

*TRAFFIC's mission is to ensure that trade in wild plants and animals is not a threat to the conservation of nature. TRAFFIC's work in China is essential to this mission. Through this quarterly newsletter, we'll tell about our actions to stop illegal trade in wildlife and to promote sustainable trade, thereby advancing conservation.*

*A centerpiece of our work is bringing together diverse partners for the conservation of species used in traditional Chinese medicine, or TCM. In this issue – the premiere of TRAFFIC's newsletter on wildlife trade in China – we use a recent TRAFFIC-sponsored symposium on TCM to show the insights that come from this approach. In coming issues, we'll report in depth on the ways that we and our partners are making a difference in the conservation of species used in TCM as well as on numerous other issues.*

*Our goal is to have this newsletter become a forum for dialogue and discussion. Please tell us the topics most interesting to you and how we can make this newsletter most useful for you. Together, we will make a difference.*

Craig Kirkpatrick  
Regional Director

Wang Shasha, Xu Hongfa  
Newsletter Editors

#### In this issue

- Special premiere section: The conservation of species used as traditional medicines, p 1
- About TRAFFIC, p 2
- Project news, p 4
- Highlights of TRAFFIC's FY05-08 program, p 5

## Forum addresses the role of traditional Chinese medicine companies in the conservation of wildlife

More than 26 experts from TRAFFIC East Asia, the CITES Management Authority in China, China's Agriculture and Forestry Administrations, TCM (Traditional Chinese Medicine) companies, and China's TCM universities recently held a forum on Oct 21, 2004 in Shanghai to address the role of TCM companies in the conservation and sustainable use of wildlife and threatened species used as medicine. The forum was organized by TRAFFIC East Asia in partnership with the CITES Scientific Authority, and with support from WWF US and Johnson & Johnson.

Participants discussed issues relating to the use of musk deer, Saiga antelope, and freshwater turtles and tortoises in TCM. TCM management issues such as GACP (Good Agriculture and Collection

Practice) were also on the table, as well as how to strengthen legislation and implementation, improve public awareness of TCM issues, improve administrative integration, and conduct research to produce TCM substitutes.

#### Participants at the forum gave presentations on the following:

#### Good Agricultural and Collection Practices (GACP)

#### —Conservation and Sustainable Use of Cultivated and Wild Medicinal Plants

*Qin Luping, Zheng Hanchen, Huang Baokang*

*School of Pharmacy, Second Military Medical University*

Approximately 80% of TCM in China uses wild plants and animals. Currently, no quality control measures are in place for ingredients collected from the wild. In addition, unregulated collection is for the most part unsustainable. GACP—(Good Agricultural and Collection Practices), which is the criteria recently issued by WHO, provides guidance for management of collection and cultivation of medicinal plants.

This article gives an overview of the pros and cons of cultivated medicinal materials and wild medicinal materials. Qin and Zheng offer an analysis of why it is necessary to push GACP forward in China, along with their ideas on how to promote conservation and sustainable use of wild medicinal plants in China.

### **Promoting the Sustainable Development of Wildlife Resources**

*Xie Yimin*

*Shanghai Wildlife Conservation Management Department*

Wildlife conservation does not only protect a few endangered species but protects all wild resources. Xie argues that China has established a sufficient legal framework for the conservation and management of wildlife resources. However, wildlife conservation education must be strengthened in order to improve people's understanding of wildlife conservation. Conservation management and enforcement capacity must also be strengthened. In addition, an effective system for legal wildlife products only to enter the marketplace must be developed.



TCM experts gathered in Shanghai for the third annual forum on the role of TCM companies in the conservation and sustainable use of wildlife and threatened species used as medicine. © TRAFFIC-East Asia

### **International Concern for the Conservation of Traditional Chinese Medicine Resources**

*Xu Hongfa*

*TRAFFIC-East Asia, China Programme*

Several important proposals relating to traditional Chinese medicine were put forward at the 13<sup>th</sup> Conference of Parties to CITES, the Convention on International Trade in Endangered Species of Wild

Fauna and Flora, held on 2-14 October 2004, in Bangkok, Thailand. These proposals included the Saiga Antelope *Saiga tatarica*, antelope horn, captive breeding of animals listed on Appendix I, rhino, musk deer, broomrape and the yew *Taxus*, demonstrating international attention on wildlife resources conservation and sustainable use.

### **Wildlife Management of Medicine Exports from Shanghai's Port**

*Kong Yi*

*Shanghai Office of CITES*

The import and export of endangered species used for medicines is managed through a permit system implemented by CITES, China's Wildlife Conservation Law and conservation regulations. The Shanghai office of CITES has issued permits for the import and export of wildlife since 1991, and covers the trade of endangered species products such as tiger bone alcohol, *Da Huoluo Dan* (a type of TCM containing rhino horn), *Liu Shen Wan* (a type of TCM containing musk), and more.

