear populations.

The Japanese have historically utilised wild animals but this was limited to only those who hunted animals or who could afford to buy animals. However, as Japan becomes economically wealthy, more and more people have started to consume wild animals. The Japanese also import wild animals and this endangers wild animals elsewhere. It seems that Japanese consumers with no relationship with the original habitat of these animals, see the current CITES regulations as an irrational restriction that hampers their indigenous 'culture'. The Traditional Medicine industry emphasises the fact that the Japanese have used bear gall bladders as a medicine since the medieval era and they still need them today. A famous traditional medicine company in Toyama stated that it is necessary for both humans and animals to help each other to make a proper and natural society, just as humans can help each other with blood and bone marrow donations²¹. This ignores the survival crisis of foreign wild bear populations and the tragic conditions on bear farms.

Environmental issues have only recently become the focus of Japanese politics, but the government's reaction to CITES is more influenced by economic than environmental concerns. The Japanese public has insufficient information about the government's or other countries' position on CITES. In addition, the Japanese government is reluctant to hear from consumers. As a result, Japanese citizens have little knowledge and interest in wildlife issues or CITES.

The future prospects of bear gall bladders in the TM industry and changes to alternatives treatments

The medical industry in Toyama, where half of the bear gall is consumed (100 kg-200 kg per year) in compound TM, strongly expects that the imports from Chinese bear farms (which have been constructed from 1984 onwards) will increase¹⁵. When imports of bear gall were restricted by CITES, the product was stockpiled, but this will not be sufficient in the long term. According to Matsushita¹⁵, certain traders imported bear gall that was worth 100 million Yen (approx 100 kg) but two years later the stock had decreased to 60kg.

The medical industry in Toyama established a working group and attempted to legalise the bear gall trade from Chinese bear farms. A trader, who plays the central role in Toyama medical industry and whose director also works as a chairman in the CITES committee of the Japan Medical Industry Association, organised a mission to China, to observe the Chinese TM industry. The team visited Chinese bear farms in October 1993, and were asked by the Chinese Government "*To act to legalise TM obtained from bred animals because a claim from China and Japan would be more effective than a claim solely from China*"²¹. The association petitioned the Japanese government to accept imports of gall bladders from bears²². In addition, the Toyama industry established the Bear gall Working Group under its "CITES Affairs Committee" (52 companies) in the Japan Medical Industry Association²³. In 1995, China informed the Toyama medical industry that it was ready to make an application to the CITES conference for the legalisation of bear gall bladders exported from bear farms²⁴. At the time of writing, this is yet to materialise.

Increasing demand for bear gall bladders

As TM has shown empirically its effect in history, people tend to expect various effects from one raw material of TM. Bear gall bladders, for internal use, are expected to be good for the stomach and also effective as analgesic and antipyretic, and in relieving convulsions and inflammation. Bear gall bladders are also used as an external medicine for eye disease, piles, and to heal pain. In addition, bear gall bladders were recently advertised to be effective against hepatitis, cancer, gallstone, and atrophy. Moreover, TM is thought to be healthier than Western medicine with no side effects even though there is no drastic medical effect. Therefore, the demand for TM containing bear gall bladders etc. is likely to increase along with the recent trend towards a "healthy and natural" life. Nevertheless, TM is not very accessible for people who did not previously use it and the medicine-distribution system is relatively smaller than before. In order to attract potential consumers, packets of Toyama medicine are sold at pharmacies in large supermarkets and grocers' shops in fashionable buildings. The JWCS confirms that several medicines for stomach and bowels, which contain bear gall bladder, were displayed and sold with other daily goods. In particular, retrospective wrapping paper designs with bear drawings for these medicines seem to be attractive amongst young people.

TM produced in Toyama are promoted in the railway station building as a souvenir called "Traditional Toyama Medicine". The major product of "Toyama medicine" is one that contains bear gall bladder and is wrapped in bear designed paper. As a result, bear gall bladder is now treated not only as a medicine but as if it were a healthy food, and thus its circulation is expanding.

