

Getting off the Tiger:

**How China can eliminate illicit demand
for Tiger parts and products
and deliver on its trade-related
National Tiger Recovery Priorities**

PRE PUBLICATION DRAFT – NOT FOR PUBLIC CIRCULATION

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Cover: Riding the Tiger, it's hard to get off 騎 虎 難 下

Tourists ride reluctant young Tigers at the Shenyang Safari Park in the capital city of Liaoning province in northeastern China. The zoo was closed down by authorities in March 2010 when 11 Tigers starved to death after being fed only chicken bones, an incident which received wide international attention. According to news reports (Yang 2010), production of Tiger bone wine at the facility was “an open secret” and is among the charges being investigated. Court documents show that, in the two years before it opened, the businessman owner gave US\$117,000 in gifts and cash to the then-mayor of the city, who was later convicted of taking bribes and died in prison. The incident led to the issuance of regulatory reforms on the management of captive animals, particularly rare and endangered species, in July 2010.

Photograph credit: Huang Qi, *Xinmin Weekly*

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Abbreviations

CITES	The Convention on International Trade in Endangered Species of Wild Fauna and Flora
GTRP	Global Tiger Recovery Program
NTRP	National Tiger Recovery Priorities
PSA	Public Service Announcement
SAIC	State Administration of Industry and Commerce, Government of China
SFA	State Forest Administration, Government of China
TCM	Traditional Chinese Medicine
TRCs	Tiger Range Countries

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Executive Summary

China has very few wild Tigers of its own, but its strict domestic trade ban is widely recognized as the cornerstone of efforts to save the Tiger across its remaining range in Asia's forests. Yet poaching is still taking place at unsustainable levels, and China is widely perceived as the destination for smuggling Tiger products.

As the lunar Year of the Tiger began in 2010, China's State Forest Administration issued new directives to crack down on illegal trade, raise public awareness, and improve control over Tigers in captivity and their remains when they perish (Annex 1). This report, based on TRAFFIC research and an expert forum held in Beijing (Annex 2), aims to support the Government of China's policy and National Tiger Recovery Priorities by examining recent information about illegal markets for Tiger products in China from a variety of angles and providing solutions to strengthen legal, enforcement and demand deterrents, ideally coordinated and sustained in an integrated fashion.

Demand for Tiger products in China cannot be characterized as large. Consumer surveys carried out by independent research efforts have found very low levels of recent use, showing that Tiger products are not widely sought after nor frequently consumed. Still, with such a large population in China, combined with residual traditions of use by the ethnic Chinese diaspora globally, even low levels of demand translate into a potential consumer base of millions of people, showing that this big country needs a big message for a campaign to eliminate illicit demand.

While Tiger bone medicines are largely valued by older people for traditional health reasons, other Tiger products are valued primarily by relatively educated, high income men precisely because they are rare and difficult to acquire, and thus can demonstrate prestige in social settings. Although traditional uses (Tiger bone medicines and ceremonial Tiger skin robes once favored by ethnic Tibetans) and distribution channels have declined sharply in China, new non-traditional types of consumption are growing – especially “Tiger” bone wine and meat. This trade is centered on large and growing captive collections of Tigers in China. Tiger farmers are undermining China's policy and longstanding efforts to eliminate illicit demand by exploiting legal loopholes, and these practices have met with widespread international concern, especially from other Tiger range countries. China could send a clear and strong message by targeting enforcement action on the two largest Tiger farms.

As the Chinese proverb goes, “Riding the Tiger, it's hard to get off.” It will not be easy to change behavior and beliefs, but by removing legal ambiguity, increasing intelligence-led policing in cooperation with authorities in other Tiger range countries, targeting hotspots of illegal trade, and sustaining government engagement with civil society in support of Tiger conservation and against consumption of Tiger products, China can make a decisive difference for the recovery of the Tiger.

Introduction: The importance of China in the context of the Global Tiger Recovery Program

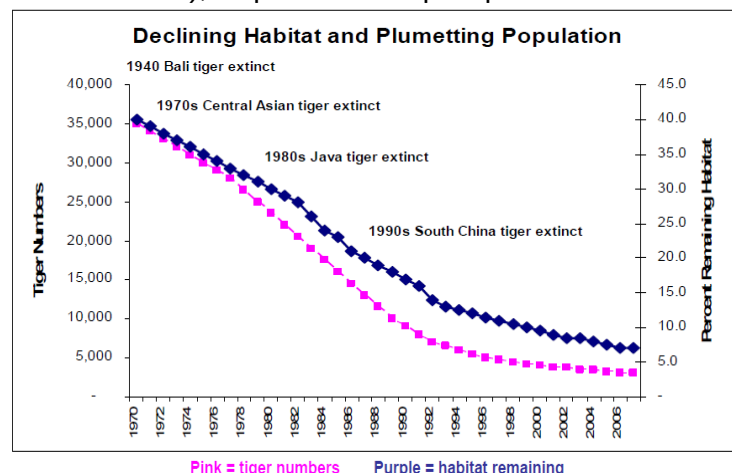
In the Global Tiger Recovery Program developed for adoption at the unprecedented gathering of Asian leaders known as the Tiger Summit (St. Petersburg, Russia, November 2010), the Tiger Range Countries (TRCs) have set the ambitious goal of doubling Tiger numbers over the next 12 years, from approximately 3,000 to 6,000 (GTRP 2010a). Tigers occupy just a fraction of their potential range in suitable habitat (Walston et al 2010), so this goal is achievable – but only if the poaching which has reduced Tigers to their present perilous state of endangerment can be stopped.

Tiger poaching is driven by less by poverty and more by wealth (TRAFFIC 2008), which is putting expensive illegal Tiger products within reach of a rapidly growing group of potential consumers. TRAFFIC has documented alarming levels of recent illegal trade within the TRCs, with seizures and confiscations in 2008-2009 averaging the equivalent of approximately 200 Tigers per year (Verheij et al 2010). Interdictions represent just a fraction of the true level of illegal trade, indicating that Tigers are gravely imperiled by black market demand.

Figure 1. China's 1993 domestic trade ban slows the precipitous decline of wild Tigers

Source: *Global Tiger Recovery Program Executive Volume*, September 2010

China has very few wild Tigers of its own, but its strict domestic trade ban is widely recognized as the cornerstone of efforts to save the Tiger across its remaining range in Asia's forests. China's swift enactment of this policy in 1993, at a time when extinction seemed imminent (Mills and Jackson 1994), helped slow the precipitous decline of the wild Tiger population that began in the



1970s-1980s (Figure 1). Only further action and leadership from China, acting in concert with other TRCs, can provide the decisive force to turn the situation around and start the Tiger on the road to recovery. There is wide recognition that “the fate of wild Tigers across the Tiger’s range will rest in policy decisions made in China” (Wikramanayake et al 2010, Nowell 2010).

China has fully protected the Tiger from hunting, domestication and breeding, sale, purchase, transport,

post, import and export under the 1988 Wildlife Protection Law (Govt. of China 1988); such actions may only be carried out by a national government permit. These protections were strengthened under a 1993 legal notice from China’s highest governing body, the State Council (Govt. of China 1993), which removed Tiger bone from the national list of approved pharmaceutical ingredients, banned manufacture and production, and required that existing stocks of Tiger bone be declared, registered and sealed. The Circular specified that any product marked, even if falsely marked, as containing these derivatives is to be treated under law as if it contains such derivatives (Mainka 1997). A notification sent by the Ministry of Public Security in March 2001 made this more explicit by clearly extending prohibitions to fake Tiger parts and products, and called for increased enforcement efforts especially in western China (Ministry of

Public Security 2001). China has some of the strongest penalties for illegal trade in Tiger products, with prison sentences ranging from 10 years to life having been handed down in several recent prosecutions (Verheij et al 2010). China has been applauded for these protective measures, and for taking steps to shut down a sizeable industry (over 200 factories were producing Tiger bone medicines in the early 1990s [Nowell 2000], and production was valued at US\$230 million [Mills and Jackson 1994]).

China has the capacity and resources to achieve the full measure of success, and the task is not an impossible one. Demand is no longer considered a major threat in other areas identified as major consumers during the early 1990s, the beginning of the 'Tiger crisis' (Mills and Jackson 1994, Nowell 2000). European countries and the US have invested significant resources in shutting down domestic markets in Tiger medicinal products, but the results from East Asia (Japan, South Korea, and the Chinese territories of Taiwan and Hong Kong) are particularly impressive. Yet China and, to a lesser extent, Vietnam, are still perceived as leading destinations for smugglers of poached Tiger parts, despite strict trade policies and demonstrated commitment to enforcement. It is probably not a coincidence that in both countries, government efforts are being undermined by business interests who have taken advantage of legal loopholes to invest in the 'Tiger business'.

China's 1988 Wildlife Protection Law also supports captive breeding of wildlife for food and medicine, as a way to alleviate harvest pressure on wild populations. Two so-called Tiger farms were started before the 1993 trade ban: the facility now known as the Siberian Tiger Park in the north-eastern province of Heilongjiang (1986), and the Xionsen Bear and Tiger Mountain Village in the southern province of Guangxi (1992) (Figure 2) (Nowell and Xu 2007). These facilities have bred captive Tigers at rates unimaginable in the international zoo community, and have loaned out breeding stock to start new facilities, so that in 2010 China's captive Tiger collections probably number in the hundreds, and the total caged Tiger population exceeds 6,000 (Anon. 2010a), the world's largest. It is tragic and ironic that stopping the decline of wild Tigers will be a daunting challenge (let alone doubling their numbers to 6,000), whereas in captivity the difficulty lies in reducing the population to a level supportive only to conserving wild Tigers (as called for by CITES Decision 14.69).

