

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Inclusion of *Amyda* spp. in Appendix II, in accordance with Article II, paragraph 2 (a), of the Convention, and Resolution Conf. 9.24 (Rev. CoP12), Annex 2 a, paragraph B. i).

NB: the genus *Amyda* is currently known to contain the single species *Amyda cartilaginea*.

B. Proponent

The United States of America in accordance with the consensus recommendations 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, and the Animals Committee Working Group on Tortoises and Freshwater Turtles.

C. Supporting statement1. Taxonomy

- 1.1 Class: Reptilia
- 1.2 Order: Testudines (Chelonia)
- 1.3 Family: Trionychidae (Trionychinae)
- 1.4 Genus: *Amyda* (Geoffroy Saint-Hilaire, 1809)

Species: *Amyda cartilaginea* (Boddaert, 1770)

- 1.5 Scientific synonyms: *Trionyx cartilagineus* (Boddaert, 1770)
Trionyx phayrei (Theobald 1868)
Trionyx ornatus (Gray 1861)
Trionyx nakornsrihammarajensis (Nutaphand, 1979)

See Wermuth & Mertens (1961: 263-266, 484-485) for additional synonyms, with the corrections that *Testudo rostrata* Thunberg, 1787, is a [suppressed] synonym of *Pelodiscus sinensis* (Wiegmann, 1835) (see Webb 1990; ICZN 1991) and *Testudo gotaghol* Hamilton in Gray, 1831 is an unavailable synonym of *Aspideretes leithii* (Gray, 1872) (see Webb 1980).

- 1.6 Common names:
- | | |
|-------------------|---|
| English: | Southeast Asian softshell turtle |
| French: | Trionyx cartilagineux |
| Spanish: | |
| Bahasa Indonesia: | Labi-labi, Labi biasanya, Bulus, Kuja |
| Bahasa Melayu: | Labi-labi Asia |
| Burmese: | Leik-kaba, Leik-beywoon |
| German: | Knorpel-Weichschildkröte |
| Khmer: | Kantheay ah see |
| Laotian: | Pa fa Asia |
| Thai: | Ta pab nam thammada, Ta pab suan; Ta pab khao tok; Pla fa |
| Vietnamese: | Ba ba nam bo |

- 1.7 Code numbers: ---

1.8 Taxonomic notes: *Amyda cartilaginea* is the only species currently included in the genus *Amyda* (Meylan, 1987).

2. Biological parameters

2.1 Distribution

Brunei Darussalam, Cambodia, India, Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, Thailand, Viet Nam. Brunei Darussalam: No information available. Cambodia: The species occurs in lowlands and at mid-elevations throughout the country (Touch Seang Tana *et al.* 2000). India: Inhabits the Ngengpui river basin of Mizoram, in the extreme southern part of north-eastern India (Pawar and Choudhury 2000). Indonesia: Found in Sumatra, Banka, Java, the Riau Archipelago, Belitung, Lombok and Kalimantan (Iverson 1992). The species occurrence in the Moluccas (Boulenger 1889, de Rooij 1915) remains unconfirmed. Lao PDR: The species inhabits the north and central region including the limestone region and Annamitic foothills (Stuart, 1999: 52). Malaysia: The species likely occurs Peninsular Malaysia and Sarawak. Few records are available from Sabah (Iverson 1992). Myanmar: Known from a few localities in the Arakan mountains, Bago Yoma [Pegu mountains], and Tenasserim in the southern regions of the country (Smith 1931, Iverson 1992). Singapore: Only known from the Nee Soon swamp forest (Yong 1990), but historically had a wider occurrence. Thailand: Occurs throughout Thailand (Taylor 1970, Nutaphand 1979, Thirakhupt and van Dijk 1995). Viet Nam: The species is known from the Mekong delta and from river basins in the southern Annamite slopes towards the north (Bourret 1941, Iverson 1992). Also observed as far north as Kon Tum and Se Bang Hien and Nha Trang (Farkas and Ziegler 2003).

2.2 Habitat availability

A. cartilaginea inhabits freshwater bodies such as lowland rivers, ponds, canals, and possibly estuaries (Boulenger 1912, de Rooij 1915, Moll 1976, Moll and Khan 1990). It also occurs in peat swamps (Chan-ard 1992), hill streams with sandy-bottomed pools among boulders (Thirakhupt and van Dijk 1995), and lakes up to 900 m altitude (Inle Lake, Myanmar). The species is restricted to areas that retain water throughout the year. Suitable habitat is available in every Range State (Choudhury *et al.* 2000, Sharma 2000, Stuart *et al.* 2000, van Dijk and Palasuwan, 2000).