The Internet trade has significant influence on the expanding demand for bear gall bladder. This survey showed that bear bile powder from Chinese bear farm, intact gall, and both domestic and Chinese medicine mixed with bear bile are sold on line. Although importing bear gall bladder is restricted by CITES, it is difficult to control the trade on the Internet. Besides, consumers can easily buy the product online without recognising such restrictions; making online circulation one of the most substantial threats to the efficiency of the restriction. The JWCS investigation into TM containing tiger parts in 2001 also revealed that the online circulation of products, which violate

CITES, was a major threat in the same way²⁵. As online circulation is likely to develop further, it is necessary to prohibit the online circulation of products violating CITES, and to strengthen the restrictions at customs.

Alternatives to bear bile

Effective, practical and inexpensive alternatives to bear bile exist in both oriental medical science and western medicine.

According to Pong, the president of the Practicing Pharmacists Association of Hong Kong, bear bile is a viable antipyretic agent and antidote, has been used in the treatment of tumours, and is effective for the invigoration of the stomach and liver. At the same time, she says that there are 64 kinds of medicine used as antipyretic agents and antidotes, 43 used in the treatment of tumours, 19 as stomach invigorating agents, and eight for invigoration of the liver.

The examples given as alternative herbal medicines are: Chrysanthemum (flower) as exterior - resolving medicinals and Scutellaria (root), Coptis (root), Phellodendron (bark), Scrophularia (root), Red Peony (root) and Dandelion as heat – clearing medicines.

Her opinion is that bear bile and the herbal medicines given above would not be very different in clinical practice, and could even offer the advantage of turning attention from the more costly to the cheaper agents²⁶.

Many pharmacies and the medical industry argue that bear bile is more effective than the bile of other animals, and thus it cannot be substituted by animal bile and/or compound medicine. On the contrary, a report, which analysed the medicinal efficacy of galenicals, says that there is no distinctive difference between bear bile and other bile as far as bile acid, their main component, is concerned²⁷.

In reality, due to the decrease in the legal trade and the difficulty obtaining bear gall, a part of the medical business in Japan has replaced bear bile with bile obtained from other animals such as cows and pigs, as the ingredient in the same brand of processed TM medicines. In this case, the price of the medicine is cheaper than the medicines made from bear bile.

However, tauroursodeoxycholic acid (UDCA), which is the main component of bear bile, can be synthesised from other bile acids or cholic acid (CA) and chenodeoxycholic acid (CDCA), which are abundant in domestic animals. UDCA, is recognised to be effective in cholestasis in biliary tract disease, liver diseases associated with cholestasis, liver dysfunction in chronic liver diseases, hyperlipidemia and maldigestion, cholesterol gallstones and chronic hepatitis. Since the 1980s, following the development of the etiology of liver-bile diseases, bile function, and immunology, UDCA has been reported to be effective for the treatment of autoimmune hepatitis and other diseases²⁸.

UDCA started to produce as a medicine in 1957 by the Japanese medical industry and today it is prescribed in more than 40 countries around the world²⁸.

In China, Korea, and Japan, more than 100 tonnes of compound UDCAis consumed every year, and the global consumption is twice this amount²⁶.

A large number of biochemical and clinical studies of UDCA have demonstrated the increased recognition of UDCA as a bear bile substitute²⁸.

Conclusion

In the 19th Century, bear gall bladder and bear bile started to be distributed widely as a precious traditional medicine. At that time, the strong commercial marketing of medicines was established. The merchant towns included Tokyo and Osaka. The town of Toyama, in particular, has a long history of and continues to be a centre for the traditional medicine distribution industry.

Bear bile crystal, extracted from dried intact gall, is used as an internal medicine for various treatments, including the invigoration of the stomach and as an antispasmodic. In the case of Chinese farmed bears, the bile is painfully extracted from the live animal, dried and then used. In Japan, popular TM treatments derived from bear bile include: the invigoration of the stomach; cardiant/analeptic medicine; and pediatric sedatives.