Figure 2. Rows of Tiger cages at Xiongsen Bear and Mountain Tiger Village



Source: Parry and Jones (2007)

The two primary Tiger farms led a major push for the government to allow them to legally sell products made from their Tigers (Nowell and Xu 2007). Recognizing the potential impact of domestic policy changes on other Tiger Range Countries, China sought international and scientific opinion on whether legalizing trade in products from farmed Tigers would be likely to reduce poaching and benefit global wild Tiger conservation. Government officials requested international input in fora including the Global Tiger Forum (an Asian inter-governmental alliance for Tiger conservation) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), through Standing Committee meetings in 2006 and 2007 and the 14th meeting of the Conference of the Parties in June 2007. The idea of legalized trade in Tiger products met with resounding disapproval, especially from the TRCs (GTF 2007, CITES Decisions 14.66 and 14.69). China's National Tiger Recovery Priorities now contain a "Policy Guarantee" that its strict domestic trade ban will continue (GTRP 2010b: 48).

As the lunar Year of the Tiger began in 2010, China's State Forest Administration (SFA) issued new directives to crack down on illegal trade, raise public awareness, promote the welfare of performing animals, and improve control over Tigers in captivity and their remains when they perish (Annex 1). This report aims to support the Government of China's policy and trade-related goals in its NTRP and SFA directives, by examining recent information about illegal markets for Tiger products in China from a variety of angles and providing solutions to strengthen legal, enforcement and demand deterrents, ideally coordinated and sustained in an integrated fashion. As the Chinese proverb goes, "Riding the Tiger, it's hard to get off." It will not be easy to change behavior and longstanding beliefs, but this report describes how targeted action, adequate resourcing and sustained effort from China can make a decisive difference for the recovery of wild

Tiger populations. Working in concert with other Tiger Range Countries and leading by example, China can secure its reputation as a global leader by making the right choices as a society.

Methods

This report is based upon market monitoring by TRAFFIC in China, literature reviews undertaken by the authors, and a discussion of consumer markets for Tigers and deterrents prepared as part of the Global Tiger Initiative process (Broad and Damania 2009) leading up to the Tiger Summit. An expert forum was convened by TRAFFIC in Beijing in July 2010, “The Future of Endangered Species: A Matter of Societal Choice,” with a focus on the Tiger as an example of a species threatened by traditional consumption practices. A wide range of Chinese expertise was solicited, with participants having a distinguished background in law, sociology, economics, governance, wildlife conservation, wildlife trade control and monitoring, traditional medicine, and mass communications. The conclusions of this expert forum (Jiang 2010; Annex 2) were a key basis for the recommendations presented in this report.

Results: the state of illegal Tiger trade in China

Trade in Tiger parts and products, whatever their origin, is illegal in China and all other Tiger range countries, and is therefore largely hidden from view and difficult to quantify. Here it is gauged in three ways: market monitoring (including surveys by investigators posing as potential buyers and making inquiries); government reports of seizures and confiscations (which represent just the “tip of the iceberg”); and attitudinal surveys of consumers (where citizens are asked about their consumption behavior and motivations to measure demand).

Market monitoring

Market monitoring indicates that China has made major progress towards eliminating demand for two types of Tiger products which were believed to be major drivers of Tiger poaching in recent years: Tiger bone traditional medicines and Tiger skin ceremonial robes. After 1993, results from market monitoring of hundreds of pharmacy outlets across China have shown a significant and steady decline in illegal trade (Figure 3). China has invested significant resources in promoting acceptable substitutes for Tiger bone in traditional medicine (Nowell and Xu 2007), and the World Federation of Chinese Medicine Societies has declared Tiger bone unnecessary for traditional Chinese Medicine (TCM), with plenty of affordable and effective alternatives (Anon. 2010b).

Similarly, demand among ethnic Tibetans in China for ceremonial robes (*chuba*) incorporating Tiger skins set off a resurgence of illegal trade in the early 2000s, but increased awareness has led to demand for these items being effectively eliminated (CI 2006, Nowell and Xu 2007, Xu 2010) (Figure 4). For example, Tiger and Asian big cat skin strips have been observed for sale by merchants who say that ethnic Tibetans no longer want to wear these robes and have removed the skin strips to sell (Xu 2010). However, some traders in western China are selling whole Tiger (and other protected Asian big cat species) skins as rugs or mounts for home display, particularly in the BeiDa Street market of Linxia, Gansu province, long a center of animal skin tanning and trade (Xu 2010).

Figure 3. Market monitoring by TRAFFIC shows a steady decline in Tiger bone medicine trade in pharmacies across China (Nowell and Xu 2007)

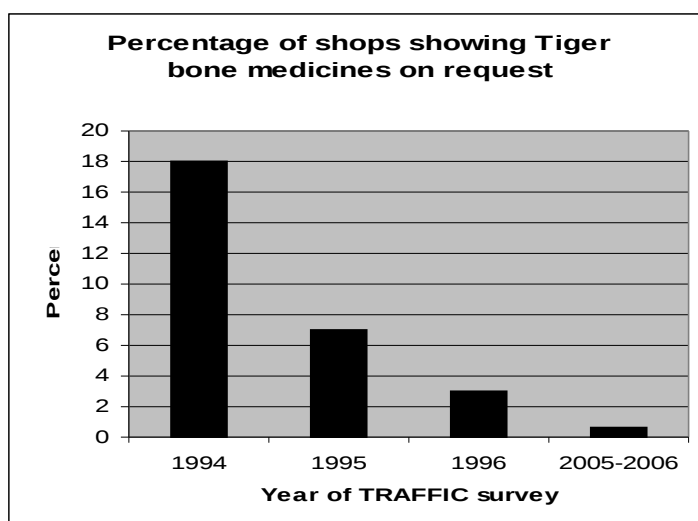
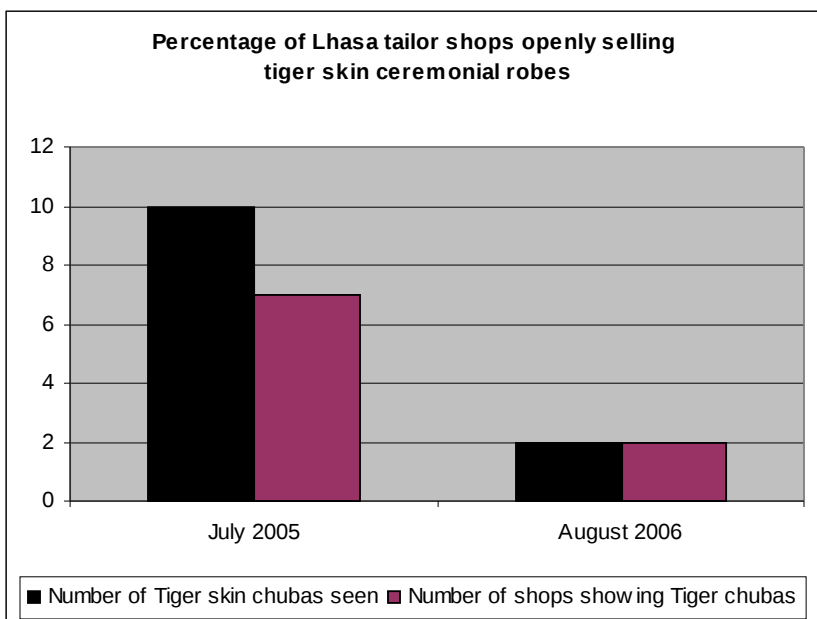


Figure 4. Demand abruptly collapsed for Tiger skin ceremonial robes after an awareness campaign (Nowell and Xu 2007)



Another growing example of non-traditional marketing taking place in some parts of China is for “Tiger” bone wine and meat. This trade is centered on China’s Tiger farms, with local business involvement (restaurants and wine sellers) and widespread local knowledge of it (Nowell and Xu 2007). The most common example is wine suggestively marketed as containing Tiger. In August 2010 TRAFFIC focused its research on one particular brand, Xionsen BuGu Jiu or Bone

Nurturing Wine (building on previous research by Nowell and Xu [2007]). TRAFFIC has previously documented other examples of illicit sales of Tiger bone wine and meat (Nowell and Xu 2007), and journalists in China have also recently investigated illegal trade coming from other Tiger farms (Zhu 2008, Zhou 2009, Li 2010).

BuGu Wine was being offered by 90 separate sellers on the Internet during a 2 week period in August 2010, with 12% saying directly that it was made from Tiger bone (sample in Figure 5), 42% hinting that it contained Tiger bone, and 46% saying only that it was made from "rare animals." Websites selling Xiongsen wines tell customers, *"Please feel comfortable buying. Reunion guests and friends that you actually, greeting sent, gift to share...because [the wines] bear SAIC and SFA licensed anti-counterfeit labels for the use of wild animals as raw materials"* (<http://bugujiu.com/tese.html>, translated from Chinese, accessed October 2010). TRAFFIC engaged two of the sellers in detailed online conversations, posing as a potential buyer, and visited one of them in Guilin, as well as the Xiongsen Bear and Tiger Mountain Village itself. Below is an excerpt from one of the online conversations (recorded) with a trader selling Bone Nurturing Wine. Potential customers are told that the wine is made from tiger bone, and given assurances that purchase will be legal.

