

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Inclusion of all species of the Genus *Pelochelys* spp. in Appendix II of CITES.

Pelochelys cantorii qualifies for listing in Appendix II in accordance with Article II 2(a) of the Convention, and satisfies Resolution Conf. 9.24, Annex 2a, Criteria A and B).

Pelochelys bibroni qualifies for listing in Appendix II in accordance with Article II, paragraph 2(b) of the Convention, and satisfies Resolution Conf. 9.24, Annex 2b, Criterion A.

B. Proponent

People's Republic of China and United States of America, in accordance with the consensus recommendation of the CITES-sponsored Technical Workshop on Conservation of and Trade in Freshwater Turtles and Tortoises in Asia, held in Kunming, China in March 2002.

C. Supporting statement1. Taxonomy

- 1.1 Class: Reptilia
- 1.2 Order: Testudines
- 1.3 Family: Trionychidae
- 1.4 Species: a) *Pelochelys bibroni* Owen, 1853
b) *Pelochelys cantorii* (Gray, 1864)
- 1.5 Scientific synonyms: a) None
b) [= *Trionyx (Gymnopus) Bibroni* Owen (1853)], by subsequent designation of Gunther (1864).
(Previously considered synonym of *Pelochelys bibroni*)
- 1.6 Common names: English: a) New Guinea giant softshell turtle
b) Asian giant softshell turtle
Cantor's giant softshell
Frog-faced giant softshell turtle
French:
Spanish:
- 1.7 Code numbers:

2. Biological parameters

Pelochelys are giant softshell turtles.

2.1 Distribution

Pelochelys bibroni is found in Indonesia and Papua New Guinea. Indonesia: This species is found on South Irian Jaya (Samedi and Iskandar, 2000). Papua New Guinea: *P. bibroni* extends across the southern lowlands of New Guinea, from the Port Moresby region in the east to the southern

lowlands of Irian Jaya, where its western extent is not well documented, but reaches at least as far as Timika region (Rhodin and Genorupa, 2000).

Pelochelys cantorii is found in Bangladesh, China, Indonesia, India, Cambodia, Lao PDR, Myanmar, Philippines, Papua New Guinea, Thailand, and Viet Nam. Bangladesh: The Asian giant softshell turtle is restricted to the estuaries and mouths of the large rivers in the southern portion of Bangladesh such as the Lower Meghna estuary (Rashid and Khan, 2000). Cambodia: There is no specific information on the distribution of *P. cantorii* in Cambodia. China: *P. cantorii* is found in Yunnan, Jiangsu, Zhejiang, Fujian, Guangdong, Hainan, and Guangxi provinces in central and south China (Lau and Shi, 2000). Indonesia: This species is found on Sumatra, Borneo, Possibly Sulawesi and, Irian Jaya (Samedi and Iskandar, 2000). India: Most reports of *P. cantorii* are from the Orissa coast (Choudry et al., 2000). Lao PDR: Data was not available on the distribution of *P. cantorii* in Lao PDR. Myanmar: There is no specific information on the distribution of *P. cantorii* in Myanmar. Philippines: Data were not available on the distribution of *P. cantorii* in the Philippines. Papua New Guinea: The distribution of *P. cantorii* in Papua New Guinea includes the northern lowlands as far east as Madang, including the Sepik and Ramu drainages and in the west into the northern lowlands of Irian Jaya including the Jayapura region, the Mamberano drainage, and the Nabire region on the southern shore of Cenderawasih Bay (Rhodin and Genorupa, 2000). Thailand: At present, *P. cantorii* is restricted to the rivers of the peninsular region and occurrence in the Thai part of the Mekong is unconfirmed (van Dijk and Palasuwan, 2000). Viet Nam: The Asian giant softshell turtle is found in lowland rivers, estuaries, and coastal areas of southern Viet Nam (Hendrie, 2000).

2.2 Habitat availability

Pelochelys bibroni: Indonesia: No information was available on habitat availability for *P. bibroni* in Indonesia. Papua New Guinea: There is no specific information on habitat availability for *P. bibroni* in Papua New Guinea.