It is possible to estimate that the potential demand for bear bile is at least 200 kg per year. If we assume that 20g of dried bear gall bladder is obtained from one bear, then in theory 10,000 bears must be killed to satisfy the demand. The volume of legal imported bear bile is only 2-8kg (obtained from CITES Appendix II listed bear species). Also, bear bile that has been stockpiled in Japan since the early 1990s may now be very limited in supply. Therefore, it is thought that wild or captive bears are now targeted as the new source of bear bile supply.

In the Japanese bear bile market, 37.5% of the TM pharmacies investigated were selling intact gall, and in particular, 59.1% of TM pharmacies in Osaka. Additionally, 66.4% of pharmacies investigated were selling bear bile in crystal/powder form. It is thought that crystal/powder is becoming popular because its quality is stable and it is available to buy in small amounts. When the numbers of pharmacies that only sell the processed bear bile medicine were also included, it was found that in total 76.6% of the TM pharmacies investigated sold bear gall, bear bile or bear bile medicine.

It was found that there were 4 different categories for the source of bear products: 'imported from wild bears'; 'Japanese wild bears (sport hunting and pest control)'; 'Chinese farmed bears'; and 'bears in Japanese bear parks'.

Of those TM manufacturers that were found to be dealing with the gall and bile, and provided the source of supply, 50.9% stated that they obtained the gall or bile from 'imported from wild bears', 33.3% from 'Chinese farmed bears', and 12.3% from 'Japanese wild bears'. Of the pharmacies, 47.1% stated that they obtained the gall or bile from 'imported from wild bears', 32.9% from 'Japanese wild bears' and 20% from Chinese farmed bears.

It is obvious that wild bears in other countries are the main source of bear gall and bile in Japan. The information collected reveals that South East Asia, Russia and North America are supply sources, with the Himalayan region being the major source of supply. It was also found that Hong Kong is an important accumulation and trading point. The findings indicate that there is a significant international illegal trade in bear gall and bile. The number of official Customs seizures of bear gall, bile and bile medicines in 2000, was 122 cases – double the previous years figure. These figures are considered to be just a part of the actual number of smuggling incidents.

Gall bladders from Japanese wild bears are traded on limited routes, or between specific hunters, middle men and pharmacies, and the supply to the market is not stable. They are not so important as a TM supply source for manufacturers. However, they are important for the pharmacies.

Bear bile produced in Chinese bear farms is becoming more attractive to manufacturers because the volume and quality of it is stable. In Toyama prefecture, especially, the percentage of manufacturers using bear bile from Chinese bear farms (50%) was the greatest amongst the 4 source categories, even greater than the 'imported from wild bears' category (33.3%). Also it is convenient for pharmacies to deal with this product because it is less expensive than the bile processed in Japan.

Information on the trade in bear bile from captive bears in Japanese bear parks is limited, but it was confirmed that it does enter the market. There are approximately 1,000 bears in Japanese "bear parks", so these should not be ignored as a source of bear gall bladder and bile.

Considering this marketing situation for bear bile, it cannot be doubted that the Japanese demand for bear bile has a significant effect on the survival of bear species both within Japan and internationally.

The fundamental solution to this problem is to control the demand and supply of bear bile. To achieve this, it is essential to control the supply of bear bile from its source, and to regulate and manage all marketing of bear gall, bile and bile products, in cases where it is legally obtained, and to effectively ban and prevent the illegal trade.

Does the present legislation, and its implementation and enforcement, substantiate these measures?

With regard to the control of two supply sources, 'imported from wild bears' and 'Chinese farmed bears', the importation of them is regulated by CITES and the national trade-related law which implement it.

However, the present legislation lacks the necessary provisions concerning the confiscation of illegally imported specimens. This violates CITES.

Sufficient resources have not been provided at the points of entry into Japan for the effective enforcement of the Convention. This is where the main responsibility for monitoring the implementation and enforcement of CITES lies. Customs should put a greater priority on this issue and improve their techniques, including methods for identification of species.

The police and customs authorities should conduct a thorough investigation of the products available on the Internet. This method of buying the products is becoming increasingly popular with consumers.

