

In this issue

Special section: Conserving Taxus, p 1- 2

TRAFFIC East Asia – China programme update, p 2- 4

Op-ed: Medicinal effects of tiger bone, p 4

Laws & regulations: New hope for leopards, p 5

TRAFFIC report finds increasing threat to cancer-fighting tree in Asia

A new TRAFFIC report to be published later this year has found that Yew species across Asia are coming under increasing threat as a result of unsustainable harvest of bark and needles for pharmaceutical production of anti-cancer medications. This is despite the fact that in 2004, four types of Asian yew trees were added to CITES Appendix II listings.

TRAFFIC East Asia – China programme together with the CITES MA Kunming office, School of Agriculture and Biology of Shanghai Jiaotong University, and the Chinese Academy of Sciences began a comprehensive investigation and analysis of the current status and trade of Taxus in China in 2004. The research sheds light on practices of manufacturers in China, including trade volumes, captive breeding practices, a review of current PRC laws and regulations, and the current status of Taxus in China.



The US government approved Taxol for the treatment of ovarian cancer in 1992. In the summer of the same year, traders in China began purchasing the bark of yew trees in North-west Yunnan province. Research found that all bark purchased at this time was for the international pharmaceutical trade.

The American drug company Bristol-Myers Squibb was the first company approved by the US government to manufacture Paclitaxel for chemotherapy. In 1993, the company's production of Paclitaxel amounted to USD13 million. In 1995, the production value was estimated to exceed USD 50 million (Shi Qingwen, 1997). In 1996, Chinese manufacturers also began exporting Paclitaxel. In 1999, one Sino-American joint venture in Yunnan province was found to have manufactured 60 kilograms of high purity of Paclitaxel, consisting of 30,000 yews trees.

After Chinese media reported on the high profitability of the business, many companies in China

began manufacturing Paclitaxel. It was found that the same Sino-American joint venture purchased at least 200,000 yew trees (4000 tons of bark) for Paclitaxel from 1996 to 2002.

The report found that China and India are the two biggest manufacturers and exporters of raw materials made from taxus. Other export countries and regions that export raw materials for medicines made from taxus (consisting of 98% yew tree) include Italy, Korea, Taiwan, Argentina and Mexico. Primary products (consisting of 1-50% of ingredients from yew trees) are exported from Canada, Italy, India, Burma and North Korea.

TRAFFIC's new report will offer recommendations for conserving Taxus in China. The report will be distributed to China's relevant authorities and research institutes to help promote the establishment of more effective laws and action plans for the conservation of Taxus.

TRAFFIC East Asia – China programme update

Wildlife trade monitoring network initiated

On Feb. 11, 2006, Yunnan Normal University and the TRAFFIC East Asia – China programme organized a training to teach Yunnan province and Chongqing municipality middle school teachers how to conduct wildlife surveys. The training is the first step in establishing a wildlife trade monitoring network in China.

The teachers, who volunteered their time, were from middle schools in Menghai, Yingjiang, Mengla, Dali, Jinghong, Tengchong and Chongqing, locations considered illegal wildlife trade 'hotspots', many of which border South-east Asia. They were trained on techniques for monitoring illegal wildlife trade and how to report the information to enforcement authorities.

In addition, the teachers learned how to bring conservation messages to their classrooms.

At the training, experts from CITES MA, Kunming office and Neijiang Normal University presented national and international laws aimed at protecting wild animals and plants as well as introduced how to identify and

categorize common wild animal products.



Training of market survey on wildlife trade
© TRAFFIC East Asia - China Programme

Xu Ling of TRAFFIC East Asia – China programme introduced TRAFFIC's methodology for surveying the wild animal trade.

TRAFFIC East Asia – China programme will organize similar trainings in the future, with the aim of establishing an effective volunteer wildlife trade monitoring network in China.

TRAFFIC promotes the conservation of Traditional Chinese Medicine

Traditional Chinese medicine (TCM) is the most widely practiced traditional medicine system in the world. But many practitioners and consumers are not aware that some of the medicine may be threatening the survival of

animals such as Tigers, rhinos, and plants, for example the wild-grown Asian Ginseng.

Together with habitat loss, poaching is the most immediate threat to the survival of Tigers, rhinos, bears, and musk deer in Asia. Poaching is exacerbated by the booming economies and growing wealth in Asia, which has increased not just the demand, but also prices for many wildlife products.

To help address this growing threat, representatives of the Chinese government and TRAFFIC East Asia - China Programme came together on March 28 for a workshop titled 'Relationship between Use and Conservation of Rare Animal Medicinal Resources'. The workshop brought together key traditional Chinese medicine (TCM) practitioners and researchers, wildlife experts and government officials to discuss complex issues related to medicinal wildlife trade at a time when some significant medicinal species have only small populations surviving in the wild.