Pelochelys cantorii: Bangladesh: There is no specific information on habitat availability for *P. cantorii* in Bangladesh. Cambodia: This species is found in large lowland rivers in Cambodia. China: The Asian giant softshell turtle lives in rivers, lakes and reservoirs where suitable habitat still exists in China (Lau and Shi, 2000). Indonesia: No information was available on habitat available for *P. cantorii* in Indonesia. India: *P. cantorii* was known from the mangrove creeks of the Sunderbans and Bhitarkanika until the early 1990s (Choudhury et al., 2000). Lao PDR: This species is found in large river lowland habitat in Lao PDR (Stuart and Timmins, 2000). Myanmar: There is no specific information on habitat availability for *P. cantorii* in Myanmar. Philippines: There is no information on habitat availability for *P. cantorii* in the Philippines. Papua New Guinea: There is no specific information on habitat availability for *P. cantorii* in Papua New Guinea. Thailand: Habitat availability is limited in Thailand and most areas of known or suspected occurrence are intensely used by humans (van Dijk and Palasuwan, 2000). Viet Nam: Habitat availability for this species is unknown although availability of nesting sites is presumed to be a factor that affects the potential survivorship of wild populations in areas of heavy human influence (Hendrie, 2000).

2.3 Population status

Pelochelys bibroni: Indonesia: This species is considered uncommon in Indonesia (Samedi and Iskandar, 2000). Papua New Guinea: *P. bibroni* is considered uncommon in Papua New Guinea (Rhodin and Genorupa, 2000).

Pelochelys cantorii: Bangladesh: *P. cantorii* is considered uncommon in Bangladesh (Rashid and Khan, 2000). Cambodia: Cambodia is suspected to have a good population which might be the most important one in the region (Tana et al., 2000). China: *P. cantorii* is considered 'Extinct in the wild' in China (Zhao, 1998 as cited in Lau and Shi, 2000). Indonesia: This species is considered rare in Indonesia (Samedi and Iskandar, 2000). India: *P. cantorii* has been virtually eliminated from India due to exploitation (Choudry and Bhupathy, 1993 as cited in Choudry et al., 2000). The

CAMP/BCPP evaluations considered the species Lower Risk, near threatened in India (Rhodin, 2002). Lao PDR: This species is Critically Endangered in Lao PDR (Rhodin, 2002); only a few records exist in the country for this species and it is presumed to be relatively rare (Stuart and Timmins, 2000). Myanmar: There is no specific information on the status of *P. cantorii* in Myanmar. Philippines: There was no information on population status of *P. cantorii* in the Philippines. Papua New Guinea: The species appears to be scarce throughout its range (Rhodin and Genorupa, 2000). Thailand: *P. cantorii* is considered scarce and depleted in Thailand and is locally extinct from Chao Phraya and Mae Klong systems and most likely from other minor river basins (van Dijk and Palasuwan, 2000). Rhodin (2002) considers this species Critically Endangered or Endangered in Thailand. Viet Nam: Rhodin (2002) indicates that the Asian giant softshell turtle is critically endangered in Viet Nam while Tana et al. (2000) feel that the Viet Nam population of this species is probably extinct.

2.4 Population trends

Pelochelys bibroni: Indonesia: There is little scientific information on the population trends of freshwater turtles in Indonesia (Samedi and Iskandar, 2000). Papua New Guinea: No information on population trends of *P. bibroni* was available for Papua New Guinea.

Pelochelys cantorii: Bangladesh: *P. cantorii* is presumably more common than previously thought (Rashid and Khan, 2000). Cambodia: There was no information on the population trends of *P. cantorii* in Cambodia. China: Zhao (1998) feels that both the population and range of this species in China have been significantly reduced and the Zhejiang population is close to extinction (Lau and Shi, 2000). Indonesia: See discussion in *P. bibroni*. India: *P. cantorii* is severely declining in India (Choudry et al., 2000). Lao PDR: No information on population trends of *P. cantorii* was available for Lao PDR. Myanmar: Historical information suggests that turtles were at one time widespread and relatively common but all currently available evidence indicates that populations are now severely depleted and some species may be on the verge of extirpation (Platt et al., 2000). Philippines: There was no information on the population trends of *P. cantorii* in the Philippines. Papua New Guinea: No information on population trends of *P. cantorii* were available for Papua New Guinea. Thailand: van Dijk and Palasuwan (2000) consider the population trend for *P. cantorii* to be in decline, possibly strongly. Viet Nam: Population trends of *P. cantorii* are unknown although as with other species in Viet Nam, natural populations are unlikely to sustain present levels of hunting (Hendrie, 2000).

2.5 Geographic trends

Pelochelys bibroni: No specific geographic trends for this species were available.

Pelochelys cantorii: The extralimital range of this species includes Myanmar, Thailand, Malaysia, Indonesia, China, the Philippines, Viet Nam and New Guinea (Das, 1991).

2.6 Role of the species in its ecosystem

P. bibroni eats fish, shrimp, crabs, mollusks, and some aquatic plants (Wirot, 1979 as cited in Ernst and Barbour, 1989). This species has an unusually small head and has a habit of burying its body in the sand with only his head out suggesting that it is an ambush feeder (Das, 1991).