2.3 Population status

Brunei Darussalam: No information is available. Cambodia: Populations are believed to be good locally and of medium importance globally (Touch Seang Tana *et al.* 2000). India: The species is not rare in the localized area of occurrence (Pawar and Choudhury 2000: 154). Indonesia: Samedi and Iskandar (2000) considered the species as 'common', and Iskandar (2000: 79) considered it 'abundant locally'. In Sumatra, stocks were depleted by 1989 (van de Bunt 1990). Shepherd (2000: 113,114) noted that declining (by two-thirds) trade quantities indicated increasing scarcity of the species. Lao PDR: Populations in accessible areas of Laos have been depleted (Nash 1997). Collectors on the Selampao River, one of the main harvested areas, had to travel into remote areas to find specimens (Jenkins 1995: 15). Stuart and Timmins (2000) noted that reduced populations survived in appropriate habitat. Stuart (1999) considered the species as Potentially at Risk. Lao P.D.R.'s wildlife regulations considers the species as threatened with extinction if hunting is not controlled (Salter 1993). Malaysia: Historically, the species was very common in the Malay Peninsula (Boulenger 1912). Moll (in Sharma 1999) observed fewer *cartilaginea* softshells at markets, dealers, and temples in northern Malaysia in 1989-1990 than during the 1970's. Sharma and Tisen (2000) considered the species common throughout Peninsular Malaysia, but noted likely population declines in areas accessible to collectors. In Sarawak, *A. cartilaginea* was the most common soft-shelled turtle species (Leh 1985). No information is available on populations in Sarawak or Sabah (Sharma and Tisen 2000). Myanmar: No information is available, though it may be threatened by unsustainable harvests (U Kyaw Moe *et al.* 2002). Platt *et al.* (2000) reported one trader's reduction of purchases from 480 kg monthly in 1999 to 110 kg in 2000. Singapore: The species is uncommon (Lim and Chou 1990, Lim and Lim 1992) and declining (Yong 1990). Thailand: The

species is widespread but with few, if any, large populations (van Dijk and Palasuwan 2000). Historically, the species was common in central Thailand (H. Smith 1925, M. Smith 1931). It became uncommon in the Mae Klong basin (Thirakhupt and van Dijk 1995). Noting that populations are in decline or depleted, softshell turtle hunters now travel to remote areas to obtain specimens from Myanmar (Caskey 1993, in Jenkins 1995). The supply has declined since the 1970's (van Dijk 1999). Viet Nam: The species occurs in the Mekong delta, but in 1993-1996 it occurred only in low and declining volumes in the Vietnamese turtle trade (Le Dien Duc and Broad 1995, Lehr 1997).

2.4 Population trends

Known population declines have occurred in all range countries except Brunei Darussalam, Cambodia, and India.

2.5 Geographic trends

Population and trade data indicate that the species has been subject to increasing exploitation pressures and population declines across its range.

2.6 Role of the species in its ecosystem

The species prefers animal prey but will also scavenge and eat fruits and seeds. Juveniles feed mainly on invertebrates. Larger prey includes snails, clams, and fish (Moll and Khan 1990, van Dijk 1998). Eggs and hatchlings of the species are predated upon by monitor lizards (*Varanus* sp.), crows (*Corvus* sp.), and serpent eagles (*Spilornis cheela*) in Peninsular Malaysia (Jasmi 1986).

2.7 Threats

This species is harvested for local, regional, and international consumption. Large numbers are caught for rural consumption, while regional networks of hunters and traders supply restaurants and the international trade (Jenkins 1995, van Dijk 1999). All animals larger than about 15 cm shell length are taken, but traders prefer animals less than 5 kg (Jenkins 1995: 14, Shepherd 2000). Because turtles do not reproduce until they reach a much larger size, intensive exploitation of juveniles and mature adults strongly affects population recruitment resulting in the rapid decline of populations (van Dijk and Palasuwan 2000). Eggs are also harvested for local consumption, but not in great numbers (van Dijk and Palasuwan, 2000). The species is also impacted negatively by wetland drainage, construction of reservoirs and flood defense structures, which eliminate natural feeding and breeding habitats (Fritz and Gaulke 1997, van Dijk 1999, van Dijk and Palasuwan 2000). Small juveniles are occasionally traded in domestic and international pet trade. The *2000 IUCN Red List of Threatened Animals* lists the species as Vulnerable. The species is considered Potentially at Risk in Lao P.D.R. (Stuart 1999). It is not listed in the *1996 Red List for Thailand* (OEPP 1997) or the *1992 Red Data Book of Viet Nam* (MSTE Viet Nam 1992).