Workshop in Beijing, 28 March

© TRAFFIC East Asia - China Programme

At the workshop, participants sought to address the conflict between conservation and use of rare wild medicinal resources; researching substitutions to reduce use of rare medicines; and developing captive breeding as a means to mitigate pressure on wildlife while considering its negative influences on wildlife resources.

Participants also discussed the need to

conduct scientific research on the actual effect of certain traditional Chinese medicines that use rare animal resources. For example, whether the use of tiger bone as a pain reliever for joints, or rhino horn as a means to reduce fever, are effective. Such analysis would help TCM practitioners and users to decide whether to stop or continue use of some rare animal medicinal resources, and also aid the development of appropriate protection policies.

In addition, representatives of major state-run TCM manufacturers introduced current trade procedures as pertaining to relevant laws and regulations prohibiting the use of rare animal medicinal resources. For example, one recent, positive development discussed was a TCM labeling system introduced by the government.

Qin Luping, the professor of the Second Military Medical University, gave a presentation on how to initiate conservation awareness amongst students at traditional Chinese medicine universities.

Participants to the workshop included 13 Chinese governmental departments, institutes and corporations including the Conservation Department of the State Forestry Administration, the CITES Management Authority, the State Administration of Traditional Chinese Medicine, the China Medicinal Resources Group, the Second Military Medical University, Shanghai University of Traditional Chinese Medicine, and the China Forestry Academy. The workshop was jointly supported by the China Wildlife Conservation Association, the Endangered Species Scientific Commission of China, and TRAFFIC East Asia - China Programme.

NGOs evaluate Taxus conservation project

On 13th April, CEPF held an evaluation meeting for "The study on the relationship between the yew trade and the degradation of taxus resources in the mountains of southwest China and the conservation of taxus" conducted by the TRAFFIC East Asia – China programme. Project officers from CI, IFAW, WCS and WWF evaluated the project results.

Key issues discussed included:

Laws and regulations:

How to use the TRAFFIC network to influence the international trade.

How to conserve other species involved in the international trade.

How to influence government decision-makers and policies.

The influence of international laws in China

Education

How to raise awareness amongst the public, communities and companies.

Monitoring

Which stakeholders should be involved.

How to use a local monitoring network.

Each of the participating NGOs discussed how to use their strengths to advocate environmental conservation amongst governments, companies and the public.

Wildlife trade NGOs meet in Beijing for 7th trade alliance meeting

On April 15, 2006, TRAFFIC East Asia – China programme assisted CI (Conservation International) to organize the 7th trade alliance meeting. Participants included various NGOs and institutes involved in addressing wildlife trade - CI, WCS, IFAW, WWF, Save the Tiger Fund and Wildaid. The main topic was how to share data and information on wildlife trade amongst NGOs and how to use the

information for conservation. The participants agreed to establish a working group with representatives from each NGO that will focus on working together to increase effectiveness in stopping wildlife trade in China.

Op-Ed: Medicinal effects of tiger bones lack scientific foundation

by Helin Sheng, Professor, East China Normal University

Hundreds of years ago when medicinal sciences were not very developed, people relied on trial-and-error to determine effectiveness. People also used tiger bones, meat, blood and certain organs to cure illnesses of corresponding counterparts (i.e., eat liver to cure liver problems). Folk traditions believed that if one had eye problems, one should eat eyes, or people with weak blood should drink blood. Thus, tiger bones came to be believed a great cure for bone and tendon problems.

According to ancient records, the main functions of tiger bone medicines are to get rid of wet energy and to disperse cold energy (two energy types that Chinese believe are undesirable), relax and strengthen tendons, increase circulation, improve liver and kidney functions, and to cure diarrhea.

However, Ben-Tsao ("Original Plants", an ancient book on herbology) also states that liquors made from bones other than that of tigers, such as lamb bones, deer bones and dog bones, can also help with inflammation, act as a painkiller and help prevent osteoporosis.

Studies conducted by Beijing TCM University reinforce this, indicating that tiger bone

difference is in the quantities of elements making up the bones. Thus I believe that it is only psychologically that tiger bones have a stronger effect and are more easily accepted by people.

Northwest High Plains Research Center (in China) and Tong-Ren-Tang (an ancient medicine supplier throughout China, who perform their own R&D) cooperated to create a rheumatism liquor containing

Mole bones, which these companies found to have the same effect as tiger bone liquor. However, it could not be marketed as rodent liquor.