2.7 Threats

Pelochelys bibroni: Indonesia: The most significant threat to freshwater turtles in Indonesia is hunting for trade followed by habitat destruction caused by deforestation and conversion into agriculture, settlements, transmigration areas, logging, and forest fires (Samedi and Iskandar, 2000). Papua New Guinea: Trade threats to this species are the regional food markets (Rhodin and Genorupa, 2000).

Pelochelys cantorii: Bangladesh: This species is found in all markets in the coastal areas of Bangladesh (Rhodin, 2002) and during a survey in 1989 at least 30 specimens were seen in two weeks in various local markets (Rashid and Khan, 2000). From this type of information it can be surmised that trade is a threat to *P. cantorii* in Bangladesh. Cambodia: This species is Critically Endangered in Cambodia due to direct exploitation and habitat loss (Rhodin, 2002). China: The main threats to this species are over-collecting for the food trade, habitat destruction or degradation from the construction of small hydro-electric plants, water pollution, and the liming of streams (Lau and Shi, 2000). Indonesia: See discussion in *P. bibroni*. India: Threats to *P. cantorii* are mainly exploitation for the local flesh trade and possibly nest poaching (Choudry et al., 2000). Lao PDR: All species of turtles in Lao PDR are threatened by varying levels of hunting for local subsistence, domestic consumption, and especially for international trade to Viet Nam and China (Stuart and Timmons, 2000). Malaysia: *P. cantorii* is threatened by international trade; between January and October 1999, 4,3000 individuals were exported from Peninsular Malaysia (Sharma and Tisen, 2000). Myanmar: It is likely that all species of turtles occurring in Myanmar are exploited for either food or local and export markets (Platt et al., 2000). Philippines: There was no information on the threats to *P. cantorii* in the Philippines. Papua New Guinea: Threats to this species include use in curio masks for export and regional food markets (Rhodin and Genorupa, 2000). Thailand: Threats to *P. cantorii* are from subsistence hunting, collection for the pet trade, and habitat degradation (van Dijk and Palasuwan, 2000). Viet Nam: Threats to the Asian giant softshell turtle in Viet Nam include hunting for local and domestic consumption, the wildlife trade, and habitat loss (Hendrie, 2000).

3. Utilization and trade

3.1 National utilization

Pelochelys bibroni: Indonesia: In general, there is little documented information on the domestic use of freshwater turtles and tortoises in Indonesia although it is believed that domestic use is much lower than the number of animals exported (Samedi and Iskandar, 2000). Papua New Guinea: This species is prized for its egg and meat and is consumed locally or sold in local or regional food markets (Rhodin and Genorupa, 2000).

Pelochelys cantorii: Bangladesh: The meat of *P. cantorii* is highly prized by consumers (Rashid and Khan, 2000). This species is usually caught on line hooks by local collectors (Rashid and Khan, 2000). The meat is sold in local markets and not brought to export centers because its large size causes problems in transportation (Rashid and Khan, 2000). Cambodia: Local subsistence use of turtles is widespread in Cambodia, and probably not species-specific (Tana et al., 2000). Harvested turtles that are not sold because of lack of demand from traders, are probably consumed by the hunters (Tana et al., 2000). There is also domestic trade in turtles, which are used for meat, eggs, Khmer and Chinese medicine, decoration, pets, and Buddhist release (Tana et al., 2000). China: All Chinese turtle and tortoise species are exploited in China whenever they are found (Lau and Shi, 2000). They are rarely utilized by villagers for subsistence consumption but are usually sold directly to urban restaurants or to food markets in the cities due to the high market value live turtles command (Lau and Shi, 2000). Indonesia: See discussion in *P. bibroni*. India: Large numbers of *P. cantorii* are killed for consumption in northern Orissa (Das, 1991). Lao PDR: Local subsistence use of wild-collected turtles is not species-specific and is widespread throughout Lao PDR (Stuart and Timmons, 2000). Myanmar: Incidental observations at turtle traders (Platt et al., 2000, 2001 as cited in van Dijk, 2002) within Myanmar indicate that turtle collection is widespread and intensive throughout the country (van Dijk, 2002). Some level of subsistence consumption presumably occurs, but no details have been reported (Platt et al., 2000). Philippines: There was no information on the national utilization of *P. cantorii* in the Philippines. Papua New Guinea: There is significant local consumption of *P. cantorii* in Papua New Guinea and local market trade for food and eggs (Rhodin and Genorupa, 2000). The carapace is also used to produce ornamental curio turtle masks which are primarily manufactured in the Sepik region (Rhodin and Genorupa, 2000). Thailand: There is some subsistence hunting in areas where *P. cantorii* still occurs and some animals are traded as

pets (van Dijk and Palasuwan, 2000). Viet Nam: In Viet Nam, softshell turtles are on the menu in many restaurants (Hendrie, 2000).

