

**Inclusion of Indian Roofed Turtles genus *Kachuga* spp. in Appendix II. Proponent: India and United States of America.**

**Summary:** There are seven species of Indian Roofed Turtles in the genus *Kachuga*. They are small to large species that occur variously in Bangladesh, India, Myanmar, Nepal, and Pakistan. Reproductive rates differ between the species with clutch sizes ranging from three to 35 eggs and at least one taxon is known to produce two clutches a year. All species in the genus are reported to be declining, some rapidly so. Five species are classified as threatened to various degrees by IUCN and one as Least concern, near threatened. All are largely aquatic, occurring in a range of inland water habitats, and at least some are believed to be affected by habitat degradation and loss. Although specific data are not available to assess the quantity of trade in these species, national and international trade for eggs, meat and shells are assumed to affect all species. Indian Roofed Turtles have been observed on sale in food markets in mainland China, Hong Kong SAR and Taiwan POC. There is a relatively small market for the pet trade in the USA, Europe and Japan. Reported reduced availability in domestic markets may indicate population declines. These turtles are largely unprotected throughout their range with the exception of *K. kachuga* and *K. sylhetensis*, which are totally protected in India; some species are afforded protection in Myanmar and Nepal. *K. tecta* has been listed in Appendix I since 1975. The proponents seek inclusion of *K. dhongoka*, *K. kachuga*, *K. sylhetensis* and *K. trivittata* in Appendix II in accordance with Article II, Resolution Conf. 9.24, Annex 2a 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 near future, and that harvesting of specimens from the wild will exceed, over an extended period, the level that can be continued in perpetuity. *K. smithii* and *K. tentoria* are proposed for inclusion in Appendix II, Annex 2b criteria B for reasons of similarity of appearance to bring trade in the first four species under control.

**Analysis** Following Resolution Conf. 9.24, available information suggests that *K. dhongoka*, *K. kachuga*, *K. sylhetensis*, and *K. trivittata* meet the criteria for inclusion in Appendix II (Bi). They are currently regarded as threatened with extinction and although data on international trade in these species are limited. There is clearly international demand, and much trade probably goes unrecorded, being either illegal or reported as unspecified turtle species. The relative importance of international trade compared with local use and other threats is unclear; however, it is likely by inference from other Asian turtle species that it has a significant impact on populations. These species are therefore likely to meet the criteria for inclusion in Appendix II on the basis of Resolution Conf. 9.24 Annex 2a, criterion A. Distinguishing between different *Kachuga* species is problematic so that the other two species (*K. smithii* and *K. tentoria*) would appear to qualify for inclusion for lookalike reasons under Annex 2b.

Supporting Statement (SS)	Additional information
<u><b>Taxonomy</b></u>	
<p>The genus <i>Kachuga</i> has been divided into two subgenera, with <i>Pangshura</i> containing the small and medium-sized species. Recent publications discuss the possibility of <i>Pangshura</i> being a separate genus.</p>	
<u><b>Range</b></u>	
<p><i>K. dhongoka</i>: Bangladesh, India, Myanmar (?), Nepal.  <i>K. kachuga</i>: Bangladesh, India, Myanmar (?), Nepal.  <i>K. smithii</i>: Bangladesh, India, Nepal, Pakistan.  <i>K. sylhetensis</i>: Bangladesh, India.  <i>K. tentoria</i>: Bangladesh, India, Nepal.  <i>K. trivittata</i>: Myanmar.</p>	<p><i>To date neither K. dhongoka nor K. kachuga have been recorded in field surveys in Myanmar (Win Ko Ko, 2002).</i></p>
<u><b>IUCN Global Category</b></u>	
<p><i>K. dhongoka</i>: EN A1cd +2cd  <i>K. kachuga</i>: CR A1cd  <i>K. smithii</i>: LR/nt  <i>K. sylhetensis</i>: EN B1 +2c  <i>K. trivittata</i>: EN A1c  <i>K. tentoria</i>: LR/least concern</p>	

Supporting Statement (SS)	Additional information
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**Biological and trade criteria for inclusion in Appendix II**

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

*K. kachuga*, with an estimated population of less than 1 000, currently meets criteria Ai and Av for inclusion in Appendix I.

*K. sylhetensis* may already meet criteria Bi, iii and iv for inclusion in Appendix I.

*K. dhongoka* is likely to meet criterion Ai for inclusion in Appendix I.

*K. trivittata* has not been observed in the wild since 1935 and may be extinct.

*Das (1997) considered K. kachuga and K. sylhetensis to be among the ten most-threatened chelonians of the Asian region.*

**B) Harvesting for international trade has, or may have, detrimental impact on population**

**(i) exceeds sustainable yield; (ii) reduces population to potentially threatened level**

Few population estimates exist for these species, but populations are reported to be in decline, with most species recorded as rare or extremely rare in the countries in their range.