Another example comes from the Kunming Animal Research Center, which also uses mole bones in combination with five herbs to make "Dragon Bone Liquor". When it comes to deflamation and circulatory effectiveness, it was found to be superior to liquors containing tiger bones.

In addition, white liquor (which tiger bone is paired with in tiger bone liquor) alone has been found to help circulation. The liquor contains 10-20 different herbs, thus showing that the medicinal benefit of the tiger bones alone is not sufficient – otherwise, why not use tiger bones alone?

People have also been known to turn to leopard (*Panthera pardus*) bones when tiger bones are not available. This *seems* rational because leopards, like tigers, are also classified as *Panthera*. However, herbalists have also been known to use clouded leopards (*eofelis nebulosa*), which differs from *Panthera*. It is not a close relative of the tiger, so why do they use it to replace tiger bones? Perhaps because in laymen terms these species are all called "bao" in Chinese. In fact, golden cats, which are also

called "bao" in small villages and commercial markets, are also used in place of tiger bones. There is no science here - the only consistent factor is the liquor and herbs.

Thus, now that other medicines - whose sources are more abundant and cheaper – have been proven effective, why must we continue these unproven traditions that threaten the existence of tigers?

Sheng Helin is co-author of *The Mammalian of China* (China Forestry Publishing House)

TRAFFIC would like to thank Elaine Hsiao for translating this article.

Laws and regulations

China offers new hope for leopards in Asia

Efforts to increase the protection of leopards in China are being strengthened according to TRAFFIC, the wildlife trade monitoring network of WWF and the World Conservation Union (IUCN).

In Dec 2005, the SFA and China's State Administration for Industry & Commerce issued a national notice to all traditional Chinese medicine manufacturers in China stating that as of 1 January 2006, all medicines using leopard bone must adhere to China's TCM labeling system – a newly developed label for trade, use and management of medicines containing wild animal parts. The labeling system distinguishes TCM containing legal wildlife ingredients from those of unsustainable and illegal origin.

In March 2006, the SFDA (State Food and Drug Administration) also issued the notice, specifically stating that all medicines

containing leopard bone are prohibited from being manufactured as of 1 January 2006.

The March 2006 notice by the SFDA stipulates how TCM manufacturers should use existing leopard bone stock. It stipulates that leopard bone stocks may be used until supplies run out, at which point companies manufacturing orally administered medicines must submit an application to the SFDA to obtain authorization to continue to manufacture medicines using either a leopard bone substitute or without the use of leopard bone. All externally applied medicines containing either leopard bone or substitutes are prohibited from being manufactured as of Jan 1, 2006.

In addition, in late 2005, in a case publicized throughout China, six men from Shanxi and Henan provinces received sentences for the collection and selling of leopard skins and bones.

Evidence gathered by TRAFFIC has found that China may be a growing market for snow leopard (*Uncia uncia*) skins and bones, which have been seen for sale in numerous rural wildlife markets, and even in Beijing. A survey of traditional Chinese medicine markets conducted in southeast China (Yunnan and Guangdong provinces and Chongqing municipality) in 2005 confirmed leopard bone being sold in medicinal markets and stores, as well as leopard skins for sale in markets.

Under a CITES treaty that came into force in 1975, international trade in leopards, snow leopards, clouded leopards, or their pelts or body parts for commercial purposes has been banned. In China, leopards are designated a national grade I protected species, a status that prohibits the trade of leopards in China.

However, similar to other range states where the cats are protected by law, enforcement of these laws is often lax due to limited resources and, in some cases, political upheaval.

TRAFFIC's China Programme is addressing threats to leopards through its 'Tiger Business in the Kingdom of the Dragon' Asian Big Cat project. The project aims to improve understanding of the motivations behind poaching and the changing dynamics of the tiger trade along China's south-east borders and develop effective strategies to eliminate the killings and the demand for leopard parts. TRAFFIC is collaborating with and training government and CITES officials in China to increase the effectiveness of authorities to intervene in the trade of tiger parts.

New Staff

TRAFFIC welcomes Ms Xu Ling and Ms Liu Xueyan, who joined the TRAFFIC East Asia – China programme as the wildlife trade officers in January 2006.

Published by TRAFFIC-East Asia,
China Programme

C/O WWF China Office

Room 1609

Wen Hua Gong

Beijing Working People's Culture Palace
(Laodong Renmin Wenhua Gong Dongmen)

Beijing, P.R. China 100006

Editors: Wang Shasha, Caroline Liou

Xu Hongfa

Tel: 86-10-6522 7100 ext 3260

Fax: 86-10-6522 7300

E-mail: teachina@wwfchina.org

Website: www.traffic.org

www.wwfchina.org/english

www.wow.org.tw