Q: What is the ingredient of this wine?

A: Real Tiger bone. Yes, this wine is produced by Guilin Bear & Tiger Village. 100% produced by Tiger bone wine.

Q: Why didn't you write Tiger bone clearly? How can you sell it at such a high price if you didn't tell consumers clearly?

A: Tiger bone wine is very sensitive. The government approved Bear & Tiger Village to sell this wine, but we are not allowed to do many advertisements.

Figure 5. Website advertising Tiger bone wine (red characters highlighted in the boxed area) from the Xiongsen Bear and Tiger Mountain Village



In the case of Bone Nurturing Wine, the license is for the manufacture of 400,000 bottles, granted in 2005, of wine containing not Tiger bone, but bone from African lion, *Panthera leo* (Nowell and Xu 2007; Figure 5). However, the name BuGu Jiu sounds like Tiger Bone Wine – *HuGu Jiu* – and the bottle is made as a replica of a Tiger (Figures 6 and 7). Many of the websites carried the same language: “In order to raise funds from multi-channels and realize the plan of ‘use Tiger to raise Tiger,’ the SFA and SAIC specially allows our village to give animals which die from normal aging to Xiong Sen wine company for the production.” While not saying directly that the wine is made from Tiger, one website extols the virtues of Tiger bone: *“Tiger is full of treasures. In addition to precious Tiger bed, bones and organs can be used as medicine. According to the “Compendium of Materia Medica” records, the Tiger has significant anti-inflammatory, Herd, pain, bone health and other effects, mainly for the treatment of osteoporosis, rheumatism and bone and so on. Tiger bone medicine to be valuable, especially the human body with Warming Yang, gluten bone, marrow filled lean, through active and vintage muscle rheumatism, shin pain, arm, waist and legs not with impotence do not move, sexual wasting embolism has a strange effect.”* (<http://bugujiu.com/tese.html>, translated from Chinese, accessed October 2010).

It is clear that customers and local people are being led to believe by Xiongsen staff and distributors that their products are made from Tiger, with government approval. The Xiongsen Tiger farm as well as others are exploiting legal loopholes and fostering demand for Tiger products. These practices have met with widespread international concern and been the subject of inspection and verification mission by the CITES Secretariat (CITES COP14 Doc. 52 Annex 7).

Figure 5. Official label showing *Panthera leo* (African lion) is the approved ingredient for Xiongseu Bugu Jiu (Bone Nurturing Wine)...



Source: Nowell and Xu (2007)¹

Figure 6. But the bottle suggests that it contains male Tiger



Photo: TRAFFIC East Asia

¹ The conservation community does not recommend that any other felid species be used as an alternative to Tiger bone; rather, the emphasis has been on eliminating demand. The African conservation community is concerned about the potential for Lion bone to serve as a substitute for Tiger bone, a concern reflected in two recent regional Lion conservation strategies developed by the African range State governments in partnership with conservationists and stakeholders. In addition, Lion bone has no history of use in TCM, so this represents a new kind of marketing rather than longstanding tradition.

Figure 8. A typical social consumption scenario (see section 3.3)



Source: Parry and Jones (2007)

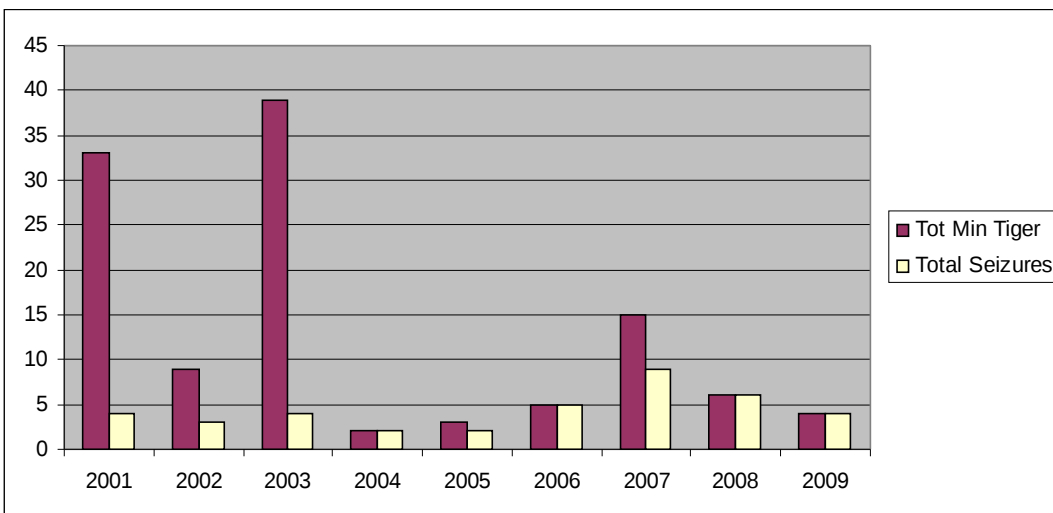
Seizures and confiscations

Chinese government announcements of Tiger trade interdictions demonstrate that there are still significant levels of illegal trade, despite substantial law enforcement effort. Analyzing media reports of confiscations from January 2001 - April 2010 (data from Verheij et al 2010, Appendix 1), there appears to have been at least 40 seizure cases in China, involving an estimated 88 Tiger skins and the equivalent of over 350 kg of Tiger bone (including whole dead Tigers and skeletons). The government of China previously reported that from 1999-2005, 80 Tiger skins, 31 Tiger skeletons and 335 kg of Tiger/Leopard bone were seized (Nowell and Xu 2007) in 22 cases, of which just three involved additional species, indicating a high degree of specialization in the trade (Moyle 2009). Moyle also noted that there were 18 cases of fake Tiger parts during the same period, and found no overlap between criminals that supply real Tiger parts (generally international in scope) and those supplying fakes (domestic).

In China, seizures were larger in quantity of Tiger parts ten years ago, but in recent years quantities have decreased (data from Verheij et al 2010: Figure 9). This could indicate improved enforcement; a drop in organized commercial-level demand and more amateur, opportunistic illegal trade; or it could reflect declining wild Tiger populations. This trend is contrary to that observed across 11 TRCs in recent years, however, where quantities seized have increased along with the number of seizure cases (Verheij et al 2010). Most of the seizures in China (Figure 10), as well as the neighbouring supply countries of India and Nepal, involve bones and skins, suggesting that these have been the main items in demand over this period (Moyle 2009, Verheij et al 2010).

Mapping these seizures supports the existence of previously described trade routes which ultimately point to China: India through Nepal to China (a border where the largest seizures have taken place: 62 kg of bone in 2001 and 31 skins in 2003); Myanmar and Laos to China; Malaysia to Thailand and then on to China; and Russian Far East to China (Shepherd and Nijman 2008, Oswell 2010, Verheij et al. 2010). There have also been seizures from across the Chinese interior, indicating a variety of internal trade and transport routes as well as a diffuse consumer market (Verheij et al 2010: Figure 11).

Figure 9. In China, quantities of Tiger parts seized have been lower in recent years



Source: data from Verheij et al (2010: Appendix 1); Tot Min Tiger = total estimated minimum number of Tigers represented by quantity of parts seized each year; Total Seizures = number of cases per year

Figure 10. Bones and skins are the primary items in illegal trade as evidenced by China's seizure reports (data from Verheij et al 2010, Appendix 1)