There are no specific data available to assess the numbers of *Kachuga* spp. in international trade. *K. dhongoka*, *K. kachuga* and *K. trivittata* are particularly attractive for the food market because of their large size, although export numbers are likely to be low because of their rarity. *Kachuga* spp. of indeterminate origin have been observed on sale at food markets in Hong Kong SAR and Taiwan POC. Between 1994 and 1996, Taiwan POC reported imports of 9 410 kg of hard shelled turtles from Bangladesh. There may be a demand for *K. sylhetensis* from the western pet trade and for *K. trivittata* for the plastron trade. There are no legal exports of *Kachuga* spp. from India. Myanmar exports chelonians to China, and increasing numbers of turtles are transported from and through Nepal, *Kachuga* spp. are thought to be included in these unselective trades.

*All species of the genus Kachuga are reported to be decreasing in numbers not only in India but also in Nepal and Bangladesh (Ernst et al., 1997 and Sarker and Hossain, 1997 cited in Altherr and Freyer, 2000)*

*According to fishermen, populations of Kachuga spp. are rapidly decreasing (sensu Moll 1997 cited in Praschag, 2002). Those in the sub-genus Pangshura are easily captured when nesting in October (Praschag, 2002).*

*Meier (2000) noticed Kachuga species offered for sale in Qing Ping market, Guangzhou, China, indicating that trade extends to mainland China.*

*K. smithii and K. dhongoka are commercially available in Japan (Kameoka, in prep) and there is limited trade in Kachuga species to the USA, presumably for the pet trade. Trade data indicate some 230 live specimens exported from Pakistan to the USA between 1998 and 2001. Kachuga smithii is offered for sale on the web at relatively high prices (USD 50-200) (TRAFFIC North America, 2002).*

*Recent reports of K. trivittata, including three living animals at a Buddhist pagoda sanctuary on the upper Chindwin River in July 2002 and a newly butchered shell found during a survey a few years ago in addition to a specimen apparently recently confiscated in Hong Kong SAR, indicates that the species still survives, though almost certainly in critically low numbers (TRAFFIC Southeast Asia, 2002; Win Ko Ko, 2002).*

*Shipments of shells of the Appendix-I listed Kachuga tecta have been intercepted in Canada in recent years, believed to have been exported from China (Graham, 2002); it is likely that other Kachuga species are included in general shipments of turtle shells and products containing turtle shell (TRAFFIC North America, 2002).*

Supporting Statement (SS)	Additional information
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**Inclusion in Appendix II to improve control of other listed species**

**Specimens resemble other species and are difficult to distinguish, or most of taxon is already listed**

*Environment Canada (Wildlife Enforcement) reports that turtle plastrons are often imported into Canada, but authorities have difficulty providing identification of most (Graham, 2002).*

*Several Kachuga species may be difficult to distinguish from Callagur borneoensis (Appendix II) and Batagur baska (Appendix I) (Praschag, 2002).*

**Other information**

**Threats**

Habitat loss is thought to affect all species to some extent.

*K. dhongoka* and *K. kachuga* are thought to be consumed nationally in Bangladesh, India, Nepal and Myanmar as part of the general use of native turtles for food. Their presence in the domestic trade in India has declined from 1983 when they were observed for sale in several markets, to 1993 since when neither species has been observed in markets.

**Conservation, management and legislation**

The genus remains largely unprotected throughout its range with the exception of *K. kachuga* and *K. sylhetensis*, which are totally protected in India.

Fisheries and Forestry laws protect chelonians in Myanmar, no permits for collection and commercial purposes are issued.

**India:** *K. tecta*, *K. kachuga* and *K. sylhetensis* are included in Schedule I of The Indian Wildlife (Protection) Act of 1972 as a species which may be hunted only in exceptional circumstances (Choudhury et al., 2000).

**Nepal:** *K. dhongoka*, *K. kachuga* and *K. tecta* are included in the National Parks and Wildlife Conservation Act 2029 and amendment (2039) which provides for prohibition of all forms of hunting and killing except under exceptional conditions (Das, 2001 cited in van Dijk, 2002).

**Pakistan:** there is a federal ban on the export of all wild reptiles, except for limited numbers of authorised hunting trophies (CoP 12 Prop. 31).

**Myanmar:** Legislation to protect chelonians is not effectively enforced (CITES Management Authority of Myanmar, 2002).

*For information on recent import restrictions to China, see Conservation, Management and Legislation section of the analysis of CoP 12 Prop. 20, to include Platysternon megacephalum in Appendix II.*

**Captive Breeding**

Captive specimens are held at the Madras Crocodile Bank, India but captive breeding has not been successful, it being likely that the specimens are hatched from wild collected eggs.

*In 1991 K. dhongoka and K. kachuga were reportedly present in a hatchery in Madhya Pradesh, India, which used eggs collected from captives at Chambal National Park. A small-scale hatchery which included K. smithii reportedly existed in Uttar Pradesh, India in 1995 (Choudhury et al., 2000).*

**Other comments**

The consensus recommendation of the Technical Workshop on Trade in Freshwater Turtles and Tortoises in Asia, Kunming, China, 25-28 March 2002 supported

Supporting Statement (SS)	Additional information
this proposal and the genus was regarded as a high priority for inclusion in CITES Appendix II.	

**Reviewers:** P. Praschag, TRAFFIC Southeast Asia, TRAFFIC North America, Win Ko Ko

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