3. Utilization and trade

3.1 National utilization

Brunei Darussalam: No information is available. Cambodia: Turtles and their eggs are used as food, medicine, pets and other purposes. Collection for subsistence and local trade has been extensive (Touch Seang Tana *et al.* 2000, Ing Try and Poum Sotha 2002). Recent protective measures have led to efforts to inform the population that consumption and utilisation of freshwater turtles is no longer legal (Ing Try and Poum Sotha 2002). India: The species is hunted for subsistence consumption and local trade (Pawar and Choudhury 2000). Indonesia: Some domestic consumption (van de Bunt 1990, Jenkins 1995). Harvesting for export is extensive. Lao PDR: Baird (in Nash, 1997: 14) noted expanding harvest for export to Viet Nam. Stuart (1999: 53) noted that the species was "heavily hunted for food and sale to Lao traders, Vietnamese traders and reportedly Chinese traders, presumably for the Vietnamese and Chinese consumption trade. Most common species of softshell turtle in markets." Malaysia: The most widely consumed turtle in Malaysia (Moll 1976, Sharma, 1999). Sharma

and Tisen (2000) considered local trade in the species to be rampant. The demand for the species in Sarawak was thought to endanger the species (Leh 1985). Myanmar: Historically and presently softshelled turtles of all species have been heavily exploited and active subsistence hunting continues (Theobald 1868, van Dijk 1997, Platt *et al.* 2000, U Kyaw Moe *et al.* 2002). Singapore: The highly localized population is not known to be exploited (Yong 1990, Theng 2002). Thailand: The species has been in great demand for consumption (Taylor 1970). By 1995, the price for whole softshell was 150 baht (USD 6.-) at retail, soon after which the species disappeared from public retail food markets (van Dijk 1999). Viet Nam: *Amyda cartilaginea* has been in high demand for consumption (Le Dien Duc and Broad 1995). Lehr (1997) recorded *Amyda* as available in moderate to high quantities in southern, central and northern Viet Nam in 1993, but in 1996 only in moderate quantities in the central part. Hendrie (2000) noted softshell turtles were available in restaurants throughout Viet Nam.