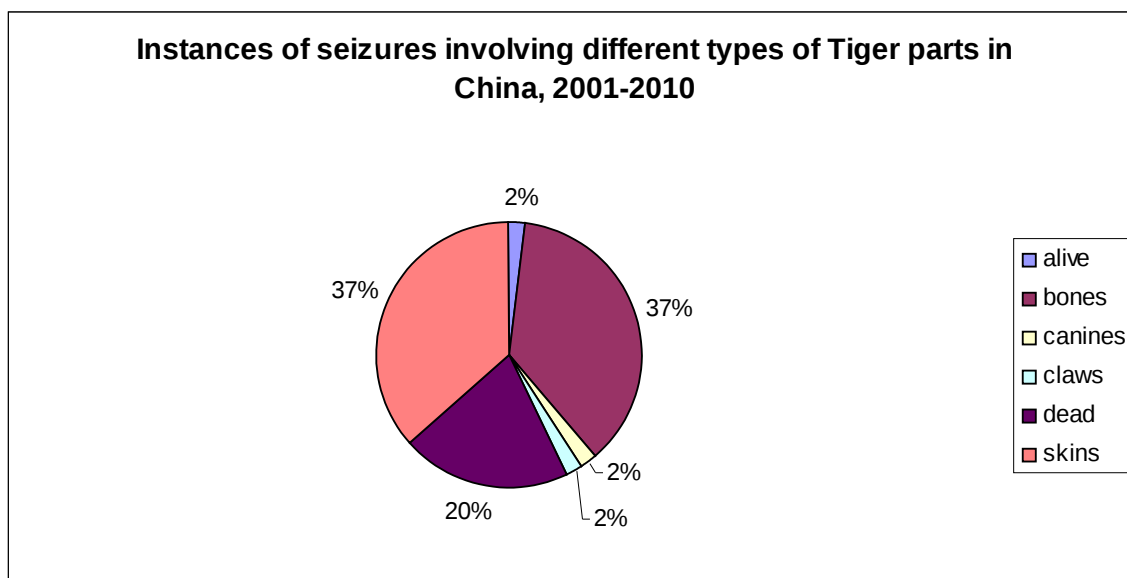
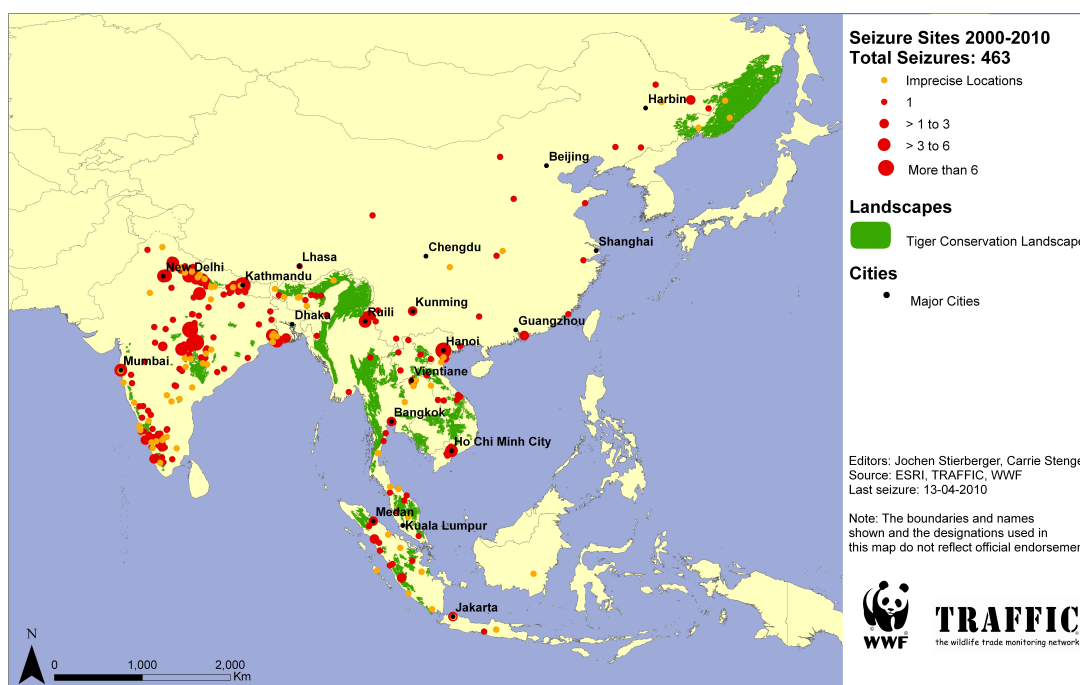


Figure 11. Map of Tiger seizures indicates primacy of India as a source for illegal trade, clusters at key border crossing points going into China, and a diffuse consumer base across China (Verheij et al 2010)



Consumer surveys

Demand for Tiger products in China cannot be characterized as large. Consumer surveys carried out by independent research efforts have found very low levels of recent usage (Table 1), showing that Tiger products are not widely sought after nor frequently consumed. If Tiger products were really in popular demand, wild Tigers would already be gone. Still, with such a large population in China, combined with residual traditions of use by the ethnic Chinese diaspora globally, even low levels of demand translate into a potential consumer base of millions of people.

Table 1. Consumption levels and prices for Tiger products in China

Product	Proportion of surveyed consumers reporting recent use (past 1-2 yrs)	Retail price per item (US\$)
Tiger bone medicine*	1-2% (a,b)	\$1-22 per gram (d)
"Tiger" bone wine*	3% (c)	\$16-257 per 500 ml bottle (e)
Tiger meat*	0 (b) 2.6% receptive to the idea	\$100 per dish (d)
Xiongsen "Tiger" penis wine*	n/a	\$490 per 500 ml bottle (e)
Tiger skin for display	0.2% (a)	\$11,000-22,000 (f)
Tiger curio	n/a	\$660 per tooth (f)

* These items are not readily recognizable as Tiger but are described as such verbally or in suggestive marketing

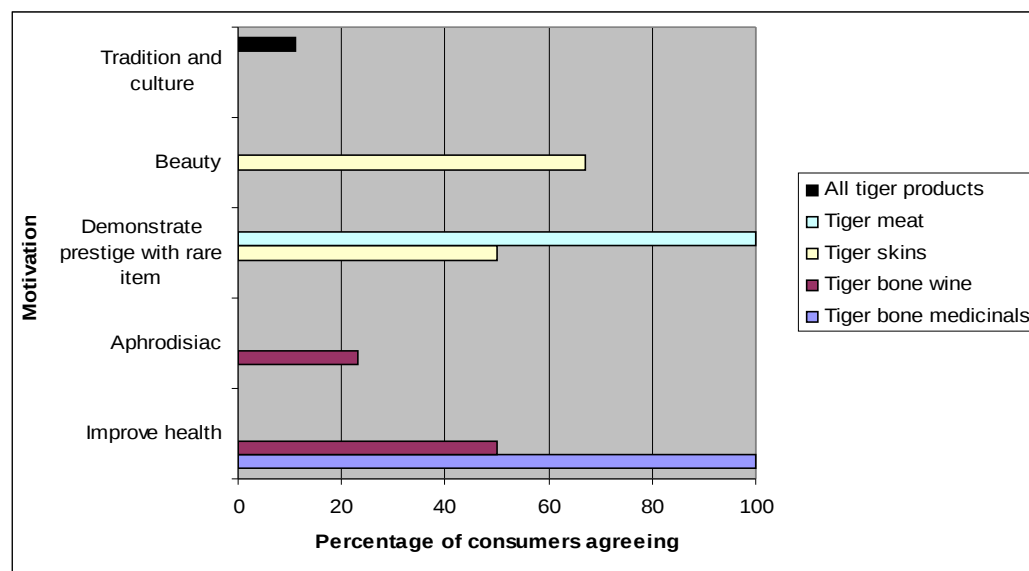
Sources: a Zhang et al. (2008); Shen (2004); b Wasser and Jiao (2010); c Gratwicke et al (2008); d Nowell and Xu (2007) e this report (Xiongsen Bone Nurturing Wine); f EIA (2009)

Even so, it is the behavior of a relatively small number of people in China that constitutes a major threat to the Tiger's survival. These consumers are demographically diverse. Gratwicke et al (2008) found that older people were twice as likely to have consumed Tiger bone wine, and older people (45-60) are more likely to use wildlife-based medicines (Wasser and Jiao 2010). While Gratwicke et al (2008) found that younger people were significantly less likely to use all types of Tiger products, younger men (age 25-44), with relatively higher education levels and incomes, were found to more frequently consume Category 1 protected species (a category which includes Tiger) as food, typically for business gatherings (Zhang et al 2008, Wasser and Jiao 2010). Similar demographic consumption patterns have been documented in Vietnam (Venkataraman 2007, Drury 2009a).

Although eating Tiger meat recently was not reported (Gratwicke et al 2008, Wasser and Jiao 2010), a survey in Guangzhou (the city with the highest reported levels of using wildlife as food and medicine in TRAFFIC's survey: Wasser and Jiao 2010) found that 3% of people said they had eaten Tiger at some point in their lifetime (Guo 2007 in Drury 2009a). Tiger meat is a rare and expensive food item that does not appeal to most people; 97% think it should never be eaten at all. Only 0.1% thought it was fine to eat Tiger meat, while 2.5% were receptive to the idea, thinking that it could be eaten but not everyone would like it (Table 1; Wasser and Jiao 2010).

Figure 11 shows the main motivations given by consumers of different Tiger products. Different products are desired for different reasons. Whereas Tiger bone medicines are considered purely for health purposes (primarily for rheumatic conditions), Tiger bone wine, also used for the same conditions, is seen by a significant minority as an aphrodisiac (a function previously ascribed only to Tiger penis: Nowell 2000). Tiger skins are desired not only for their beauty, but also to demonstrate prestige, as is Tiger meat (these items can impress others by the difficulty of their acquisition, since they are rare, expensive, and illegal: Shen et al 2004, Drury 2009a, Wasser and Jiao 2010). Although the consumption of Tigers has a long history, few Chinese people consider tradition or heritage to be a strong motivator for consuming Tiger products (Gratwicke et al 2008). In fact, Tiger products seem more desirable today because they are "precious" (rare: Wasser and Jiao 2010) and unusual, albeit stemming from deep cultural roots (Annex 2). The relative low importance consumers place on traditional beliefs may be a possible outcome of the marketing of tonics such as Tiger bone wine and meat for non-traditional purposes.

