

# Pro Wildlife e.V.

Graefelfinger Str. 65  
D - 81375 Muenchen  
Germany

Tel.: ++49-89-81299-507  
Fax: ++49-89-81299-706  
E-mail: [mail@prowildlife.de](mailto:mail@prowildlife.de)  
Web site: [www.prowildlife.de](http://www.prowildlife.de)

## Asian Turtles Are Threatened by Extinction

### 1. Introduction

The trade to and in Southern Asian — especially Chinese — food markets has become the main threat to the survival of Southeast Asian turtles. While tortoises and freshwater turtles have been subjected to human predation for centuries, recent changes in Asian economics, spawned when Chinese currency became convertible, have opened direct access to foreign markets (Behler, 1997).

Tortoises and freshwater turtles are favored for their supposed medicinal value and consumed as food. China's native turtle species already have been depleted dramatically. Therefore, the species present in Chinese markets are increasingly collected in countries further and further away. Besides Bangladesh, Pakistan, India, and Nepal, even species from New Guinea and the USA are now affected. Only a small portion of the turtles being observed in the markets in 1997 were native for China. This indicates a dramatic decline of the Chinese populations of all affected species. Wai-Neng Lau et al. (1998) described the situation in China: "In the late 1970s the hard-shelled chelonian trade was dominated by Chinese species. Now there are more Southeast Asian species for sale than Chinese ones. The import of food chelonians from outside countries has increased more than tenfold since 1977. This reflects an increase in demand in Southern China and the depletion of Chinese chelonians in the wild."

### 2. Population Trends of Key Species

All Southern and Southeast Asian species of turtles have been rapidly declining in the past decade; many face extinction in the wild. The following data are serious indications of this dramatic situation:

- Some of the Chinese species as *Cuora mccordi* are only known from the markets — there is no information about their population status, reproductivity, etc. *Cuora mccordi* as well as *Cuora zhoui* have not been available in the markets for a couple of years (Barzyk, 1999), although there are huge amounts of money offered by Western herpetologists. It has to be feared that these species are already extinct.

- Of all chelonians, *Cuora trifasciata* is the species most in demand, which has resulted in a price ten times that of other species (Jenkins, 1995; van Dijk, 1995, cited by the U.S. Fish & Wildlife Service, 1999). Meanwhile, the price for one specimen has increased to \$1,000 U.S. (McCord, cited by Behler, 1997).
- Softshell turtles have a central role in the traditional Chinese medicine and are generally regarded as the most palatable non-marine chelonians within Southeast Asia (Jenkins, 1995). The populations of almost all softshell turtles are declining rapidly (for example, as described by Jenkins, 1995; Thirakhupt & van Dijk, 1995; Shrestha, 1997).
- Behler (1997) warns that *Chitra Indica* and *Pelochelys bibroni* might become extinct in the wild without heroic intervention.
- The Indian populations of *Kachuga sylhetensis* suffered a 90% decrease in the last decade. *Kachuga kachuga* is showing a similar decline: during the last 20 years there was a reduction of more than 80% (BCPP, 1997). All other species of the genus *Kachuga* are also decreasing — not only in India but also in Nepal and Bangladesh (Ernst et al., 1997; Sarker & Hossain, 1997).

### 3. Volume of Trade

Although not documenting the extent of trade in all details, the following data are definite indications of the tremendous threats to Asian turtles:

- Bill McCord reported that in two Chinese food markets alone an estimated 10,000 turtles are offered during a two-day period. He calculates that, “If China only had five or six markets, . . . this would add up to at least 50,000 turtles on any given day. If the total replacement time was conservatively figured to be a full week (2–3 days given orally), then five or six markets would process at least 2.6 million turtles a year!”
- Salzberg (1998) estimates the number of markets to be a lot higher and therefore calculates that more than 12 millions of turtles are sold each year in China alone. Almost all animals are wild-caught. Considering the low reproduction rate of most species, there is no doubt that this exploitation is not sustainable and that within a few years many of the affected species will be extinct in the wild. The situation continues to worsen with the increasing demand from growing human populations and affluence, especially in China.
- Wal-Neng Lau et al. (1998) described a dramatic trend in the import of food chelonians in the past few years: “In 1977, 139,200 kg of food chelonians was imported to Hong Kong. In 1991, 110,574 kg of food chelonians was imported and rose to 680,582 kg in 1993. In the first ten months of 1994, a record high of 1,800,024 kg of animals was imported.” In 1996 the import of turtles to Hong Kong was 3.5 million kg (Barzyk, 1999).
- Only about 10% of the turtles at Vietnamese markets are consumed by the domestic demand. The remaining 90% are exported to China and Hong Kong (Lehr, 1997). Most of the exported animals are alive, but there are also exports of pharmaceutical products.

