

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Nineteenth meeting of the Conference of the Parties
Panama City (Republic of Panama), 14 – 25 November 2022

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

The Proponents propose the addition of the Red-crowned Roofed Turtle (*Batagur kachuga*) to CITES Appendix I, in accordance with Article II, paragraph 1, of the Convention. *Batagur kachuga* qualifies for listing on CITES Appendix I because the species faces a high-risk of extinction and is detrimentally affected by extrinsic factors, including habitat loss from pollution and hydrological projects, and overharvest for illegal consumption and the illegal international pet trade. The IUCN classifies *B. kachuga* as Critically Endangered under category and criteria A2cd+4cd (i.e., an observed, estimated, inferred or suspected population size reduction of $\geq 80\%$ over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased or may not be understood or may not be reversible, based on exploitations and/or a decline in habitat.). The species meets the listing criteria for CITES Appendix I because it meets the biological criteria found in Resolution Conf. 9.24 (Rev. CoP17), Annex I, specifically paragraph C(ii):

C: A marked decline in the population size in the wild, which has been:

ii) inferred or projected on the basis of any one of the following:

- a decrease in area of habitat;
- a decrease in quality of habitat;
- levels or patterns of exploitation;
- a high vulnerability to either intrinsic or extrinsic factors; or
- a decreasing recruitment.

B. kachuga is or may be affected by trade because live specimens of the species, particularly males, are recorded to have been found in international trade and recent records show that trade is ongoing (UNEP-WCMC; Praschag *et al.* 2019). Due to the ongoing decline in the species' population and continued threats to the species, both of which are expected to continue into the future, any trade in the species will have a detrimental impact on its status.

B. Proponent

India*

* The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or

C. Supporting statement

1. Taxonomy

1.1 Class: Reptilia

1.2 Order: Testudines

1.3 Family: Geomydidae

1.4 Genus, species or subspecies, including author and year: *Batagur kachuga* (Gray, 1831).

1.5 Scientific synonyms: *Batagur bakeri* (Lydekker 1885); *Batagur ellioti* (Gray 1862); *Emys kachuga* (Gray 1831); *Emys lineata* (Gray 1830); *Emys lineata* (Gray 1831) [nomen oblitum]; *Kachuga fusca* (Gray, 1870); *Kachuga kachuga* (Gray 1831)

1.6 Common names: English: Red-crowned Roofed Turtle

1.7 Code numbers: A-301.007.019.002

2. Overview

Batagur kachuga has a range limited to the Ganga lowlands of northern India and Bangladesh. *B. kachuga* is a large, exploited riverine turtle with selective habitat requirements, slow recruitment (generation time estimated over 25 years) and threatened by exploitation for consumption, international pet trade due to its brilliant coloration, and systemic impacts on its main river habitat, which have been documented to have caused steep population declines (Praschag *et al.* 2019). The species is listed as Critically Endangered under the IUCN Red List (Praschag *et al.* 2019). *Batagur kachuga* meets the listing criteria for CITES Appendix I because it meets the biological criteria found in Resolution Conf. 9.24 (Rev. CoP17), Annex I, specifically paragraph C(ii):

C: A marked decline in the population size in the wild, which has been:

ii) inferred or projected on the basis of any one of the following:

- a decrease in area of habitat;
- a decrease in quality of habitat;
- levels or patterns of exploitation;
- a high vulnerability to either intrinsic or extrinsic factors; or
- a decreasing recruitment.

Tortoises and freshwater turtles are highly affected by overexploitation in India for illegal trade. A study by TRAFFIC based on reported seizures for India calculated that between 2009 and 2019 on average more than 11,000 tortoises and freshwater turtles were poached and illegally traded every year and that species identification was not reported in 51.5% of the cases (Badola *et al.* 2019).

B. kachuga is or may be affected by trade because live specimens of the species are recorded to have been found in international trade and recent records show that trade is ongoing trade (UNEP-WCMC; Praschag *et al.* 2019). Due to the ongoing decline in the species' population and continued threats to

the species, both of which are expected to continue into the future, any trade in the species will have a detrimental impact on its status.