Figure 11. Motivations for using Tiger products given during Chinese consumer surveys



Sources: *All Tiger products* (Gratwicke et al 2008); *Tiger meat* (Guo 2007 in Drury 2009a); *Tiger skins* (Zhang et al 2008); *Tiger bone wine* (Gratwicke et al 2008); *Tiger bone medicinals* (Shen et al 2004, Gratwicke et al 2008)

Broad and Damania (2009) considered the basic demand equation for Tiger products as desire for the product moderated by the ability and willingness to pay for it (Figure 12). Table 1 shows that Tiger products are expensive, and especially skins, but China's growing economy is putting such products within reach for more and more people. Tiger bone wine is twice as likely to be consumed by people with relatively high incomes (Gratwicke et al 2008). Nearly 50% of people surveyed in 2007 (Wasser and Jiao 2010) gave “too expensive” as one of their top three reasons for **not** consuming protected species. Following the logic posed by Broad and Damania (2009), the number of people with the **ability** to pay for Tiger products in China will continue to grow, so demand reduction interventions must target their **willingness** to pay, focusing on the stigma associated with illegality and endangerment, and the availability of acceptable substitutes.

Figure 12. The demand equation (Broad and Damania 2009)

$$\text{DEMAND} = \text{DESIRE} \times \left(\begin{array}{c} \text{ABILITY TO PAY} \\ + \\ \text{WILLINGNESS TO PAY} \end{array} \right)$$

DEMAND ISSUES:

- **Desire?** **CULTURE AESTHETICS POWER**
- **Stigma?** **ILLEGAL - ENDANGERED**
- **Ability to pay?** **GROWING ECONOMIES**
- **Substitution?** **ANIMAL HERBAL OTHER FAKES**

Surveys of urban residents in China by Gratwicke et al (2008) found high awareness of the illegality of Tiger trade. Only 8% thought domestic and international trade were legal, and 4% thought it was legal to purchase Tiger parts or products as an individual. Eighty-eight per cent said they agreed somewhat or strongly with “the government prohibition of trade in Tiger products;” only 3% disagreed.

While people were not generally aware of how endangered Tigers have become, not knowing the status of Tiger populations globally or in China, there was strong support for their protection, with 96% of people surveyed saying it was very important or important, and agreeing that use of Tiger products might lead to extinction and is bad for the planet (Gratwicke et al 2008). Forty per cent of those surveyed by TRAFFIC (Wasser and Jiao 2010) who did not consume protected species as food listed environmental reasons among their top three reasons for non-consumption. However, heavy wildlife consumers (more than 10 times a year) were more likely to be “not so concerned” (28%) about wildlife endangerment in comparison to light users (10%) (less than three times per year) (Shen et al. 2004).

A significant finding of consumer surveys is that awareness of endangerment and illegality does not yet appear to deter consumption among urban Chinese. Gratwicke et al (2008) found no statistically significant relationship between a survey respondent’s expressed support for the China government’s Tiger trade ban and their history of consuming Tiger products. TRAFFIC also noted that “support for wildlife protection was not necessarily related to choices about wildlife consumption,” finding that 90% of current consumers of wildlife claimed to support its protection (Wasser and Jiao 2010). While Shen et al. (2004) found that while heavy consumers of wildlife were more aware of which species were protected (28%) in comparison to less frequent users (17%), they were less willing to abstain from future consumption (25%) than light users (44%).

However, in other cases awareness has clearly helped to stigmatize Tiger trade and reduce demand. In Tibet, 81% of Lhasa residents surveyed said they would give up wearing and buying

animal-skin clothing if there were strong public opinion against it (Tsering 2006 in Nowell and Xu 2007). Time-lapse market surveys show that trade in Tiger skin ceremonial robes has declined sharply across western China (CI 2006, Nowell and Xu 2007, Xu 2010). Among pharmacies nationwide (formerly the main distributors of Tiger medicinals in China), awareness (as expressed voluntarily by shop staff during market monitoring surveys) of the 1993 Tiger trade ban was lowest (just under 50%) in the period one year after the ban, but rose thereafter, and has remained steady at about 60%. This also coincides with a clear reduction in sale volume (Figure 1).

The other issue affecting willingness to consume Tiger products is the availability of acceptable substitutes. An acceptable substitute for Tiger products, from a conservation viewpoint, is one that does not endanger Tigers or other wild species. Farmed Tigers are not acceptable because they perpetuate demand for Tiger products, which runs contrary to international consensus to eliminate use (Nowell and Xu 2007, Nowell 2010). Other Asian big cats are not acceptable because they are also threatened in the wild.

The Chinese government has invested significantly in research into alternatives to Tiger bone for traditional medicine. It was included in the Action Plan of China's 21st Century Agenda. Numerous scientific studies, published in Chinese traditional medicine journals, have documented that the bones of other common species – including pig, dog, cow and Zokors or mole rats (*Myospalacinae*) – are functional substitutes for Tiger bone (Nowell and Xu 2007). Tiger bone would seem to have no unique medical qualities, and many say that it has none whatsoever from a scientific standpoint, but is valued psychologically (Nowell 2000, Nowell and Xu 2007, this report Annex 2). The World Federation of Chinese Medicine Societies, based in Beijing but with membership in 57 countries globally, has declared that Tiger parts are not necessary for human health care and that alternatives are plentiful, affordable, and effective (Anon. 2010b).

There is also an abundance of acceptable substitutes for other Tiger products, including skins, meat, and teeth and claw curios. Many women today wear harmless cat-pattern clothing, retaining all of the beauty of wild cat pelage with no associated extinction risk.

A substitute can either be overt, where the consumer knows the product is not genuine Tiger (e.g., Tong Ren Tang company's Sailong Anti-Rheumatic wine made from Pika (*Ochotonidae*) bone, which received a government manufacturing permit in 2005: Nowell and Xu 2007), or covert, where the consumer may be led to believe the product is Tiger, but it is not genuine. Covert substitutes are unacceptable because they perpetuate demand for Tiger products, and include fake Tiger products. Most (85%) of people surveyed who said they had used Tiger products in the past were not sure if they were real or fake (Gratwicke et al 2008). Xiongsen Bone Nurturing Wine and others like it are also not acceptable substitutes, despite being described as such by the owner Zhou Weisen (CITES COP14 Doc. 52 Annex 7), because they are suggestively marketed as containing Tiger rather than clearly identified as not.

China's national wildlife law encourages the domestication of wildlife in order to reduce unsustainable harvest of wild species. However, in the case of species valued for their rarity, products from farmed animals are not perfect substitutes and lack the same status, thus perversely increasing demand for genuinely rare wild items (Drury 2009b). In the case of the Tiger, 71% of urban Chinese said they would prefer wild to farmed (Gratwicke et al 2008). People who most frequently consume wildlife are most discerning about whether the products they use are derived from wild or farmed animals (Shen et al. 2004).

Conclusion: A big country needs to send a big message

China has invested substantial effort to curtail consumption of Tiger products, and its domestic trade ban policy has been widely viewed as essential to conservation of wild Tigers. Yet market monitoring, seizures and confiscations, and consumer attitude surveys shows that residual demand persists, and that government policies are being undermined by Tiger farms which are encouraging this demand. International illegal Tiger trade seems to have accelerated since 2007, with a sharp rise in the number of reported Tiger seizures (Verheij et al 2010). Although this may be due to improved enforcement and reporting of seizures across Tiger range, China is widely perceived to still be a major destination for smuggled Tiger products, and should send a strong message to the contrary, using an integrated suite of three coordinated deterrents as outlined by Broad and Damania (2009).

The first is the **policy or legal deterrent**, the legislative and regulatory framework that governs Tiger trade. China has the strictest trade ban policy of any country, which has undoubtedly helped to save wild Tigers. However, the widespread suggestive marketing of products from Tiger farms make this policy appear ambiguous and may encourage unlawful behavior among the citizenry.

Second is the **law enforcement deterrent**, or how well legal controls are implemented. Enforcement depends on credibility, or whether people believe that there is legitimate risk associated with unlawful behavior. Credible enforcement depends upon targeted, intelligence-led action (as opposed to simply depending upon random inspections or expecting the legal deterrent to be sufficient unto itself). Law enforcement should concentrate on key players, as China recognizes, with its focus on illegal trade hotspots and areas with severe problems (Annex 1). To improve enforcement, the system needs to be strengthened in an integrated way, including detection, arrest, prosecution, conviction and penalty. The public must be educated about why such measures are important, and steps must be taken to reduce the demand for illegal products (Akella and Cannon 2004).

The system is only as strong as its weakest link, and the recent prosecution and imprisonment of the manager of the Yichang Safari Park (Zhou 2009) is an excellent example of how enforcement should be targeted on the weakest link, the Tiger farms, which in terms of volume are likely the largest source of illegal Tiger products available in China today. China could send a clear and strong message and strengthen its policy by targeting the two largest Tiger farms for the special enforcement actions called for in its SFA Directive and NTRP: *"In areas where the situation is critical, multi-agency joint enforcement inspection and special cracking down will be conducted, with the timely public communication of prosecutions to form strong shock and awe to deter illegal behavior."* New regulations issued in July 2010 direct facilities with captive animal displays and performances to conduct "self-inspection and self-rectification" on issues including animal welfare as well as "illegal trade in animal products." They are to report to their provincial SFA bureaux, which will have responsibility for appraising compliance with regulations (Annex 1 Part 2). At CITES COP15, China supported an amendment to Resolution Conf 12.5 urging that *"those Parties and non-Parties in whose territory tigers and other Asian big cats are bred in captivity ensure that adequate management controls are in place to prevent parts and derivatives from entering illegal trade from or through such facilities"* (CITES Resolution Conf. 12.5 [Rev. COP15]).