- During an investigation by Yiming and Dianmo (1998) about 2.29 to 29,325 tons of wildlife per day were exported to China from Vietnam. Because more than 61% of this volume are turtles and tortoises, this results in 1.84 to 18.4 tons of turtles and tortoises each single day.

This trade is unselective; species protected by international or domestic legislation are involved as well as unprotected ones. The species presently affected represent about 25% of the world's turtle species. The turtles that are imported for the Chinese food markets are often declared as "seafood". This is one reason statistics are lacking that document the volume of the trade in separate species.

**If this unsustainable trade continues, many Southeast Asian turtle species will be extinct within a few years. It is now vital to focus international attention on this issue and coordinate steps to reduce the trade in turtles to a sustainable level.**

#### **4. Conservation Strategy for Asia's Turtles**

The Animals Committee is asked to establish a working group on this issue and develop a conservation strategy to be supported by the CITES member states and NGOs:

- to realise and discuss the fatal extent of the trade in Southeast Asian turtles, which should also be an agenda item for CoP 11;
- to work with and assist range states and local conservationists to win protection for turtles and prevent their extinction in the wild, e.g.,
  - i) to support current proposals for an Appendix II listing of Asian turtles,
  - ii) to conduct field studies and assist in establishing in situ conservation projects in range states;
- to appeal to export countries to enforce national and international laws as well as IATA regulations (detailed declaration, conditions during transport);
- to encourage and support range states to run education programs to reduce the demand in medical products made from endangered species;
- to bring up discussion of China's infractions: Western herpetologists report that Appendix-I species of turtles are offered in Chinese food markets that are non-native to China (*Aspideretes gangeticus*, *A. hurum*, *Batagur baska*, *Geoclemys hamiltonii*, *Kachuga tecta*, and *Morenia ocellata*). There are also several Appendix-II species offered in the markets in high numbers (*Callagur borneoensis*, *Cuora pani*, *Geochelone elongata*, *Geochelone platynota*, *Manouria emys*, and *Lissemys punctata*).

#### **5. Literature**

Barzyk, J.: "Turtles in crisis: The Asian food markets", Tortoise Trust ([www.tortoisetrust.org](http://www.tortoisetrust.org)), April 1999.

BCPP: "Taxon data sheets *Kachuga dhongoka*, *Kachuga kachuga*, *Kachuga smithii smithii*, *Kachuga smithii pallidipes*, *Kachuga sylhetensis*, *Kachuga tentoria circumdata*, *Kachuga tentoria flaviventer*, *Kachuga tentoria tentoria*", BCPP Reptile CAMP report, 1997.

Behler, J.L.: "Troubled times for turtles", in Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles — An International Conference, New York Turtle and Tortoise Society, 1997.

Ernst, K.; Shah, K.B.; Schleich, H.: "Schildkrötenschutz in Nepal", Reptilia 7/97.

Jenkins, M.: "Tortoises and freshwater turtles: The Trade in Southeast Asia", TRAFFIC Southeast Asia, 1995.

Lehr, E.: "Untersuchungen zum Schildkrötenhandel in Vietnam zwischen 1993 und 1996.", Mitteilungen der Zoologischen Gesellschaft für Arten- und Populationsschutz, Heft 2, 1997.

Salzberg, A.: "The Chinese Turtle Problem", Reptilia, June 1998.

Sarker, S.U. & Hossain, L.: "Population and Habitat Status of Freshwater Turtles and Tortoises of Bangladesh and Their Conservation Status", in Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles — An International Conference, New York Turtle and Tortoise Society, 1997.

Shrestha, T.K.: "Status, Biology, Conservation, and Management of Tortoises and Turtles in the Himalayan Foothills of Nepal", in Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles — An International Conference, New York Turtle and Tortoise Society, 1997.

Thirakhupt, K. & van Dijk, P.P.: "The Turtles of Western Thailand — Pushed to the Edge by Progress", in Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles — An International Conference, New York Turtle and Tortoise Society, 1997.

U.S. Fish & Wildlife Service: "Species assessment for *Cuora trifasciata*", information to the German Scientific CITES-Authority (March 1999).

Wai-Neng Lau et al.: "Wildlife Trade in Southern China including Hong Kong and Macao", Kaadori Farm & Botanic Garden Cooperation, 1998.

Yiming & Dianmo, L.: "The dynamics of trade in live wildlife across the Guangxi border between China and Vietnam during 1993–1996 and its control strategies", Biodiversity and Conservation, 7, 1998.