Inclusion of all species of the Genus *Chitra* in Appendix II. Proponent: China and United States of America.

Summary: Soft-shelled turtles in the genus Chitra, known as Narrow-headed Turtles, can reach a carapace length of almost one metre and generally occur in large rivers; they commonly produce around 100 eggs per clutch. At present there are two accepted species, C. chitra which occurs in Indonesia, Malaysia and Thailand and C. indica which occurs in Bangladesh, India, Pakistan and probably Nepal. A population also occurs in Myanmar, though it is not known whether this belongs to the aforementioned species or a third very recently described species. Narrow-headed turtles are declining in numbers in India and suspected to be in decline in the remainder of their range. IUCN classifies C. indica as Endangered and C. chitra as Critically Endangered. The most serious threat identified in all range States is collection of eggs and adults, mainly for domestic trade; there is also a demand for international food markets and the international pet trade where the species command high prices. Habitat modification and loss also pose threats. Export of *Chitra* species from India, Myanmar and Thailand is prohibited and no information on trade quantities is available for other range States. The USA reported imports of 108 C. indica, mostly from Pakistan, between March 1998 and November 2001, all of which originated in the wild. The proponents seek inclusion of *Chitra* spp. in Appendix II in accordance with Resolution Conf. 9.24, Annex 2a satisfying criteria A and Bi) on the grounds that if international trade is not strictly regulated, the species will meet the criteria for inclusion in Appendix I in the next five years and that harvesting of specimens from the wild for international trade will exceed, over an extended period, the level that can be continued in perpetuity.

Analysis: Although data are limited the available evidence suggests that both *C. chitra* and *C. indica* meet the criteria for inclusion in Appendix II. Both species are reported to be depleted or declining in numbers and are evidently in heavy demand both nationally and internationally so that harvesting of specimens for trade is very likely to have a detrimental impact on the population. It is possible that one or both species may meet the biological criteria for inclusion in Appendix I in the near future (if they do not already do so) without strict regulation of international trade.

Supporting Statement (SS)

Additional information

Taxonomy

Synonym: Trionyx indicus.

It is unclear whether the population of Myanmar consists of C. chitra, C. indica or a third very recently described species. The description is currently under review (TRAFFIC Southeast Asia, 2002). The three records of Chitra in Myanmar are from the food trade (Engstrom et al., 2002).

Range

C. chitra: Indonesia (Sumatra and Java), Malaysia (Peninsular) and Thailand.

C. indica: Bangladesh, India, Pakistan and possibly

Nepal.

Chitra sp.: Myanmar.

Based on old records and the best available recent information, Chitra indica almost certainly occurs in Nepal (Groombridge, 2002).

IUCN Global Category

C. chitra, CR A1cd, B1+2c C. indica, EN A1cd+2cd

Biological and trade criteria for inclusion in Appendix II

A) Trade regulation needed to prevent future inclusion in Appendix I

See below. See below.

B) Harvesting for international trade has, or may have, detrimental impact on population (i) exceeds sustainable yield; (ii) reduces population to potentially threatened level

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Supporting Statement (SS)

Narrow-headed turtles are declining in numbers in India and likely to be in decline, severely so in some cases, in the remainder of their range. Available information suggests that continued high levels of use and trade would have a detrimental impact on the size and viability of the populations of both species.

C. chitra is considered to have been seriously impacted by the food and pet trade throughout its range. The species is considered 'uncommon' in Bangladesh where local extinction has occurred, 'seriously threatened' in India, 'rare' in Indonesia, 'common' in Nepal and 'uncommon' to 'rare' in Thailand.

Exports from India, Myanmar and Thailand are prohibited and there is no information available on trade quantities for other range States, though it is likely there is trade in this species from Indonesia and Malaysia amongst the general export of unspecified turtle species. Illegal exports are suspected to occur from all countries.

C. indica has undergone severe declines in Bangladesh and India as a result of trade pressure. Populations may have decreased in Pakistan. Freshwater turtles are not generally consumed in Pakistan, although international trade is likely and may be reducing the populations.

Exports from India and Myanmar are prohibited and there is no information available to assess levels of trade for the remainder of range States. Species are thought to enter international trade from Bangladesh and Pakistan. A proportion of specimens entering trade from Nepal may be illegal. Some illegal trade also occurs from India and substantial numbers are thought to enter trade illegally from Myanmar.