3.2 Legal international trade

Pelochelys bibroni: Indonesia: We are unaware of known international trade of this species from South Irian Jaya. Papua New Guinea: There is no known international trade of *P. bibroni* (Rhodin and Genorupa, 2000).

Pelochelys cantorii: Bangladesh: The center of the turtle trade on the Indian subcontinent is Bangladesh with the majority of turtle exports destined for China, although a lesser amount is shipped to India (Bhupathy et al., 2000). Turtles are collected within country and Bangladesh also serves as a regional collection center and trans-shipment point for turtles gathered in neighbouring countries (Bhupathy et al., 2000). Cambodia: Legal international trade, run through a government export agency KAMFIMEX, ships turtles by air directly from Phnom Penh to Guangzhou or Hong Kong Special Administrative Region (Hong Kong SAR), China (Tana et al., 2000). This trade is restricted by an annual quota and by the size of individual turtles, which must be larger than 1 kg to be legally imported (Tana et al., 2000). In the first legal international export of live reptiles in the fishing season 1998-1999, the total exported quantity was 200 tons: turtles were estimated to comprise 50% of this shipment (Tana et al., 2000). The same live reptile quantity was approved for export to China in the fishing season 1999-2000 (Tana et al., 2000). China: China has suspended exports of native species of Testudinata for commercial purposes (except *Chinemys reevesii* and *Trionyx sinensis*) according to the CITES Management Authority of China (in litt. to CITES Secretariat, 17 November 2001, cited in AC18 Doc. 7.1). China has been and remains a major importer of live turtles, both legal and illegal. Except for CITES-listed species which are likely to have been imported illegally, it is to differentiate legal international trade from illegal trade in other species (Lau and Shi, 2000). Major turtle markets exist in Guangzhou, Shanghai, and Shenzhen. Indonesia: Records from the Directorate General of Fisheries of Indonesia show that exports of freshwater turtles and tortoises in 1997 were 423,100 animals weighing 670,653 kg and in 1998, they were 396,719 animals weighing 828,032 kg (Samedi and Iskandar, 2000). Although the records do not identify species, *Pelochelys* (probably *cantorii*) was likely among the species that were exported in greatest volume (Samedi and Iskandar, 2000). India: There is no legal international trade of *P. cantorii* in India. Lao PDR: As of 1999, no data were available on volumes of domestic turtle trade in Lao PDR, as no monitoring studies have been conducted (Stuart and Timmins, 2000). However, there appears to be extensive export of turtles from Lao PDR to Thailand and unquantified exports to Viet Nam (Jenkins, 1995). Myanmar: Commercial trade in tortoises and freshwater turtles is not allowed in Myanmar, and as a result, no official trade statistics are available (van Dijk, 2002). Philippines: There was no information on legal international trade of *P. cantorii* in the Philippines. Papua New Guinea: A large number of masks, a significant number made from the carapaces of *P. cantorii* are sold to tourists in northern Papua New Guinea and in Port Moresby and appears to be quite robust (Rhodin and Genorupa, 2000). Thailand: There is no legal international trade of this species because it is specifically protected from exploitation under the Wild Animals Reservation and Protection Act (van Dijk and Palasuwan, 2000). Viet Nam: There are no figures for trade in any softshell turtle species in the national export records (Hendrie, 2000).

3.3 Illegal trade

Pelochelys bibroni: Indonesia: Actual export numbers of all species are essentially several times greater than those managed by the Indonesian government (Samedi and Iskandar, 2000). Papua New Guinea: Trade in New Guinea turtles at present appears to be restricted to the international exotic pet industry and there appears to be significant levels of illegal export trade along the southern Papua New Guinea – Irian Jaya (Indonesia) border although there is no evidence of international pet trade in *P. bibroni*, (Rhodin and Genorupa, 2000). However, as populations of heavily traded species in southeast Asia are depleted, these export routes will probably convert and begin to trade turtles primarily for the food trade (Rhodin and Genorupa, 2000).