3.2 Legal international trade

Amyda cartilaginea is the most heavily traded wild-harvested Asian turtle (IUCN/SSC TandFTSG and ATWGW 2000). Brunei Darussalam: No indications of significant exploitation for international trade. Cambodia: Cambodia exported several tons per month to Viet Nam (Le Dien Duc and Broad 1995). During 1998-1999, the government agency KAMFIMEX licensed export quota of an estimated 100 tonnes of turtles to Guangzhou and Hong Kong (Touch Seang Tana *et al.* 2000). A similar export quota was approved for the 1999-2000 fishing season but withdrawn. Cambodia extended its wildlife protection legislation to include freshwater turtles in 2000, and has ceased legal exports. India: No indications of significant exploitation for international trade (Pawar and Choudhury 2000). Indonesia: Harvest became extensive since the late 1980s (van de Bunt 1990, Yuwono, in Jenkins 1995). Harvest quotas for the species in Indonesia are the highest of any turtle. There was no harvest limit in 1990 and 50,000 animals for each of the years 1992-1994, (Jenkins 1995:39). The Indonesian Directorate General of Fisheries, Agriculture Department, recorded softshell exports amounting to 715,192 animals in 1996, 423,100 in 1997 and 358,927 animals in 1998. 66,500 kg of softshells from Sumatra were exported in 1988 (van de Bunt 1990). Shepherd (2000) cited records of the Directorate General of Fisheries indicating that Medan and Riau in Sumatra exported about one-third of Indonesia's recorded softshell turtle exports (750,480 specimens between 1996-1998). Most of the exports were shipped to Singapore, Malaysia, and onwards to P.R. China and Hong Kong (Shepherd 2000). Auliya (2000: 210) noted that "Additionally, enormous quantities of turtles are brought in from the catchment area, comprising batagurids and softshells for the medical and food market in China. At this locality, *A. cartilaginea* is abundant." Malaysia: 8,773 wild-caught animals were exported in the first 10 months of 1999, representing 0.91% of wild-harvested turtle exports and 0.36% of total turtle exports. Singapore: All turtles, including *Amyda cartilaginea*, are imported and of which less than 10% are sold for domestic consumption (Theng 2002). An exporter in Tembilahan, Sumatra exported some 5 tons of turtles (with an unknown but significant fraction consisting of *Amyda cartilaginea*) per week to Singapore in October 1999, and a part of the 25 tonnes of turtles exported weekly from Medan at the same time was shipped to Singapore (Shepherd 2000). Thailand: Harvesting had been so intensive that, by 1995, most specimens came from Myanmar, Laos, and Cambodia (Baird, in Le Dien Duc and Broad 1995, Caskey, in Jenkins 1995). Viet Nam: Mass exports of turtles from Viet Nam to P.R. China are well documented (Le Dien Duc and Broad 1995, Jenkins 1995, Li *et al.* 1996, Lehr 1997, Nash 1997, Hendrie 2000, Le Xuan Canh *et al.* 2002), as is the occurrence of *Amyda cartilaginea* in Vietnamese turtle shipments (Le Dien Duc and Broad 1995, Lehr 1997, Hendrie 2000). The likelihood of significant unrecorded exports from Viet Nam to China is high. By the mid-1990s most supplies came from Laos and Cambodia (Baird, in Le Dien Duc and Broad 1995, Lehr 1997). Touch Seang Tana *et al.* (2000) noted over 100 tons of annual turtle exports, including *Amyda cartilaginea*, to Viet Nam. China: *Amyda cartilaginea* is one of the most common species in turtle imports. Statistics from the Endangered Species Import and Export Management Office (2002) show that during 1998-2000, it represented 6.5% of all turtle specimens for which import permits were issued, and 15.69% of total weight (292,500 specimens in 1998-1999). A survey of 3 food markets in Guangzhou and Shenzhen and one trader in Hong Kong SAR carried out between October 2000 and October 2001 observed 1,391 individuals offered for sale. Hong Kong S.A.R.: Trade Statistics of the Agricultural and Fisheries Department recorded 312,459 *Amyda cartilaginea* imported from

Indonesia from 1993 to 1994. About 80-90% of these were re-exported to China (Lau *et al.* 1995). Other Parties: Altherr and Freyer (2000) noted specimens offered by pet traders in the Netherlands and the United Kingdom. United Kingdom trade figures recorded that 2,044 individuals had been imported into the UK prior to 1991. In 2001, wild-caught juveniles were offered for in Germany (Mende 2001).

3.3 Illegal trade

Cambodia: Little information is available on illegal turtle trade. By 1999, a comprehensive network of provincial middleman traders stretched across the country and was believed to turn over quantities greatly exceeding the legal export trade under quota (i.e., much more than 100 tons of turtles per year, of which *Amyda cartilaginea* represented a significant component). The great majority of this was exported to Viet Nam (Touch Seang Tana *et al.* 2000). Recent enforcement of strengthened protective legislation appears to have reduced illegal trade (Ing Try and Poum Sotha 2002). Indonesia: Trade statistics of the Agricultural and Fisheries Department of Hong Kong recorded a total of 312,459 *Amyda cartilaginea* imported into Hong Kong from Indonesia from November 1993 to October 1994 (Lau *et al.* 1995), about 6 times the total annual Indonesian quota at that time. This indicates the scale of unreported trade levels from Indonesia. Lao PDR: Baird (in Jenkins 1995) noted that softshelled turtles harvested in southern Lao P.D.R. were predominantly destined for export to Viet Nam, which at the time was illegal. Export trade in southern Laos began in 1994 and then amounted to likely several thousand animals (Jenkins 1995). Stuart and Timmins (2000) and Stuart *et al.* (2000) reported extensive harvest, trade, and export of freshwater turtles of all species inhabiting the country with exports almost exclusively traded to Viet Nam and P.R. China. Myanmar: The species is known to be harvested for export to China and Thailand (Caskey, in Jenkins 1995, Kuchling 1995, Platt *et al.* 2000, U Kyaw Moe *et al.* 2002), but quantities are unknown. Singapore: The import and trans-shipment from Indonesia is in conflict with the WABA unless licensed appropriately. The proportion of illegal shipments cannot be estimated. Thailand: *Amyda cartilaginea* has not been recorded in recent confiscations (Lauprasert *et al.* 2002).