Additional information

C. chitra: van Dijk et al. (2000) regard C. chitra amongst the species of Southeast Asian turtles that have been the most seriously impacted by both the food and pet trade. They are thought to be vulnerable to extinction in the wild in Thailand (Jala, 2002) and the recent discovery of the occurrence of C. chitra in Java (Indonesia) has been offset by intensive exploitation of that population for food and pet trade (Rhodin, 2002).

C. indica: Rhodin (2002) reported this species to be critically endangered in Bangladesh and uncommon (between endangered and vulnerable) in India where it has not been observed for sale since 1986. Alterr and Freyer (2000) state that there is a high level of exploitation for national and international trade of C. indica.

Chitra sp: this species is probably 'critically endangered' in Myanmar (Engstrom et al., 2002).

Chitra spp. are exported to Europe, Japan and the USA from India, Bangladesh and Myanmar (Praschag, 2002).

TRAFFIC East Asia's analysis of US import data show that 106 live wild specimens of C. indica were reported as imports from Pakistan from March 1998 to December 2001 (TRAFFIC East Asia, 2002).

This species is reported to be exported illegally from Myanmar to China and Thailand (CITES Management Authority of Myanmar, 2002, Win Ko Ko, 2002).

A US reptile dealer noted that where C. chitra still occurred in the wild in Indonesia, it was available in large numbers. He also noted that hundreds of juvenile C. indica were routinely offered to him in Pakistan (TRAFFIC North America, 2002).

In a recent survey of pet shops in Japan, one specimen of C. chitra retailing for USD 608 was observed, C. indica retailed at USD 100-3 658 (depending on size) (Kameoka, in prep).

Chitra chitra is sold in food markets in south China (Lau, 2002).

Other information

Threats

The most serious threat to *Chitra* spp. identified in all range States is collection of eggs and adults, mainly for domestic trade; there is also a demand for international food markets and the international pet. Other threats include habitat alteration and destruction and pollution.

Conservation, management and legislation

C. chitra is protected in Indonesia under the name C. indica. National utilisation is permitted in exceptional circumstances. In Malaysia, the situation is unclear and legislation varies between different parts of the country.

For information on recent import restrictions to China, see Conservation, Management And Legislation section of the analysis of Proposal 12.20, to include Platysternon megacephalum in Appendix II.

Supporting Statement (SS)

Additional information

The species is specifically protected from exploitation in **Thailand**.

C. indica is not included in national legislation in **Bangladesh** or **Nepal**. In **India**, a small game hunting licence is required for take, and there is no legal international trade of *C. indica*. There is a federal ban on the export of all wild reptiles including their parts, products and derivatives from **Pakistan**, except for limited numbers of authorised hunting trophies. The commercial trade of tortoises and freshwater turtles, including *Chitra* spp. is illegal in **Myanmar**.

A long-term study of the trends of the Thai population of *C. chitra* are in progress.

Some of the habitat of *C. chitra*, *C. indica* and *Chitra* sp. is conserved as protected areas in all the range States.

Similar Species

The species of the genus *Chitra* are very similar and cannot realistically be identified by non-experts.

Praschag (2002) concurs that the Chitra species are difficult to distinguish from each other and can be confused with Pelochelys (the subject of COP 12 Prop. 32).

Captive Breeding

The Turtle Survival Alliance considers *C. chitra* a prime candidate for establishment of assurance colonies in Europe and North America.

In India, there is a captive rearing and reintroduction program at Varanasai along the Ganga. Captive breeding projects exist for *C. chitra* in Thailand but these have not been successful.

Several breeding centres in India tried to keep C. indica though efforts were unsuccessful (Praschag, 2002).

Recently, the Department of Fisheries of Thailand has successfully bred C. chitra in captivity (Jala, 2002).

Other comments

Indonesia strongly supports this proposal for its native species *C. chitra*. Nepal supports the listing of *C. indica*.

The consensus recommendation of the Technical Workshop on Trade in Freshwater Turtles and Tortoises in Asia, held in Kunming, China from March 25-28, 2002, is that the genus *Chitra* is among the 11 highest-priority taxa for an Appendix II CITES listing at CoP 12.

Rhodin (2002) notes that the population C. chitra of Java, Indonesia may not be identical taxonomically to the Thai species and Engstromet al. (2002) suggest that more information is needed to assess this situation.

Reviewers: R. Jala, P. Praschag, TRAFFIC East Asia, TRAFFIC East Asia – Japan, TRAFFIC North America, TRAFFIC Southeast Asia.

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