Pelochelys cantorii: Bangladesh: There is a undetermined amount of illegal smuggling of turtle products by ship from Bangladesh (Bhupathy et al., 2000). Cambodia: The illegal international trade of Cambodian turtles to Viet Nam is much larger than the legal trade quantities to China (Tana et al., 2000). Few data exist on illegal trade of turtles to Thailand, although without additional information it is presumed to be much less significant than the trade to Viet Nam (Tana et al., 2000). China: Many CITES-listed species observed in south China food markets have likely been imported into China illegally, particularly Appendix-I species such as Batagur baska (Lau and Shi, 2000). Many non-CITES species in Chinese food markets have likely also been imported illegally, attesting to the documented illegal exports from other countries such as Myanmar and Viet Nam. Indonesia: See discussion for *P. bibroni*. India: *P. cantorii* is not known to be traded from India although trans-boundary exchange between India and Bangladesh may exist (Choundry et al., 2000). Lao PDR: All trade in turtles in Lao PDR is considered legal as no turtles are truly protected in this country (Stuart and Timmins, 2000). Myanmar: Observations in markets in mainland China of substantial quantities of turtle species endemic to Myanmar (Kuchling, 1995; Artner & Hofer, 2001 as cited in van Dijk, 2002) show that illegal exports from Myanmar are substantial (van Dijk, 2002). Philippines: There was no information on illegal trade of *P. cantorii*. Papua New Guinea: See discussion in *P. bibroni*. Thailand: Most pet animals are said to originate from Cambodia (van Dijk and Palasuwan, 2000). Viet Nam: The Asian giant softshell turtle is uncommon in trade seizures along ground transport routes in the north (no observed records) however, trade in softshell turtles may involve an entirely separate network (Hendrie, 2000).

3.4 Actual or potential trade impacts

Pelochelys bibroni: Indonesia: The demand for turtles and tortoises for pets, food, and medicine is increasing with growing human populations and economic improvements especially in East and Southeast Asia. Without further control on the trade of these species, they will certainly decline (Samedi and Iskandar, 2000). Papua New Guinea: No information was available on actual or potential trade impacts for this species.

Pelochelys cantorii: Bangladesh: Potential trade impacts are unknown. Cambodia: This species is Endangered in Cambodia due to trade exploitation (Rhodin, 2002). China: Over-collecting of turtles for food markets has been the main cause of the decline of this species to endangered status in China and the continual harvest of large numbers of slow-growing chelonians with low reproductive rates from the wild is clearly unsustainable and must have a deleterious effect (Lau and Shi, 2000). Indonesia: See discussion for *P. bibroni*. India: *P. cantorii* may become locally extinct due to trade impacts (Choundry et al., 2000). Populations of this species no longer support an export trade in India (Bhupathy et al., 2000). Lao PDR: This species is very reduced in numbers in Lao PDR from collection pressure because they are large-sized species and they are associated with large river lowland habitat that also contains high densities of people (Stuart and Timmins, 2000). Myanmar: Available evidence suggests declines have occurred as a result of over-harvesting for both local consumption and to meet the demands of export markets and with one exception all chelonian species in Myanmar should be considered threatened by levels of harvest that are almost certainly unsustainable (Platt et al., 2000). Philippines: No information was available on actual or potential trade impacts to this species. Papua New Guinea: No information was available on actual or potential trade impacts to this species. Thailand: Potential trade impacts are unknown. Viet Nam: Trade impacts to this species are unknown but, based on the lack of observations of this species in the trade or domestic market, it may be extremely rare in Viet Nam (Hendrie, 2000).

3.5 Captive breeding or artificial propagation for commercial purposes (outside country of origin)

Pelochelys cantorii: China: Captive breeding for commercial sale occurs on Chinese turtle farms (Shi and Parham, 2001). Viet Nam: The Institute for Ecology and Biological Resources is involved in establishing softshell breeding farms but the success is unknown (Hendrie, 2000). There is currently a trend in Viet Nam to establish "breeding farms" for animals confiscated from trade (Hendrie, 2000).

4. Conservation and Management

4.1 Legal status

4.1.1 National

Bangladesh: *P. cantorii* is not included on the Schedules of the Bangladesh Wildlife Preservation (Amendment) Act (BWPA) of 1974. Bangladesh is a signatory to CITES and acceded in November 1981.