3.4 Actual or potential trade impacts

Recent exploitation pressures, resulting mainly from demand for the species through international trade, have caused extensive and range-wide population depletions. Including the species in Appendix II will regulate and monitor exploitation of the species for international trade. It is expected to result in a reduction in international trade in the species.

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

Large-scale commercial farming of *Amyda cartilaginea* softshells was attempted in Singapore and Thailand (Chou and Choo 1986, Bundesamt für Naturschutz 2003). The species, however, had slower growth and lower annual reproductive output than the Chinese softshell turtle, and any increased value per kg of *Amyda* produced could not compete financially with the higher productivity of *Pelodiscus* (Bundesamt für Naturschutz 2003). The species is easily maintained in captivity but is not popular among hobbyists due to its large size, appearance, and temper. Captive reproduction has only succeeded in large ponds within the natural range. No successful breeding has been reported *ex-situ*.

4. Conservation and management

4.1 Legal status

4.1.1 National

Brunei Darussalam: No legal protection (Gaski and Hemley 1991). Cambodia: Joint Declaration (Ministries of Agriculture and Environment) No 1563 states that wild animals cannot be hunted with traps, explosive materials, or poison, nor can wild animals or their products be sold, commercialised, exploited, or transported, or their products served in restaurants (Touch Seang Tana *et al.* 2000), this presumably includes softshell turtles. Declaration No 359 protects “nationally threatened” wild animal species. No turtles are

listed. Government Decision 02 (Department of Fisheries) aims to end illegal trade in aquatic animals (Touch Seang Tana *et al.* 2000). India: The Indian Wildlife (Protection) Act of 1972 does not include *Amyda cartilaginea* since the species was only very recently discovered to inhabit India. Indonesia: *Amyda cartilaginea* is considered a candidate for national protection by inclusion under Law No.5/1990 concerning the Conservation of Biological Natural Resources and their Ecosystems, and Law No. 5/1985 concerning Fisheries (Suwelo 2001). Lao P.D.R.: *Amyda cartilaginea* is listed in Category II, meaning a rare species which may be threatened with extinction if hunting is not controlled. Hunting is permitted during the non-breeding season, and only for food and not for sale or exchange (Salter 1993). Malaysia: State fisheries legislation in Johor, Kelantan and Negeri Sembilan can be interpreted to cover *Amyda cartilaginea*, coverage under Malacca State legislation is unclear; other States (Pahang, Penang, Perak, Perlis, Selangor, Terengganu) do not possess the legislative tools to regulate *Amyda* harvest. Exports of freshwater turtles from Peninsular Malaysia is regulated by the Department of Wildlife and National Parks of Peninsular Malaysia (Gregory and Sharma 1997). In Sarawak, the Wild Life Protection Ordinance 1998 lists 'all soft-shelled turtles' as 'Protected Species' (Sarawak 1998). In Sabah the species is not protected (Sharma and Tisen 2000). Myanmar: *Amyda cartilaginea* is a Protected Species in the Protection of Wildlife, Wild Plants and Conservation of Natural Areas Law of Myanmar (U Kyaw Moe *et al.* 2002). Singapore: Native wildlife species, including freshwater turtles, are protected under the Wild Animals and Birds Act (WABA), 1965. The Act protects the species because it is native, and prior permission is needed to trap any native animal species anywhere in Singapore. Permission is only granted in exceptional cases such as scientific research (Theng 2002). Import, export and transshipment of species protected under the WABA are prohibited unless licensed by the Director of Primary Production (Gaski and Hemley 1991). In addition, the National Parks Act prohibits taking animals from protected areas (Theng 2002). Thailand: *Amyda cartilaginea* is protected from exploitation under the Wild Animals Reservations and Protected Areas Act (1992) and The National Parks Act of 1961. National Parks and Wildlife Sanctuaries are legally protected from all forms of removal, release, disturbance or other impacts on all plants, animals and the habitat as a whole. Viet Nam: The species is only covered by Directive 359 (1996), which restricts trade in wildlife and animal parts and prohibits 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. Circular 62/2001/TT-BNN issued on 05 of June 2001 by the Ministry of Agriculture and Rural Development stipulates that Vietnam prohibits exports of all native wild animals and rare and precious plants from 2001-2005 (Le Xuan Canh *et al.* 2002).

4.1.2 International

Amyda cartilaginea is not specifically covered by bilateral or inter-governmental legislation. China's Notice of Strengthening the Trade Management on Turtles and Tortoises suspended commercial imports of turtles from Cambodia, Indonesia, and Thailand. Export permits or certificates must accompany turtle imports in China. Imports are restricted to designated ports and airports.