A well-publicized crackdown on the Tiger farms could have a profound freezing effect on the domestic market, and would be a move that would resonate well outside China's borders and be welcomed by the international community, particularly other TRCs.

It would also help to stem the growing captive Tiger population, which poses substantial risks to public safety and health (several major outbreaks of H1N1 avian flu have swept through large Tiger facilities: Nowell and Xu 2007). It is clear that the maintenance costs of these populations

depend upon selling “Tiger” products, because revenues from tourism are insufficient (CITES COP14 Doc. 52 Annex 8), and tourism does not need so many Tigers. To paraphrase one popular demand reduction campaign slogan, “If the selling stops, the breeding can too.”

Other enforcement priorities are to actively strengthen cross-border cooperation with other TRCs to improve detection of smuggling of wild Tiger products, especially in north-east, south-west, and western China, as well as more sustained and regular market monitoring in areas identified as trade hotspots, including the BeiDa Street market in Linxia, Gansu province, where skins of Tiger and other protected Asian big cats were observed for sale during multiple surveys in 2008 (Xu 2010).

Demand deterrents are the third group of interventions, with effective enforcement of legal prohibition being possibly the strongest demand deterrent which may best inspire individual responsibility (Drury 2009a). Campaigns to change public behavior which are understood as having strong government backing are more effective, according to experimental study of public service announcements (*guangyi guangao*) in China (Stockmann et al 2010).

Attitudes and motives need to be understood through consumer research; there is a reasonably good information baseline in China, as previously discussed. Messages need to be targeted at different consumer groups and will be effective only to the extent that they address the underlying motivations. And finally, communication needs to be scaled up in both frequency and precision of focus, as befits the crisis nature of the Tiger’s situation.

TRAFFIC’s market monitoring shows that major market channels for Tiger bone medicines and traditional Tiger skin robes have sharply declined. Only a small percentage of China’s people have recently used Tiger products, and for reasons which should be relatively straightforward to counter. For the largely older segment of the population that still values Tiger bone as a medicine, traditional practitioners have legal, time-honored, acceptable alternatives. For the largely male group of elites who consume Tiger products like wine and meat in social settings to demonstrate prestige, this perception can be changed with leadership messaging from other elites that it is of higher status to frown upon such illegal practices. Using “peer pressure” to change perceptions of appropriate behavior and fashion would probably be effective as well for the lesser known buyers who purchase Tiger skins for home decoration or Tiger teeth and claw jewellery; like fine art, these items are less for private enjoyment and more for social display of taste. In order to reach the uncovered, it is necessary to draw lessons from other fields, and an example of such social marketing messaging is China’s well-known anti-corruption campaign, where in the summer of 2010 CCTV aired PSAs showing doctors, teachers and other respected figures frowning upon proffered “red envelope” bribe payments for services.

Tigers have been an important part of Chinese culture for thousands of years, both feared and revered. They were killed to protect life and livelihood, and consumed to partake of their strength and power. China has moved from seeing Tigers as a pest to seeing them as a cultural and conservation asset, with much of its NTRP focused on recovering its wild Tiger populations (GTRP 2010b). At the same time, China has become a world leader. Conserving endangered species like the Tiger is fundamentally a matter of societal choice (Annex 2) and - if the government promotes the change - China can relegate Tiger consumption to the past by firmly closing the door on use of captive-bred Tiger products, and work in cooperation with other TRCs to stop illegal trade and save wild Tigers.

Recommendations

Policy and legislative deterrents

The legislative and regulatory framework that governs Tiger trade should be reinforced to remove ambiguity. The ambiguity regarding the legality of trade in products from the Tiger farms is the most pressing issue, but any suggestive marketing of products as containing Tiger, whatever their origin, should be subject to the same penalties. Criminality should also be extended to possession of Tiger parts, products and derivatives to close this potential loophole (Annex 2).

Legislation, policy and penalties need to be clearly communicated by China's top leadership, as well as by local authorities. One element that should be immediately communicated is the "Policy Guarantee" in China's National Tiger Recovery Priorities. There was a lot of publicity in 2006-2007 around the government's recent policy review and consideration of legalizing Tiger farming. The rejection of this option must be clearly communicated to the public around the farms who would consume such products, as well as the investors and owners of the farms and the re-sellers of the farms' products. Communication efforts should also target other areas which have been known for illegal trade, including Linxia city skin markets and towns around major border crossing points. The government should also cooperate with authorities in other TRCs to ensure that would-be poachers and illegal traders the Tiger's range receive a clear message that China's Tiger trade ban stands and is being strengthened.

It is also recommended that China explore the enactment of a special law for Tigers (Annex 2), similar to the Giant Panda (*Ailuropoda melanoleuca*) law being considered by Chengdu municipality. The law could address issues specific to Tigers, such as restricting captive breeding solely to scientific purposes (Annex 2).

Enforcement deterrents

China has committed to intelligence-led policing on market availability as well as smuggling of products (whether from domestic or international sources). In order to analyze trade patterns, China should compile its intelligence, seizures and prosecutions in a form that is compatible and can be shared with authorities from other countries.

Transboundary cooperation should not be limited to information exchange but should also include joint enforcement actions. Important border areas include not only transit points along the primarily terrestrial borders with South Asia, Southeast Asia and the Russian Far East, but also through air/seaports connecting China with other routes of supply and demand. China is already actively pursuing strengthened bilateral enforcement collaboration, having recently enacted agreements with Nepal, India and Russia. China should increase its engagement with regional bodies as well, including SAWEN, the South Asian Wildlife Enforcement Network, given the importance of this Tiger trade route, as well as ASEAN-WEN, since the south-western border is another hotspot of illegal wildlife trade.

China is also enlisting the support of the public in deterring illegal Tiger trade by setting up a telephone hotline (Annex 1 Part 2), and a system of rewards and punishments (Annex 1 Part 1). This will also be useful for raising general awareness about wildlife crime, and yield opportunities to publicize the useful contributions of citizens.

China has pledged in its NTRP and SFA Directives to conduct special "shock and awe" crack down investigations "in areas where the situation is critical." The two largest Tiger farms are the places to target. This could have a profoundly chilling effect on the market and send the message

that, as the Beijing expert workshop recommended (Annex 2), no citizen is above the law. Other citizens have been given long prison sentences for lesser quantities of illegal trade.

The SFA Notice announced on December 30 2009 (Annex 1) contains measures to secure stockpiles of dead Tigers at breeding facilities, something that has long been recommended by CITES and which has been open to abuse (Xiongsen, for example, claims it keeps having to dispose of bodies due to power failures [Nowell and Xu 2007], while the Siberian Tiger Park's recent records of Tiger carcasses in its freezer have also been questioned [Li 2010]). These measures should be fully implemented.

Demand deterrents

Demand deterrents are the third group of interventions supporting legal prohibitions and effective enforcement. As "Tiger" bone wine and other products of questionable legality from the Tiger farms appear to be the main component of current consumption in China, demand reduction should start here first. By shutting off this source of supply and making this very public, major gains could be made in changing public attitudes toward consuming Tigers.

The major emphasis of China's strategy to eliminate illicit demand should be to raise the stigma of illegality and endangerment, in a way that makes it socially unacceptable to consume Tiger products. Although shame is an important element, messages should be clear and constructive, so that it a mark of social status to **reject** Tiger products. Based on the results of the previously discussed consumer attitude surveys, campaigns should target successful, high income and high status males of all ages as the priority audience, and should be focused around wildlife trade hotspots, including the Tiger farms, but also wildlife markets and wild meat restaurants. Another key emphasis should be on the promotion of acceptable substitutes for Tiger bone medicines.

Different products require different messaging, such as:

- a) Tiger bone is desired out of a belief in its healing properties. This could be deterred with several arguments. One, there is no scientific support for medicinal properties of Tiger bone (so the purchaser is wasting money, and not scientifically treating the underlying health problem – this may be a more powerful argument for the typically older consumer of Tiger bone medicines). Two, TCM practitioners can treat the conditions for which Tiger bone was traditionally prescribed with acceptable and proven substitutes.
- b) Tiger bone wine is being increasingly described and perceived as an aphrodisiac, a non-traditional usage. Some usage could also be deterred by the scientific argument: that there is no medical support for this function. A shame message could also prove psychologically potent.
- c) Tiger skins, for both display and garments, are desired for their beauty and for the status they convey to the holder. This may also be best countered by a shame message, as was done for fur coats in the West. There is no research on why people buy Tiger curios such as teeth and claws, but they are often used as jewelry or talismans and could be targeted with the same type of shame messaging to remove the benefits of showing them to others.

Illegal markets in other TRCs often cater to tourists from China. Since many Chinese nationals travel in tour groups, awareness efforts should include working with tour organizers to stop Tiger

consumption by Chinese nationals abroad and promote an ethic of globally responsible conservation.

The Year of the Tiger Summit offers an unprecedented awareness-raising opportunity for China. China's top leaders should use the occasion to broadcast to their countrymen the gravity of the Tiger crisis, and China's leadership of a new way -- where the predominant national ethic and culture values Tigers in the wild. Tiger medicines, tonics, jewellery and skin displays should be described as 'relics of the past'. Whether true or not, there is a widespread perception that government officials are often the consumers of rare and exotic endangered species products like Tiger. A clear message from top leaders would be helpful to reduce both the damaging perception and practice, and encourage exemplary leadership from all echelons of government office.