With regard to the control of the supply of bear gall and bile from 'Japanese wild bears', the legislation itself is the main problem.

Considering that there are many populations threatened with extinction, firstly hunting should be strictly controlled using all appropriate measures, and secondly, the trade in gall bladders, other parts and derivatives of hunted bears, should be prohibited.

Regarding the fourth source of supply of bear gall and bile ('bears from Japanese bear parks'), the trade in bear gall and bile from bear parks and other breeders should be prohibited.

While it is very important to control the supply sources listed above, it is impossible to avoid any loopholes.

The strict regulation and management of all marketing of legally obtained bear bile, including bile derived from CITES Appendix II species, is considered to be necessary in order to eliminate illegal bear bile from the market. The regulation system itself is legislated in the Law for Conservation of Endangered Species of Wild Fauna and Flora (LCES). Therefore, the law should be applied to bear gall, bile and their products derived from all bear species.

The parts and derivatives of species, which are regulated under LCES, are limited to "readily recognisable" ones.

In a similar case to bear gall, bile and their products, the Japanese government had rejected the application of the regulation on the domestic trade under LCES of tiger bone, penis and their products, from the legal point of view that they "cannot be readily recognised". But it changed its view and has regulated the trade in these body parts since April, 2000. It can be said that there is no barrier to the interpretation of the law regarding the application of the same regulation on the domestic trade of bear gall, bile and their products.



The Japanese trade in bear bile products is a threat to bears worldwide.

In a case where trade regulation under LCES is improved, the effective implementation and enforcement of it becomes crucial. However, the system ensuring this has never been sufficiently established.

Therefore, it is necessary to establish an inspectorate system with police enforcement of the LCES regulations. This unit would conduct monitoring of the marketing of products, investigate infractions, and would cooperate and exchange information with the relevant authorities including Customs, the National Police Agency, Interpol and the CITES Secretariat.

While the regulation and effective law enforcement are most important, it is also necessary to promote the use of alternative treatments to bear bile. Herbal treatments, livestock bile (produced as a byproduct of the meat industry) and synthetic UDCA (the main component of bear bile acid), have already been used to a certain extent. The Japanese government and the prefectural governments should strongly promote the use of alternatives and to introduce some financial incentives if necessary.

Notifications to the industry and public awareness are also needed. Knowledge amongst pharmacies about CITES is quite limited. In particular, they fail to realise that bear bile imported from Chinese bear farms is illegal. In addition, when pharmacies give explanations to consumers they tend to hide the fact that the demand for bear bile is threatening bear species. It is assumed that consumers lack this knowledge even more.

Sufficient notifications and awareness amongst each sector are needed, concerning: the fact that demand for bear bile has greatly affected the survival of all bear species; the vital importance of bear conservation; and the regulation under CITES and the expected new national legislation.

Recommendations

JWCS recommends that the Japanese Government takes the following action:

- 1. The regulation and management of all marketing of bear parts and derivatives, including gall and bile obtained from legal sources:
 - Include all bear species*, including those listed under CITES Appendix II, in the "international endangered wild species" section of the LCES (Law for Conservation of Endangered Species of Wild Fauna and Flora), in order to apply the provisions relating to the domestic trade regulations. (* *Exclude those species listed as "domestic endangered wild species" under the LCES*).
 - Include bear gall bladder, bear bile, processed medicines derived from bear bile, bear paw and other bear parts and derivatives in the items subject to the domestic trade regulations under the LCES.
 - Obtain and disclose data on the stock and trade in bear gall bladder, bear bile and processed medicines derived from bear bile, in order to effectively implement the domestic trade regulations.
 - Establish an inspectorate system with police enforcement of the LCES regulations and a Ministry of Environment inspectorate enforcement unit. This unit would conduct monitoring of the marketing of products, investigate infractions, and would cooperate and exchange information with the relevant authorities including Customs, the National Police Agency, Interpol and the CITES Secretariat.