3. Species characteristics

3.1 Distribution

Batagur kachuga has a range limited to the Ganga lowlands of northern India and Bangladesh. (Praschag *et al.* 2019).

3.2 Habitat

Batagur kachuga was known with certainty only from the Ganga basin of India and Bangladesh. This species is now only known with certainty to exist in the National Chambal Sanctuary, with 50 nests over 100 km (Praschag *et al.* 2019). It is likely to be extinct now in Bangladesh (Praschag *et al.* 2019).

3.3 Biological characteristics

Batagur kachuga inhabits large swift-flowing rivers with sandy bottoms (Das 1991; Choudhury *et al.* 2000). The species' basks on sandbanks, rocks, and tree snags (Das 1991). Its recorded food items are leafy vegetables, fruits, and other plant material (Moll 1986; Das 1991). The species has a generation length of 25 years (Praschag *et al.* 2019).

3.4 Morphological characteristics

Batagur kachuga has a depressed carapace, and the keel is more prominent on the second and third vertebral shield of young turtles, though this disappears gradually with age (Das 1991). The neck is pale brown and in males, during breeding season, the head and the neck develop brilliant colorations of red, yellow, blue and white and 6 stripes of bright red color on the top of the head (Das 1991). Limbs have narrow, transversely-enlarged yellow-brown scales and digits are fully and broadly webbed (Das 1991). The carapace is olive and the plastron is yellow in color (Das 1991). Males are almost half the size of females (Das 1991).

3.5 Role of the species in its ecosystem

The role of the species in its ecosystem is unknown.

4. Status and trends

4.1 Habitat trends

Available habitat for *Batagur kachuga* is decreasing. As a main river turtle, the species is highly susceptible to major hydrological projects and their impacts on river flow dynamics, nesting beaches, and water pollution (Das 1991, 1997; Choudhury *et al.* 2000). It is very shy and human activities on and along the river are disturbing its populations, with impact on thermal biology and fitness. Entanglement in fishing nets has a significant impact on subpopulations (Praschag *et al.* 2019).

4.2 Population size

In the past 12-13 years, no reliable records of *Batagur kachuga* are known except from the Chambal River (Praschag *et al.* 2019). Its range has shrunk from most of Ganga to just the Chambal; at Chambal the population of adult breeding females is estimated to be about 500. The status of the species in Bangladesh was unclear, based on very few records (Rashid and Khan 2000), and was considered extinct by 2010 (Praschag *et al.* 2019).

4.3 Population structure

The population structure of the species is unknown.

4.4 Population trends

The population continues a large-scale decline, caused by illegal trading for consumption locally and internationally (Praschag *et al.* 2019). Despite a lack of quantitative data, an inferred population reduction of at least 80% in the past 50 years, and ongoing, is realistic (Praschag *et al.* 2019).

4.5 Geographic trends

The species is endemic to India and Bangladesh, but is considered to be extinct now in Bangladesh (Praschag *et al.* 2019). The species habitat is being lost due to pollution and hydrological projects so the geographic range is shrinking (Praschag *et al.* 2019).

5. Threats

The species has been legally protected from hunting and trade in India since 1986. However, illegal offtake and trade of the species has continued. The species has been recorded as consumed as food (Das 1991), and was exploited commercially for the East Asian export trade (Praschag *et al.* 2019). In 2017, 23 male *B. kachuga* were confiscated in Agra (Uttar Pradesh); at least five animals were confiscated in Hong Kong; and several were recorded in the Chinese pet trade (Praschag *et al.* 2019). The males have bright coloration (Praschag *et al.* 2019) and are hence preferred specimens by pet traders.

As a main river turtle, the species is highly susceptible to major hydrological projects and their impacts on river flow dynamics and nesting beaches, and water pollution (Das 1991, 1997; Choudhury *et al.* 2000). It is very shy and human activities on and along the river are disturbing its populations, with impact on thermal biology and fitness. Entanglement in fishing nets has a significant impact on subpopulations (Praschag *et al.* 2019).