Cambodia: Law No. 33 (Department of Fisheries) and Law No. 35 (Department of Forestry) are the main laws on the use of aquatic animals and use of land animals, respectively (van Dijk, 2002). Joint Declaration No. 1563 (Ministry of Agriculture, Forestry and Fisheries and Ministry of Environment) states that wild animals can't be hunted with traps, explosive materials, or poison, nor can wild animals or their products be sold, commercialized, exploited, or transported, nor can wild animals or their products be served in restaurants (Tana et al., 2000). Declaration No. 359 1563 (Ministry of Agriculture, Forestry and Fisheries) protects "nationally threatened" wild animal species (van Dijk, 2002). Although no turtles are currently listed, they could be added in the future if they are shown to be threatened (van Dijk, 2002). Government Decision 01 (Department of Forestry) and Government Decision 02 (Department of Fisheries) focuses on ending illegal trade in land animals and in aquatic animals respectively (Tana et al., 2000). Cambodia has been a signatory member of CITES since 1997.

China: Several freshwater turtles and tortoises are listed in the People's Republic of China Wild Animals Protection Law are state major protected wildlife grade I, while others are grade II protected (van Dijk, 2002). *P. cantorii* is listed as grade I. The Wild Animals Protection Law also covers important economic and scientific species, though the actual species are not listed. For terrestrial species, the State Forestry Administration is responsible for the administering and enforcing of this law, while the Fisheries Ministry is responsible for the aquatic species (van Dijk, 2002). The collecting of state major protected species is only allowed for scientific research, captive breeding, exhibition and other special reasons. Permission from the Forestry or Fisheries bureau in the central government is needed for the collecting of grade I protected species; permission from the Forestry or Fisheries Department in the provincial government is required for grade II protected species (van Dijk, 2002). The transport of state major protected species across county boundary needs the permission from the provincial Forestry or Fisheries Department. The import and export of these state major protected species and CITES-listed species need the permission from the Forestry or Fisheries bureau in the central government and a certificate issued by the Endangered Species of Wild Fauna and Flora Import and Export Administrative Office (Shi and Lau, 2000 cited in van Dijk, 2002)). Regarding imports and exports of turtles, China has tightened its regulations considerably in recent years (van Dijk, 2002). The Notice of Strengthening the Live Reptile Import and Export Management (China CITES Authority No.[2000] 51) was issued by the State Endangered Species Import and Export Administration Office in June 2000 (van Dijk, 2002). This was augmented by Notice of Strengthening the Trade Management on Turtles and Tortoises, issued by the State Endangered Species Import and Export Administration Office on June, 17, 2001 (van Dijk, 2002). Under these Notifications, commercial imports of turtle species listed on Appendix II of CITES are only accepted from Parties that set an annual export quota, all commercial imports of all turtles from Indonesia, Cambodia and Thailand are suspended, all imports of turtles into China need to be accompanied by export permits or certificates from the exporting country, turtle imports are restricted to a small number of designated airports, and local wildlife authorities are instructed to co-operate closely with customs authorities (van Dijk, 2002). In addition, China suspended the export of native species of Testudinata for commercial purposes (except

Chinemys reevesii and *Trionyx sinensis*) on 6 June 2000 (CITES Management Authority of China, *in litt.* To CITES Secretariat, 17 November 2001, cited in AC18 Doc. 7.1).

India: *P. cantorii* (as *P. bibroni*) is protected under schedule I of the Indian Wildlife (Protection) Act of 1972 (Choudry et al., 2000). Schedule I includes endangered species that may only be hunted under exceptional circumstances (van Dijk, 2002). India has been a Party to CITES since October 1976.

Indonesia: *P. bibroni* and *P. cantorii* are not listed in the national protection status nor in CITES appendices and is managed as a fishery resource in Indonesia in accordance with Act no. 12 of 1985 (van Dijk, 2002). Management of fishery resources are delegated to the Fishery Service which is under the local (district) government where expertise in conservation is very limited and can lead to over-exploitation (Samedi and Iskandar, 2000). The species is managed by the Fisheries Department through the establishment of capture and export permits which may be issued in some cases without consideration of quotas set by the Directorate General of Nature Protection and Conservation (van Dijk, 2002). Indonesia acceded to CITES in December 1978, which came into force in March 1979.

Lao PDR: Wildlife legislation is under review in Lao PDR (van Dijk, 2002); current legislation in force (Decree of the Council of Ministers No. 118/CCM on the Management and Protection of Aquatic Animals, Wildlife and on Hunting and Fishing, 1989) does not, in effect, protect freshwater turtles from exploitation (Stuart and Timmins, 2000, as cited in van Dijk, 2002)). Although 3 local names of turtles were listed in the Lao Wildlife Management Categories, no scientific names of turtles were listed in wildlife protection legislation (Stuart and Timmins, 2000). Lao PDR is not a CITES Party.