Export permits issued by CITES now covers 83.7% of all exports relating to CITES-protected species, up from 55% in 1992. In addition to the above species, other animal products used in medicines and health care products for export include live cobras and dried or powdered Stejneger snakes and black snakes *Ophidia* (usually their fat, toxin and gallbladder). In May 1993, CITES began implementing punitive measures for those breaking relevant laws and regulations, and the State Council of the P.R. China prohibited all trade of rhino horn and tiger bone.

#### **About TRAFFIC**

The joint wildlife trade program of WWF and IUCN, TRAFFIC has 26 years of experience helping regulate wildlife trade. TRAFFIC East Asia's emphasis is on consensus, not confrontation, and it has a reputation for developing mutual understanding among a wide range of stakeholders. TRAFFIC's work in China has grown over the past eight years, and TRAFFIC's current China program (based at the WWF offices in Beijing) focuses on mitigating the impact of traditional medicine on endangered species. Recent Chinese-language products with regard to traditional medicine include (1) identification manuals for trade regulators, (2) a comprehensive review of captive breeding as a conservation tool for musk deer, (3) newsletters telling the traditional medicine community, particularly traders, about conservation issues, and (4) a review of China's international trade in traditional plant medicines.

### **Wildlife Conservation and the Development of Traditional Chinese Medicine**

*Du Dechang*

*Shanghai Wild Animals Conservation Management*

## Station

The development of China's economy, improvement of people's living standards and an increase in population have contributed to the rapid increase in demand for traditional Chinese medicine. How to reconcile wildlife conservation and demand for TCM must be addressed. Populations of species have declined sharply, and a large number of important traditional Chinese medicinal materials are heading toward extinction. Therefore, it is necessary to conserve wildlife and research substitutes to make the TCM industry sustainable.



Wild musk deer in China will soon be on the edge of extinction in China if effective measures are not adopted. © TRAFFIC-East Asia

### Conservation and Use of Musk Deer

Guo Wenli

Shanghai Wild Animals Conservation Station

In the early 21st century, the wild musk deer population in China is between 50,000 and 100,000. This is only 3 to 5% of the population in the 1950-60s. Human activities such as deforestation and pollution degrade the musk deer habitat, and isolate populations from one another making reproduction more difficult. These factors as well as poaching have made wild musk deer an endangered species.

Demand far exceeds resources, bringing the international market price of musk to US\$70-80,000 per kilogram. Illegal poaching has become a serious problem, as wild musk deer can bring high profits.

If we do not adopt effective measures, wild musk deer in China will soon be on the edge of extinction. As a result, the traditional Chinese medicinal culture that has been alive for thousands of years will cease. Guo provides suggestions on solving the current musk deer and TCM dilemma, including establishing protected areas in the musk deer habitat, strengthening conservation awareness, halting illegal hunting, standardizing the trade and use of musk, developing substitutes, and advocating the breeding of musk deer.

### The Conservation and Sustainable use of Rare Chinese Medicinal Plants

Zhou Xiuqia

Shanghai Traditional Chinese Medical University

Of the 12,807 species used in traditional Chinese medicine, 11,146 are plant species, accounting for 87.03%. Of these medicinal plants, 4.18% are lower plants such as algae, fungus, and lichen, totaling 459 species. 10,687 species of higher plants, including mosses, ferns and seed plants, are 95.88% of medicinal plants. However, people require medicinal plants resource from nature for a long time, and other anthropogenic factors caused environment worsening, some species are at the edge of endanger or extinction. We must execute strictly the *Management Stipulation of Traditional Medicine Materials Production Quality*, develop filter for traditional Chinese medicine active constituent and genera in order to assure sustainable use of China rare medicinal resources.



Global demand for Paclitaxel, extracted from the yew tree (*Taxus brevifolia*), is increasing quickly. The substance is a proven cancer-fighting compound.

### Sustainable Use of Pacific Yew Tree

Li Huiting

Shanghai Institute of Pharmaceutical Industry

Paclitaxel, extracted from the yew tree (*Taxus brevifolia*), is a proven cancer-fighting compound. Global demand for the substance is increasing quickly. To ensure sustainable use, Li recommends the following: (1) The Department of Forestry, which has introduced cross-fertilization of yew *Taxus*, should find ways to increase outputs and improve quality. (2) Prohibit the extraction of paclitaxel from the cortex and stop imports of the bark, i.e., protect resources in both China and in neighboring developing countries. (3) Agree to temporarily import branches and leaves as raw materials. Unless steps are taken for sustainable use, it is estimated that domestic resources can meet demand for only two to three years at current rates.

### Chinese Terrapin Diversity and Sustainable Use Strategy

Huang Zhengyi

Fudan University

Terrapins are tortoise or turtles (Testudines (order), Reptilia (class), Chordata (phylum)). There are 37 recorded Chinese tortoise and turtle species. The geographic distribution of Chinese tortoises and turtles is unbalanced. The southeast coastal provinces, where the climate is warm and wet, and vegetation is lush, have a higher quantity, diversity

and distribution of species. However, human activities such as habitat destruction, pollution and over-hunting, have led to a more rapid decrease in terrapins than in any other time in history.