6. Utilization and trade

6.1 National utilization

B. kachuga is illegally collected for the pet trade and consumption (Praschag *et al.* 2019).

6.2 Legal trade

In India, *B. kachuga* is provided the highest legal protection available through listing on Schedule I of the Wild Life (Protection) Act of 1972. It has been listed on Schedule I since 1986. Hunting and collection of the species is prohibited (Section 9 of the Act), and all commercial trade of the species and its derivatives is prohibited (Sections 40 and Chapter VI-A of the Act). First offences with respect to the species are punishable with imprisonment between 3-7 years and a fine of not less than INR 10,000 (~125 USD).

The CITES Trade Database shows some trade in the species since 2000, including the import of live captive-bred turtles for commercial trade purposes in 2005 and 2006 (6 and 8 turtles, respectively) into Japan from Lebanon, which reportedly originated in Kazakhstan (UNEP-WCMC). More recently, in 2012 one live turtle (from an unknown source) was reportedly exported from Singapore to Austria for a zoo, and in 2018, 2 live turtles were reportedly exported from

Hong Kong to the United States (sourced from confiscated or seized specimens) for educational purposes (UNEP-WCMC).

6.3 Parts and derivatives in trade

B. kachuga is poached for the reptilian pet trade and for consumption (Praschag *et al.* 2019).

6.4 Illegal trade

All commercial trade from India is illegal under Schedule I of the Indian Wildlife (Protection) Act of 1972, so all trade is likely to be illegal. There is a prevalent illegal trade market for *B. kachuga*: in 2017, 23 male *B. kachuga* were confiscated in Agra (Uttar Pradesh); at least five animals were confiscated in Hong Kong; and several were recorded in the Chinese pet trade (Praschag *et al.* 2019).

Tortoises and freshwater turtles, including *Batagur kachuga*, are highly affected by overexploitation in India for illegal trade. Rashid & Khan (2000) and Thorbjarnarson *et al.* (2000) documented that in recent past, the major importers of *Kachuga* spp. (= *Batagur* spp. + *Pangshura* spp.) were countries in Southeast and East Asia, such as China, Thailand, Korea, Hong Kong, Singapore, Japan and Malaysia and lower numbers of specimens were sent to pet markets in Germany, Italy, the UK and the USA. Bangladesh was the center of turtle trade within and from South Asia (Bhupathy *et al.* 2000) and Rashid & Khan (2000) had also warned that the *Kachuga* spp. of Bangladesh, including *Batagur kachuga* were exploited for local and international trade, resulting in decline of the species in the wild. In India, although many of the turtle species are legally protected, chelonians are heavily exploited for national and international commercial trade (see Choudhury & Bhupathy 1993; Whitaker 1997; McDougal 2000; Badola *et al.* 2019). Confiscations in India suggest that there are turtle trade routes to / from Bangladesh, Myanmar, Singapore and China (Compton 2000). A 2019 study by TRAFFIC based on reported seizures for India calculated that between 2009 and 2019 on average more than 11,000 tortoises and freshwater turtles were poached and illegally traded every year and that species identification was not reported in 51.5% of the cases (Badola *et al.* 2019).

6.5 Actual or potential trade impacts

B. kachuga's population suffers from its limited habitat which is shrinking further. In the IUCN Red List Assessment Singapore, 2011, it was recorded that this species is considered extinct by 2010 in Bangladesh (Praschag *et al.*, 2019). The species' survival is dependent upon decreasing the demand from trade, given the impacts of hydrological projects and fishing bycatch (Praschag *et al.* 2019). Live specimens of the species are recorded to have been found in international trade and recent records show that trade is ongoing trade (UNEP-WCMC; Praschag *et al.* 2019). Due to the ongoing decline in the species' population and continued threats to the species, both of which are expected to continue into the future, any trade in the species will have a detrimental impact on its status.