2. Measures for controlling the marketing and distribution of bear gall and bear bile, obtained from imported wild bears:

- Establish procedures for the confiscation of illegally imported specimens, which violate the CITES Convention.
- Improve the customs system:
 - a) Provide specially trained agents for identifying species listed under the CITES Appendices.
 - b) Prepare an effective communication and information system, to include an information database, with on-line access, for species identification. This will enable customs officials to have direct access to expert advice.
 - c) Compile manuals and other relevant materials, which are practical to use by customs.
 - d) Enhancement of training for customs officials.
- Conduct a thorough investigation of violations against the Foreign Exchange and International Trade Law and the Customs Law with regard to the marketing and availability of bear gall bladder, bear bile and products on the Internet.
- Intensify daily inspections of incoming people and cargo, from countries where many CITES listed species have been imported, and increase the number of special inspection months.
- Carry out effective prosecutions of people found violating the Customs Law.
- Carry out a programme to confiscate and destroy illegally held bear products.

3. Measures for controlling the marketing of bear gall and bear bile obtained from Japanese wild bears:

- Prohibit the hunting of bears, or restrict the number legally hunted during the hunting season, in those prefectures where the hunting of bears is still allowed.
- Prohibit so-called "pest control based on prediction". (Where pest control is carried out, the number of animals to be killed has been set according to over-estimated predicted damage, rather than the actual possibility of it).
- Regulations on wire trapping:
 - a) Prohibit the use of wire trapping for the pest control of bears.
 - b) Prohibit the use of wire trapping inside the habitat of bears, which is intended for the purpose of the pest control and sport hunting of other animals.
- Under the Game and Hunting Law, the Government authorities should carry out pest control or should establish a system, whereby they can effectively monitor pest control in the field.
- Prohibit the trade in bears or bear parts, hunted in the name of pest control described under the Game and Hunting Law. This should include the live animal, dead body, body parts and derivatives, including bear gall, bile, paws and other parts.
- Prohibit the trade in gall bladders obtained from sport hunted bears.
- 4. Measures to control the marketing of bear gall and bile from captive bears in Japan. In applying the domestic trade regulations of the LCES to the captive bears in Japan, the facilities holding these animals should not be permitted to register with the government for trading purposes. Therefore the trade of the live animal, dead body, body parts and derivatives including bear gall, bile, paw and others, should be totally prohibited.
- 5. Notification to the business community and public awareness amongst consumers:
 - Notification to the medical manufacturers and importers:

Notify the medical manufacturers and importers of: the vital importance of bear conservation; the fact that the demand for bear bile is greatly affecting the survival of bear species worldwide; the regulation under CITES and the expected new national legislation; in particular the fact that it is illegal to import products from the Chinese bear farms (species listed under CITES Appendix I); and that any products deemed to be illegally obtained have to be handed over to the relevant authorities.

• Notification to the TM pharmacies:

Notify the TM pharmacies of: the vital importance of bear conservation; the fact that demand for bear bile is greatly affecting the survival of bear species worldwide; the regulation under CITES and the expected new national legislation; in particular the fact that it is illegal to import products from the Chinese bear farms (species listed under CITES Appendix I); that any products deemed to be illegally obtained have to be handed over to the relevant authorities; and the fact that the notification including these same matters is distributed to the medical manufacturers.

• Public awareness for general consumers:

Create awareness amongst the general consumers in Japan of: the vital importance of bear conservation; the fact that demand for bear bile is greatly affecting the survival of bear species

worldwide; the regulation under CITES and the expected new national legislation; and in particular the fact that it is illegal to import products from the Chinese bear farms (species listed under CITES Appendix I).

6. Promote the use of alternative treatments:

- To medical manufacturers and importers:
 - a) Urge the manufacturers and importers to voluntarily change from supplying bear bile to supplying herbal or synthetic alternatives.
 - b) If necessary, introduce financial incentives to promote this change.
- To TM pharmacies:

Urge TM pharmacies to provide herbal or synthetic alternatives instead of bear bile, and to replace processed medicines, containing bear bile, with alternatives.

To consumers:

> Urge general consumers to use herbal or synthetic alternatives instead of bear bile, and to replace processed medicines, containing bear bile, with alternatives.

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