#### **Current Status and Use of Chinese Hopoads**

Yuan Xiao

Shanghai Wild Animals Conservation Management Station

Chinese hop-toads belong to the order Amphibia. They play a crucial role in protecting crops and maintaining ecological balance, and are also one of the most important ingredients used in traditional Chinese medicine. Moreover, hop-toads play an important role in zoological and medicinal research. However, in many regions of China, trade in hop-toads is unregulated and they are sold to restaurants and medicinal companies for profit. If unsustainable use continues, there will be both ecological and economical consequences.

#### **Development of Chinese Medicinal Enterprise and Medicinal Wildlife Conservation and Use**

Yang Hong

Shanghai Medicinal Materials Co., Ltd.

The development of the traditional Chinese medicine industry depends on wildlife. Traditional Chinese medicine manufacturers must understand that wildlife resources are declining rapidly and that many species are in danger of extinction. To protect wildlife and promote sustainable use, the authors put forward the following suggestions: (1) Strengthen training for management of relevant enterprises and administrations to improve awareness on the conservation of medicinal wildlife resources. (2) Strengthen integration and coordination of national administrations, strengthen the research, coordination and unification of laws and regulations on 'Medicinal Wildlife Resources Conservation and Sustainable Use' and promote 'Modernization, Standardization and Internationalization of Traditional Chinese Medicine'. (3) Revise, refine and carry out laws and regulations on medicinal wildlife resources conservation. (4) Strengthen research on substitutes. (5) Establish an effective system for trade on endangered medicinal materials and strengthen management.



Fake *Dendrobium* is flooding the market to meet increasing demand.

#### **Dendrobium Orchid Conservation and Sustainable Development**

Wang Zhengtao

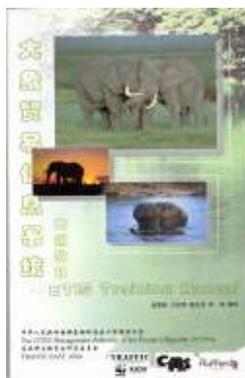
China Pharmaceutical University

Currently, increasing demand for *Dendrobium* (orchid) stems combined with fewer wildlife resources have resulted in bad quality/fake products flooding the market. To resolve this, we suggest the following: (1) Regularly confirm the endangered species list of Chinese medicinal materials. (2) The national pharmacopoeia association should have an expert workshop on *Dendrobium*. (3) Publish and distribute to stakeholders a book about the cultivation of *Dendrobium*. (4) Advise the medicinal quality monitoring departments to strengthen their monitoring capacity for *Dendrobium* manufacturing enterprises.

#### **Project news**

##### **Elephant Trade Information System (ETIS) training manual distributed**

Jointly translated and published by TRAFFIC-East Asia and the CITES MA (Management Authority), with support from the Rufford Foundation, the manual for Elephant Trade Information System (ETIS) training aims to effectively collect information on the ivory trade. Published in September 2004, 1000 copies have been distributed to custom officials and CITES MA enforcement officers in China.



ETIS Training Manual © TRAFFIC-East Asia

##### **Establishing cooperative relationships with neighboring countries**

TRAFFIC-East Asia has been working with the Chinese government to build cooperation on the enforcement of CITES implementation with neighboring countries. A dialogue meeting for Vietnam and China, supported by TRAFFIC and the UK Foreign and Commonwealth Office, was held in December last year. Following the meeting, Mekong river countries, including Vietnam, China, Laos, Cambodia, Thailand and Burma, met in June 2004.

A meeting of 10 countries in Central Asia is being planned for June 2005. The aim of the meetings is to establish cooperative relationships to halt illegal wildlife trade between borders.

## TRAFFIC FY05-08 program

TRAFFIC has an extensive China program aimed at protecting wildlife from illegal and unsustainable trade. In future editions of this newsletter, we'll tell you more about this program. Highlights include:

### Traditional Chinese Medicine

TRAFFIC is working to support effective trade measures to strengthen sustainability in the trade of TCM, including species such as musk deer.

### Asian big cats

Considered trade 'flagships,' TRAFFIC is working to improve the regulation of trade in Asian big cats and their derivatives.

### Emerging trade trends

TRAFFIC aims to catalyze action on wildlife trade issues and trends, ranging from the yew tree (*Taxus*) to Asian freshwater turtles.

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  
Wenhuagong Dongmen) 100006  
Beijing, P.R. China

Editors: Wang Shasha, Xu Hongfa  
Tel: 86-10-6522 7100 ext 3260  
Fax: 86-10-6522 7300  
E-mail: [teachina@wwfchina.org](mailto:teachina@wwfchina.org)  
Website: [www.wwfchina.org/traffic](http://www.wwfchina.org/traffic)  
[www.wwfchina.org/english](http://www.wwfchina.org/english)