7. Legal instruments

7.1 National

In India, *B. kachuga* is provided the highest legal protection available through listing on Schedule I of the Wild Life (Protection) Act of 1972. It has been listed on Schedule I since 1986. Hunting and collection of the species is prohibited (Section 9 of the Act), and all commercial trade of the species and its derivatives is prohibited (Sections 40 and Chapter VI-A of the Act). First offences with respect to the species are punishable with imprisonment between 3-7 years and a fine of not less than INR 10,000 (~125 USD). *Batagur kachuga* has been recorded from the National

Chambal Sanctuary (Madhya Pradesh and Rajasthan) in India (Hanfee 1999). *Batagur kachuga* is part of the river turtle head-starting program in northern India (Choudhury *et al.* 2000).

7.2 International

Batagur kachuga is included in CITES Appendix II, allowing international commercial trade in the species provided such trade is not detrimental to the species. The species was listed on Schedule I of the Wild Life (Protection) Act in 1986. Since at least 1999, India has banned the export for commercial purposes of wild-taken specimens of *B. kachuga*. (CITES Notif. No. 1999/39; CITES Notif. No. 2018/031; UNEP, 2021).

8. Species management

8.1 Management measures

In India, part of the distribution of *Batagur kachuga* lies within protected areas including the National Chambal Sanctuary. Since it is listed on Schedule I of the Wild Life (Protection) Act, 1972, hunting and collection of the species is prohibited (Section 9 of the Act), and all commercial trade of the species and its derivatives are prohibited (Sections 40 and Chapter VI-A of the Act).

8.2 Population monitoring

The IUCN states that ensuring the occurrence of viable subpopulations inside effectively protected areas is a prime conservation priority. Status surveys across its range were considered urgently needed, as were monitoring of key subpopulations and studies of natural history, trade monitoring and enforcement actions, and engaging communities to minimize exploitation and bycatch is essential (Praschag *et al.* 2019). Monitoring of the population in the National Chambal Sanctuary is being undertaken (Shailendra Singh, Turtle Survival Network, *pers. comm.* 27 May 2022).

8.3 Control measures

8.3.1 International

Batagur kachuga is included in CITES Appendix II, which allows for international commercial trade in the species provided such trade is not detrimental to the species. Since at least 1999, India has banned the export for commercial purposes of wild-taken specimens of *B. kachuga* (CITES Notif. No. 1999/39; CITES Notif. No. 2018/031).

8.3.2 Domestic

In India, part of the distribution of *Batagur kachuga* lies within protected areas including the National Chambal Sanctuary. Since it is listed on Schedule I of the Wild Life (Protection) Act, 1972, hunting and collection of the species is prohibited (Section 9 of the Act), and all commercial trade of the species and its derivatives are prohibited (Sections 40 and Chapter VI-A of the Act).

8.4 Captive breeding and artificial propagation

The CITES Trade Database shows some trade in the species since 2000, including the import of live captive-bred turtles for commercial trade purposes in 2005 and 2006 (6 and 8 turtles, respectively) into Japan from Lebanon, which reportedly originated in Kazakhstan (UNEP-WCMC).

8.5 Habitat conservation

In India, part of the distribution of *Batagur kachuga* lies within protected areas including the National Chambal Sanctuary. The IUCN recommends identifying and establishing habitat conservation sites for *B. kachuga* (Praschag *et al.* 2019).

8.6 Safeguards

Not applicable

9. Information on similar species

The juveniles of different species within this genus are difficult to distinguish because many species have a prominent keel and a head pattern with pale stripes (Schmidt 2005). However, juveniles of *Batagur kachuga* are distinguishable due to the backward projections of the vertebral keel on the second and third vertebral scute (Schmidt 2005). *B. kachuga* is distinguishable from the other species with this characteristic, *B. dhongoka*, because of its lack of three dark stripes on its carapace, its straight posterior border of the second vertebral scute, and the humero-pectoral seam joining the middle plastral seam in an obtuse angle (Schmidt 2005). *B. kachuga* is distinguishable from *B. baska* because *B. baska* has four claws instead of five on its forefeet (Schmidt 2005).

10. Consultations

A consultation letter, along with a draft of the present proposal was sent to Bangladesh on 8 June 2022, requesting comments by 14 June 2022. No response was received.

11. References

Badola, S., Choudhary, A.N. and Chhabra, D.B. 2019. Tortoises and Freshwater Turtles in illegal trade in India (2019). TRAFFIC Study.