Myanmar: The Burma Wildlife Protection Act, 1936, was the main law extending protection to listed species (van Dijk, 2002). In 1991, the only listed species were mammals and birds, and no turtle species were included in this law (Gaski and Hemley, 1991 cited in van Dijk, 2002). The new "Protection of Wildlife, Wild Plants and Conservation Law," enacted in 1994, replaces the Burma Wildlife Protection Act of 1936 (Moe et al., 2002). Myanmar law prohibits the commercial exploitation of natural resources, including tortoises and freshwater turtles, but allows collection for subsistence use (van Dijk, 2002; Moe, 2002). Thus, the commercial trade of tortoises and freshwater turtles is illegal (Platt et al., 2000). Turtles are protected by both fisheries and forestry laws, and all wildlife is protected in wildlife sanctuaries and national parks (Platt et al., 2000). The Department of Fisheries does not issue permits for the harvest of turtles and Law 34 provides stiff penalties for those engaged in turtle trading (Platt et al., 2000). Myanmar became a CITES Party in 1997.

Papua New Guinea: Trade in turtles from Papua New Guinea is strictly regulated by law as proscribed by the Fauna (Protection and Control) Act (Parker, 1981) This Act was in the process of being amended in 1999. All exports of all turtles require permits to be issued by the Conservator of Fauna (currently the Dept. of Environment and Conservation). No turtles are listed by Papua New Guinea as Protected Species, which would limit legal permitted export to at most 4 animals to legitimate approved zoological institutions. However, all marine turtles and two freshwater turtles, *C. insculpta* and *P. bibroni* are listed as Restricted Species, with narrow guidelines for any legal export, limiting the export to only a few animals for legitimate scientific purposes. The rest of the non-protected and non-restricted turtle species may be exported only with issued export permits, and then only for approved legitimate scientific and zoological purposes. Export of curios incorporating wildlife parts (e.g., turtle shell masks) also requires export permits. (Rhodin & Genorupa, 2000 as cited in van Dijk, 2002).

Papua New Guinea acceded to CITES in December 1975 and entered into force in March 1976.

Philippines: As far as can be ascertained, no specific endangered species legislation in the Philippines covers freshwater turtles. Presidential Decree No. 704, 1975, revised and consolidated all laws and decrees affecting fishing and fisheries, requiring that virtually all fishing activities be carried out under licence, lease or permit; import and export of fish and other aquatic products requires a permit; and the use of explosives, poisons and other noxious substances, and electricity in fisheries are prohibited. There exists a general prohibition of export of native wildlife, which covers freshwater turtles. Import of non-domestic animals is regulated under Act no. 3767; import is prohibited except under permit from the Director of Plant Industry (van Dijk, 2002).

The Philippines became a Party to CITES in 1981.

Thailand: In Thailand, the Asian giant softshell turtle is specifically protected from exploitation under the Wild Animals Reservation and Protection Act B. E. 2535 (WARPA), which was revised in 1992 (van Dijk and Palasuwan, 2000, van Dijk, 2002). The WARPA Law controls hunting, trade, possession, import, export, and commercial breeding of wildlife. It also includes provisions for the implementation of CITES. Thailand has been a CITES signatory since 1983.

Viet Nam: Ministerial decree No 18 of the Council of Ministers Stipulating the Categories of rare and precious forest fauna and flora, and their management and protection, dated 17 January 1992, includes two species of non-marine turtles, *Indotestudo elongata* and *Pelochelys bibroni* (= *P. cantorii*), under category II. Thus utilization of these two species is restricted to scientific research, establishing breeding populations, and international exchange. Any such activities require a collection permit from the Ministry of Agriculture and Rural Development (Hendrie, 2000). The list of species protected by Decree 18 is currently under review and more turtle species may be included. Directive 359 (1996) restricts trade in wildlife and animal parts, including prohibiting the sale of wildlife in restaurants. Commerce and trade regulations require a permit issued at the provincial level for trade in any commodity, including wildlife (Hendrie, 2000). Circular 62/2001/TT-BNN issued on 05 of June 2001 by the Ministry of Agriculture and Rural Development to guide imports and exports of goods and commodities managed by the Ministry for the period of 2001-2005 stipulates that Viet Nam prohibits exports of all wild animals and rare and precious plants. Thus export of all native turtle species is prohibited. Viet Nam became a Party to CITES in 1994.

4.1.2 International

P. bibroni and *P. cantorii* are not currently listed in the CITES Appendices.

4.2 Species management

4.2.1 Population monitoring

No specific population monitoring programs for this species, or for Asian freshwater turtles in general, have been identified.