Awareness about the Tiger's endangerment could be linked to the Giant Panda, the very unique symbol of China's wildlife, to make it easier for people to understand (Nowell and Xu 2007). For the foreseeable future, China's policies will continue to play a pivotal role in determining the fate of the Tiger, as with the Panda. As the Tiger is far more endangered than the panda in China, it should be recognized as the "Panda's Little Brother" (*Xionghao de xiongdì*). As for the panda, Tiger conservation in China should have the primary aim of maintaining and restoring wild populations, with strict legal protection, no commercial trade in Tiger products, and carefully managed breeding programs. Conservation, not finance, should be the primary goal in only select, high-quality facilities.

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Annex 1. Summary of China's trade-related National Tiger Recovery Priorities (Part 1) and recent Directives on control of illegal Tiger trade and captive animal welfare and control (Part 2)

Part 1. Summary of China's trade-related National Tiger Recovery Priorities (NTRP)

Trade-related aspects of China's NTRP (GTRP 2010b) can be summarized (with quotes in italics) as follows:

Policy

Policy guarantee: Years of effort have led to the establishment of relevant laws and regulation framework for Tiger in China. All Tigers are listed as Category 1 animal under conservation...It clearly states that all activities related to hunting, domestication and reproduction of Tigers without permit, sales, procurement, transport, and smuggling Tiger and Tiger products is criminal. Those engaged in poaching, illegal killing or illegal purchase, sales or transport of Tiger products will be sentenced for as much as ten years imprisonment with fines and confiscation of personal properties; those engaged in smuggling Tiger products can be sentenced for lifetime or death, and their personal properties will be confiscated. Besides, given the global population of wild and artificially bred Tigers, State Council of China has issued general orders in 1993 to fully ban the use of Tiger bones in medicine or transaction; this is a huge contribution to global Tiger conservation...

Artificial reproduction of Tigers is under strict supervision in China. Permit system is in operation for domestication and reproduction of Tigers. It is required to establish strict management archive and family tree system. Especially since 2007, microchip, gene samples, and management information system (MIS) that can be searched through the Internet started to be used in China. Oversight on artificial reproduction agencies and individual Tigers can be achieved with MIS.

Enforcement

- Improve understanding of illegal Tiger trade through analysis of trade routes, trade chains, and illegal markets based on intelligence, monitoring and seizure reports
- *In areas where the situation is critical, multi-agency joint enforcement inspection and special cracking down will be conducted, with the timely public communication of prosecutions to form strong shock and awe to deter illegal behavior*
- Improve coordination and sharing of equipment and expertise between relevant agencies
- Build staff capacity through training and incentives
- Promote increased enforcement cooperation across borders
- Strictly supervise the management of Tigers in captivity by use of microchips, genetic sampling, and management information system programs

Evaluation indicators include: number of agencies and staff in key enforcement areas; improvement of equipment and facilities; formulation and renewal of different systems; volume of trainings to professional staff; records of market patrol and case investigation and treatment;

investigation and treatment of reported cases; number of joint inspection and special actions; number of discovered illegal cases and the relevant treatment.

Public awareness

- Increase public awareness of the adverse consequences of illegal Tiger trade and consumption for Tiger conservation and China's international image
- Enlist greater public participation in reporting wildlife crime with a telephone hotline, and a system of rewards and punishments
- Increase communication of illegal trade cases to better educate the public

Part 2. Recent State Forest Administration Directives on control of illegal Tiger trade and captive animal welfare and control

SFA Notice: China to strengthen wild Tiger conservation and captive Tiger breeding management

Source: State Forestry Administration

The press office of the State Forestry Administration (SFA) released a statement on 30 December 2009 calling for actions to strengthen the protection of China's wild Tiger populations.

The SFA statement identifies actions the government body plans to take to improve Tiger conservation in China. These include a crackdown on smuggling, illegal domestic marketing/trade in Tiger products and other criminal activities; regulating and strengthening monitoring of Tiger domestication, breeding and Tiger products, as well as advocating Tiger conservation in the Year of the Tiger, which falls in 2010.

The Tiger is a powerful symbol of the importance of conserving wild species and their habitat. They have been an indispensable part of Chinese culture and art, as well as the country's ecosystems, for thousands of years, but are now on the brink extinction.

China's Tiger conservation efforts have achieved many positive results. However, China's wild Tiger populations are critically endangered, and are facing increased risks from habitat destruction, lack of prey, and many other factors. Efforts to conserve Tiger habitat and their prey, and curb smuggling and illegal trade in Tiger parts (skin and bone) are urgently needed, especially in border areas. The SFA proposes three measures to strengthen protection and management of wild Tigers:

1. **Significantly improve conservation efforts on wild Tiger populations and their natural habitats.** Regional forestry authorities in existing wild Tiger distribution areas (and potential expansion areas) should immediately carry out in-depth surveys; strengthen patrolling to prevent poaching of wild Tigers and their prey; address habitat isolation issues; continue monitoring and assessment of wild Tigers and their habitats; provide compensation for damage to human populations caused by wild Tigers and their prey; resolve conflicts between the protection of wild Tigers and local residents, and seek public support in the protection of the endangered species.

2. **Crackdown on smuggling and illegal domestic marketing/trade in Tiger products and other criminal activities.** Forestry departments at all levels should mobilize forces to investigate areas where wild animal products are traded, and increase law enforcement in identified trade hotspots. For complex issues and areas with severe problems, public security, industry and commerce, customs and other relevant law enforcement agencies should take the initiative to carry out joint inspections and law enforcement activities, and implement special crackdowns at appropriate times. On 1 October 2009, the State Forestry Administration set up a hotline for reporting illegal wildlife activities (010-62888606) as well as an E-mail address (savewildlife@caf.ac.cn). All local areas should encourage the public to provide information on smuggling, illegal trade in Tiger products and other criminal activities, set up local hotlines, and involve the public in law enforcement activities. Those who ignore reports on smuggling and illegal trade in Tiger products will be held responsible according to law.
3. **The domestication and breeding of Tigers must be strictly regulated, and rules on Tiger products from dead captive-bred Tigers must be further strengthened.** All Tiger captive breeding activities must hold a legal license, and ensure the qualities of the exhibition halls and farms. Records will be kept on all captive-bred Tigers in a unified tag management system. The corpse of captive bred Tigers, including bones, skins and all other Tiger-related products should be placed in secure storage; for venues without secure storage facilities, Tiger products should be destroyed under the supervision of the provincial forestry authority. The public should also be discouraged from buying illegal Tiger bone products, wearing Tiger skins, or participating in other illegal acts through public campaigns.

30 July 2010 Notice No. 195

State Forestry Administration (SFA) notice on rectifying, supervising and inspecting wild animal domestication and breeding practices conducted by wild animal display and performance units

Wild animal displays and performance units such as zoos and safari parks are facilities with functions of popular science education on nature conservation, spreading eco-culture, public recreation and entertainment, wild animal species preservation and scientific research based on wild animal domestication and breeding practice. But some wild animal displays and performance units overly focus on economic benefits, maltreat wild animals and are involved in animal products trade against regulations as they develop. Incidents of animal accidental death and animals attacking humans occur from time to time, and vulgar advertisements and misleading publicity arise repeatedly. All of these conducts, which are contrary to the aim of spreading eco-culture, have caused potential danger to population safety of rare and endangered species of wild animals and to public health, and have brought about negative impact on the image and reputation of China's wild animal protection.

SFA has decided to conduct an overall rectification, supervision and inspection on wild animal domestication and breeding practice and other relevant activities performed by wild animal display and performance units:

1. Organize self-inspection and self-rectification work from wild animal display and performance units.

All wild animal displays and performance units including zoos, safari parks, wild animal zoos, and circuses should conduct overall self-inspection and self-rectification on their domestication and breeding facilities and conditions, technical capabilities, funds, rules and regulations, contingency plans, record keeping, labeling of live animals, advertisement and publicity, operating and management etc according to relevant laws and regulations on wild animal protection, domestication and breeding and rules and technical standards etc. All units should stop all misconducts of using vulgar advertisements, allowing zero- distance contact opportunities for visitors with animals, utilizing animals for performance abusively and engaging in illegal animal products trade etc. They should react immediately regarding the defectiveness of rules and regulations, mismanagement, primitive facilities and conditions; eliminate various risks of hidden dangers, improve contingency plans, and ensure population safety of rare and endangered species of wild animals and public health. All units should report to their provincial administrative department of forestry regarding their self-inspection and self-rectification work.

2. Strengthen guidance, supervision and inspection of rectification work.

3. Temporarily suspend the administrative license application for domesticating and breeding wild animals under special state protection aiming at animal display and performance and for introducing wild animal species.

From July 30 to Dec 31, 2010, the administrative license application for domesticating and breeding wild animals under special state protection aiming at animal display and performance and for introducing wild animal species is temporarily suspended.

4. Summarize and appraise rectification work.

Each provincial administrative department of forestry should put forward correction proposals and deadline for existing problems and defects after receiving the report from wild animal display and performance units regarding their self-inspection and self-rectification work; for unit with illegal conducts, close the facility for rectification, impose a fine, suspend the license for domestication and breeding wild animals, confiscate wild animals and hand it over to judicial department for punishment according to law.