Bhupathy, S., Choudhury, B.C. Hanfee, F., Kalyar, Khan, S.M., Platt, S.G. & Rashid, S.M.A. 2000: "Turtle trade in South Asia: Regional summary (Bangladesh, India, and Myanmar)", In: "Asian Turtle Trade – Proceedings of a workshop on conservation and trade of freshwater turtles and tortoises in Asia", Phnom Penh, Cambodia, 1st to 4th December 1999, van Dijk, P.P.; Stuart, B., L.; and Rhodin, A. G.J. (eds.): 101-105.

Choudhury B.C. and Bhupathy, S. 1993. Turtle Trade in India. A Study of Tortoises and Freshwater Turtles. WWF-India (TRAFFIC-India), New Delhi.

Choudhury B.C., Bhupathy, S. and Hanfee, F. 2000. Status information on the tortoises and freshwater turtles of India. In: P.P. van Dijk, B.L. Stuart and A.G.J. Rhodin (eds), Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia. In: P.P. van Dijk, B.L. Stuart and A.G.J. Rhodin (eds), Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia. Chelonian Research Monographs No. 2, pp. 86–94. Chelonian Research Foundation, Lunenburg, MA, USA.

Compton, J. 2000: "An overview of Asian turtle trade", In: "Asian Turtle Trade – Proceedings of a workshop on conservation and trade of freshwater turtles and tortoises in Asia", Phnom Penh, Cambodia, 1st to 4th December 1999, van Dijk, P.P.; Stuart, B., L.; and Rhodin, A. G.J. (eds.): 24-29.

Das, I. 1991. Colour Guide to The Turtles and Tortoises of the Indian Subcontinent. R&A Publishing Ltd, Postishead, U.K.

Hanfee, F. 1999. A WWF India Field Guide to Freshwater Turtles and Tortoises of India. TRAFFIC India/WWF India, New Delhi.

McDougal, J. 2000 "Conservation of tortoises and terrestrial turtles", In: Turtle Conservation, M. Klemens (ed.), Smithsonian Inst. Press, Washington: 180-206.

Moll, E.O. 1986. Survey of the freshwater turtles of India. Part I. The genus *Kachuga*. Journal of the Bombay Natural History Society 83: 538-552.

Praschag, P., Ahmed, M.F., Das, I. & Singh, S. 2019. *Batagur kachuga* (errata version published in 2019). The IUCN Red List of Threatened Species 2019: e.T10949A152043133. <http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T10949A152043133.en>

Rao, R.J. and Singh, L.A.K. 1987. *Kachuga* (Reptilia, Emydidae) in National Chambal Sanctuary: Observations on diurnal nesting emergences and unsuccessful nesting crawl. Journal of the Bombay Natural History Society 84(3): 688-691.

Rashid, S.M.A., and Khan, S.M.M.H. 2000. Trade and Conservation Status of Freshwater Turtles and Tortoises in Bangladesh. In: P.P. van Dijk, B.L. Stuart and A.G.J. Rhodin (eds), Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia. Chelonian Research Monographs No. 2, pp. 77-85. Chelonian Research Foundation, Lunenburg, MA, USA.

Schmidt. 2005. *Kachuga kachuga*. Viewed 27 May, 2022
<https://www.speciesplus.net/api/v1/documents/13258>

Thorbjarnarson, J., Lagueux, C., Bolze, D., Klemens, M., & Meylan, A. 2000: "Human use of turtles – a worldwide perspective", In: Turtle Conservation, M. Klemens (ed.), Smithsonian Inst. Press, Washington: 33-84.

UNEP, 2021. The Species+ Website. Nairobi, Kenya. Compiled by UNEP-WCMC, Cambridge, UK. Available at: www.speciesplus.net. [Accessed 27 April 2022].

UNEP-WCMC, CITES Trade Database. Available at https://trade.cites.org/en/cites_trade/#. [Accessed 27 April 2022].

Whitaker, R. 1997: "Turtle rearing in village ponds", In: "Proceedings: Conservation, restoration, and management of tortoises and turtles – An international conference": 106-108