4.2.2 Habitat conservation

Bangladesh: There are 15 protected areas, occupying 1.5% of the country (Rashid and Khan, 2000). India: There are turtle sanctuaries in Varanasi, along the Ganga and in the Chambal River, as well as in Satkosia in Orissa; Harike is a Ramsar site (Choundry et al., 2000). Indonesia: Some of the wetland areas that are important habitat for freshwater turtles and tortoises have been included in the network of protected areas in the forms of National Parks, Wildlife Reserves, and Nature Reserves (Samedi and Iskandar, 2000). Lao PDR: Since

1993, the government of Laos has officially designated 20 areas as National Biodiversity Conservation Areas which cover approximately 12.5% of the country's surface (Stuart and Timmins, 2000). Myanmar: Significant areas of Myanmar have been designated as protected areas (currently 38 areas covering 31,972 sq. km or 4.7% of total land area (U. Kyaw Moe et al., 2002). Thailand: There are over 100 protected areas in Thailand where collecting or other forms of disturbance of any plants or animals are prohibited (van Dijk and Palasuwan, 2000). There are also various Non-Hunting areas, but there is often intensive use of these areas by the local population (van Dijk and Palasuwan, 2000). Viet Nam: There are 11 National Parks and 91 Protected Areas designated in Viet Nam which cover 13,425 km² or 4.1% of the country (MacKinnon, 1997 as cited in Hendrie, 2000).

4.2.3 Management measures

Pelochelys cantorii: Viet Nam: A Turtle Conservation and Ecology Project was established in 1998 by the Cuc Phong National Park and the Forest Protection Department that was aimed at receiving and translocating turtles confiscated from the wildlife trade, conducting research, public education, and training of regional authorities (Hendrie, 2000).

4.3 Control measures

4.3.1 International trade

Pelochelys cantorii: China: China has recently taken several legal/regulatory measures to control imports and exports of freshwater turtles (see Section 4.1.1). Viet Nam: Viet Nam recently adopted CITES-implementing legislation, which should help control international trade.

4.3.2 Domestic measures

Pelochelys cantorii: Bangladesh: Forest officers, designated as wardens, are responsible for enforcement of the Wildlife Protection Act. Violators can be sentenced up to two years in jail and fined up to \$1000 (U.S.) but enforcement and sentencing has been lax and violators often receive light sentences (Bhupathy et al., 2000). There is currently a program underway to educate judges on the need for strict enforcement of protective wildlife legislation (Bhupathy et al., 2000). India: *P. cantorii* is a protected species in India and subject to enforcement of existing laws (Choundry et al., 2000). Lao PDR: An upsurge in efforts to control wildlife trading in recent years by officials has resulted in fewer turtles being openly seen in markets, including Ban Lak in Vientiane Municipality and at Ban Lak in Bolikhamxai Province (Stuart and Timmons, 2000). Myanmar: All wildlife is strictly protected within Wildlife Sanctuaries and National Parks in Myanmar, and any activities in Reserved Forests require special permits under the Forest Law of Myanmar, enacted in 1992 (U Kyaw Moe et al., 2002). Papua New Guinea: This country tries to protect its resources from exports through its permit system although control and enforcement of these regulations is badly lacking with few permits actually getting issued (Rhodin and Genorupa, 2000). Thailand: Enforcement efforts to stop exploitation and trade in protected species and to prevent incursions and encroachment in protected areas are sometimes restrained by lack of manpower and identification skills and the complications from different responsibilities and authorities of various departments (van Dijk and Palasuwan, 2000). Viet Nam: The National Forest Protection Department is increasing enforcement activities on the ground and investing in the training of its rangers however, the process is slow and unlikely to achieve the results that are needed to meet the threat posed by the illegal wildlife trade (Hendrie, 2000).

5. Information on Similar Species

Further taxonomic work may result in the description of several new species within the *Pelochelys* complex (Das, 1991).

6. Other Comments

Pelochelys bibroni: This species status on the IUCN 2000 Red List is Vulnerable (A1cd+ 2cd).

Pelochelys cantorii: This species status on the IUCN 2000 Red List is Endangered (A1cd+ 2cd).

All range countries were consulted by mail regarding this proposal. The Republic of Indonesia strongly supports this proposal. The Philippines supports this proposal for its native taxon, *Pelochelys cantorii*.

The consensus recommendation from the CITES-sponsored Technical Workshop on Conservation of and Trade in Freshwater Turtles and Tortoises, held in Kunming, China from March 25-28, 2002, is that *Pelochelys* spp. is one of the 11 highest-priority taxa for an Appendix-II CITES listing at COP 12.

7. Additional Remarks

Anders G. J. Rhodin of the Chelonian Research Foundation has recommended that *P. cantorii* be considered for listing in Appendix II.

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