5. Strengthen leadership, fulfill responsibilities, publicize positively, and ensure actual effect of rectification, supervision and inspection work.

Annex 2. The Future of Endangered Species --the Choice of the Society: Expert Conference Summary

Human beings decide the survival chance of wild animals, whose behaviour may threaten the survival of wild animals, but on the other hand, may protect their habitats and save them from extinction. The subject of human behaviour might be an individual, a community, an organization or even the whole society. Their experience, interest and motives are different and even conflict with each other, which, in the end, leads to their behaviour difference. From a macro perspective, the complexity, long-term evolution and interaction of different social, cultural, economic and political force affect human behaviour. For the tiger, a species in need of comparatively large habitats and on the top end of the food chain in the biological system, the interest conflicts and interactions between humans and the tiger in the early stage led to its extinction. But nowadays, human behaviour, their consumption behaviour in particular, might favour the survival of the tiger. Therefore, tiger protection has become a highlight issue nationwide.

On July 1, 2010, Traffic East Asia invited experts in fields of wild animals, economics, law, Chinese medicines, industry associations, enterprises, NGOs to have a conference, aiming to analyze human beings' need for tiger products and the product market, the legislation and law enforcement based on cognition of economics, sociology, culture, and consumption behaviour, so as to put forward effective measures for tiger protection and to coexist with tigers in the long run. They discussed such questions as "Why does illegal tiger trade still exist in many places?" & "What is the driving force behind the tiger trade?" In doing so, they expect, from the perspectives of economics and sociology, to design a whole set of measures to intervene the market and reduce illegal trade as well as a set of comprehensive measures for government departments, NGOs, academic institutes and enterprises.

In 2010, TRAFFIC discovered in a survey that illegal consumption of tiger products in the current market is small but the practice of consuming tiger products especially tiger bones still exists. The main forms of tiger products are plasters and tincture. TRAFFIC found in the survey that only 11% of people consider tiger products wholesome, while another 11% of people regard the practice as a tradition. For the group which consumes tiger products, they prefer the real products of the tiger, wild tigers in particular, to the substitute products. According to the survey, most people are not sure about the law and regulations related to tiger protection, and whether a kind of behaviour of consuming wild animals is legal or not. However, overall, people support the idea of protecting tigers. China Wildlife Conservation Association and TRAFFIC discovered in the co-conducted surveys on the consumption of wild animals in 1999 and 2005 that the number of people who eat wild animals is decreasing. But there still exists demand.

Participants said that nowadays, people who like to consume tiger products concentrate on some small consumption groups. But these groups have had a negative impact on the image of China. Consumption behaviour has relation, in large part, with conceptions. The behaviour of consuming rare wild animals hasn't had apparent association with the economy, but with Chinese traditional culture and the consuming concept inconsistent with the ethic of modern society, such as the psychology of hunting for the unusual. Among those who consume wild animals, most of them are driven by the showing-off and attempting psychology.

The wildlife experts in the conference believed the conflicts between human beings and wild animals & plants lie in the habitats. That man and wild animals compete for survival room leads to the latter's loss of habitats, which is the fundamental problem affecting the survival of wildlife. Besides, man's direct and indirect using of wild animals also contributes to this crisis. For example, the residents living in the vicinity of the habitats for wild animals and plants may hunt beasts, or poach and smuggle wild animals to make a living.

Why do people hunt wild animals even knowing that this behaviour will lead to the extinction of wild animals? The reason might be for economic interest; for instance, some small group demand for tiger products, healthcare products and clothes indirectly fuels the practice of

smuggling and illegal hunting of wild animals. It might also be for the survival of themselves, for some animals may threaten the security of human beings. It might be only for entertainments. Hunting wild animals to gain medicinal materials for treatment used to be Chinese traditional culture. Why is it so difficult to change or eliminate the habits of consuming wild animals? Different regions have different cultures, which can't form or change in a short time.

The practice of consuming wild animal products will lead to the extinction of some wild animals. The government has already made strict laws to curb the behaviour threatening wild animals. Illegal consumption of wild animal products may be punished by law. Why are there still some people selling wild animal products on the market? Why consumers are willing even eager to consume endangered animals? How can psychology of hunting for the unusual be changed?

Someone argued that the only way to limit the illegal business operation and consumption of wild animals is to take legal means. To prohibit the illegal consumption of wild animals, it is necessary to break down the supply chain at first. With the increasing cost, the demand for the endangered species would reduce, which might turn to the substitutes. Therefore, strengthening legislation and executing the law could increase the cost for illegal wild animals. For example, the traffickers and poachers must be punished as well as the active consumers. Besides, the market price and payment willing often decide the allocation of rare products. For instance, legal wild animal resources can be used in medicine only when the prescription is utilized to cure patients in emergency. To control the wild animal trade, it is effective to shrink the market and guide consumers by raising the market transaction cost of legitimate wild animal materials.

In terms of wild tiger protection, some people suggested that the [livelihood](#) of the civilians must be satisfied firstly in the tiger distribution area. There is a close relationship between the economic development and wild animal habitat protection. To protect wild animals must consider the benefits of native people. During the protecting process, if native people can get benefits, then wild animals could be effectively conserved. The tigers and the habitats can be really protected only after the relationship of native people and tigers is well resolved.

The conferees reached agreements as follows:

1. The tiger is on the top of the food chain of the ecological system. In order to protect tigers, forests where tigers inhabit must be conserved as well as their prey. Consequently, this is to protect the whole broad-leaved forestry system. Habitat protection is the key to protect tigers. At present, the human's desire, psychology and behaviour to consume wild animals affect the existence of tigers. Consequently, another way to protect is to influence the consumers' preference to tiger products. To reduce the demand for tiger products, we are badly in need of making effective measures according to people's consuming behaviour. The following strategies have been carried out to decrease or even eliminate the illegal trade.

2. Reinforce legislation. Legislation and law enforcement are the prior parts that should be considered. Experts suggested it is required to establish and restore the wild animal habitats by legislation; look for substitutes for wild animals; restrict the utilization of tiger products by people in accordance with the law. Law should enhance its legislation tightness and eliminate the loopholes. The forestry and agricultural authorities take charge of terrestrial and aquatic wildlife respectively, but the division for the terrestrial and aquatic wild animals is uncertain, which is an obstacle of wildlife legislation. Except for Law on the Protection of Wildlife, Law on the Management of Wildlife or Wildlife Law should also be established. Some experts put forward a special legislation for some important animals, such as Law on the Protection of Panda.

3. Enhance enforcement. Every citizen before law should be treated equally to enhance the supervision of law and to make sure the law is executed rightly. International united enforcement could be sought for and international criminal polices are called on to participate in combating the wildlife crime. Furthermore, the international cooperation should not be only confined to communication of information, but also law enforcement. It is also necessary to strengthen the cooperation between country parties of the CITES. The wildlife marking system should be designed and developed to control the trade sources of wildlife products. The responsibility taken

up by the countries where wild animals live should be strengthened and combating wildlife crimes needs worldwide cooperation. Developed countries should also undertake appropriate responsibilities to protect wildlife, such as to provide funds.

4. Intensify the monitoring for the wildlife trade. Protection organizations including TRAFFIC should improve monitoring methods of the trend of illegal wildlife trade market, evaluating to improve the influence and function of intervention measures on the illegal wildlife consumers and market. TRAFFIC could continue to investigate and supervise on wildlife trade so as to get the information on wildlife consumption and crimes. TRAFFIC should make warnings on the illegal wildlife trade in time, but illegal medicine information especially about tigers and their products should not be played up any more. In addition, it is necessary to take advantages of the societal forces to build up the illegal wildlife trade reporting system.

5. Intensify publicity and education. The traditional culture has far-reaching influence on wildlife consumption, such as the diet culture of “what we eat compensates what we need”, the present culture and the culture of hunting for novelty & high price, which are hard to eliminate. As a result, guidance should be strengthened actively and strong social ethics should be set up. Those misconceptions should be corrected through propagation to persuade people from being persuaded to change their minds. Therefore, the awareness of wildlife conservation of the public could be improved. Besides, a new concept of consuming endangered and rare animals as a disgrace and protecting rare animals as an honour should be set up through effective publicity among consumers. The wildlife consuming behaviour of people, especially the new rich men, should be changed. By means of propagation, the public should be reminded that wildlife has great ecological values as well as economic values. Moreover, someone also suggested it should cooperate with religion, such as Buddhism, which can affect people’s consumer behaviour on wildlife.

6. It should be encouraged to develop the substitutes for those endangered wildlife. Not just for protecting tiger, the relationship of the tiger and humans should also be taken into full consideration. The captivity and fertilization of wildlife should be evaluated earnestly, and the economic and social values should be reevaluated according to various animals and objectives. The idea of taking animal captivity as an industry is not only analyzed from the economic point of view but also from the social view. If the captivity further endangers of wild populations, then the results could do more harm than good.

7. Intensify popularization of science: it is very important to improve the capacities of scientists, teachers and administration staffs and increase the investment to the popularization of natural protection and research. It also can be taking full use of education and publicity to the youth and children, and giving positive propaganda of outlook on life and value. To analyze the attitudes of all levels in our society, starting from the choices affecting humankind, the social, the cultural and the economic aspects, people can adopt the most effective ways to conserve those endangered wild animals.