4.2 Species management

4.2.1 Population monitoring

No specific population monitoring efforts are known in any of the Range States. Incidental population assessments are summarized in sections 2.3 and 2.4.

4.2.2 Habitat conservation

Brunei Darussalam: Not observed in protected areas (Das 1995). Cambodia: Unknown in protected areas apart from a record of Daltry and Chheang Dany (2000) in the Cardamom Protected Forest. India: The single area of the species' occurrence is within the Ngengpui Wildlife Sanctuary (Pawar and Choudhury 2000). Indonesia: The species

occurs in Lau Tapus [Sumatra], Tanjung Padang-Padang Island, and Singkarak Lake [West Sumatra], Kembang Island [Kalimantan], Pleihari Martapura W.R. [South Kalimantan], Rawa Danau N.R. [West Java], Rawa Pening [central Java], and Leuweng Sancang N.R. [Java] (Wetlands International Indonesia Program, in Samedri and Iskandar 2000). Lao PDR: Occurs in several National Biodiversity Conservation Areas (Stuart 1999). Designation as National Biodiversity Conservation Area does not confer absolute protection on turtle populations (Stuart 1999). Malaysia: Protected areas in Peninsular Malaysia contain suitable habitat for the species (Taman Negara, Endau-Rompin, Krau, Belum). *Amyda cartilaginea* inhabits Taman Negara National Park (Jasmi 1986, Moll and Khan 1990) and Endau-Rompin (Kiew 1987). Current protection and occurrence status of the species in Sarawak and Sabah is unknown (Sharma and Tisen 2000). Myanmar: Significant areas have been designated as protected areas (U Kyaw Moe *et al.* 2002), but the presence of *Amyda cartilaginea* is unknown. Singapore: The only surviving population occurs in the Nee Soon National Park. Thailand: *Amyda cartilaginea* occurs in protected areas (Thirakhupt and van Dijk 1995, van Dijk 1999). However, the species is absent from large lowland wetlands with the status of Non-Hunting Areas but where fishing is permitted (van Dijk 1999). Viet Nam: Found in Cat Tien National Park and U Minh Thuong protected areas.

4.2.3 Management measures

No specific management measures for *Amyda cartilaginea* are known to be in place or planned in any of the Range States.

4.3 Control measures

4.3.1 International trade

Most countries require compliance with the International Air Transport Association (IATA) regulations concerning the shipping of live animals (IATA Live Animals Regulations, Chapters 1 and 2).

4.3.2 Domestic measures

All Range States with domestic legislation protecting *Amyda cartilaginea* and/or parts of its habitat make efforts to implement these protective measures, though turtles often remain low priority. Indonesia is the only Range State, which has implemented a quota system for *Amyda cartilaginea*.

5. Information on similar species

Most other Asian softshells lack the distinct anterior carapace tubercles. *Nilssonina Formosa*, restricted to Myanmar, usually shows at least traces of four large, distinct 'eye-spots' on the carapace, a more contrasting reticulate pattern on the head, and has a proportionally shorter snout. The *Aspideretes* species have a smooth edge to the anterior carapace (*A. leithii* has a defined patch of tubercles on the carapace over the base of the neck), more or less defined large eye-spots on the carapace when young which persist into adulthood in *A. hurum*, and head markings (chevron nape markings in *A. gangeticus*, large olive-green temple spots in *A. hurum*). *Pelodiscus sinensis* and *Palea steindachneri* have distinctive black patterning on the plastron, a proportionally much narrower head, and no or much less extensive anterior carapace tubercles.

6. Other comments

Inclusion of *Amyda cartilaginea* in CITES Appendix II has been advocated by the following groups:

The Asian Turtle Trade Working Group (2000)

Working Group on Conservation Management and CITES Implementation at the CITES Technical Workshop on Conservation of and Trade in Freshwater Turtles and Tortoises (CITES 2002, CITES Secretariat 2003).

In its presentation at the Kunming workshop, Indonesia specifically listed *Amyda cartilaginea* as a species to be discussed for listing (Samedi *et al.* 2002).

Chelonian Research Foundation, in an Annex to document AC19 Doc 15.1 prepared by the United States of America (USA 2003).

The Indonesian Herpetofauna Specialist Group, in November 1999 (Suwelo 2001).

7. Additional remarks

None.

8. References

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