CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Inclusion of *Orlitia borneensis* in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), by fulfilling the criterion B (i) according to Article II, paragraph 2 (a) of the Convention, as specified in Resolution Conf. 9.24.

B. Proponent

The People's Republic of China and the Federal Republic of Germany (on behalf of the Member States of the European Community).

Executive Summary

- An Appendix II listing is proposed for the Malayan Giant Turtle (*Orlitia borneensis*); the species meets the criteria in Resolution Conf. 9.24, as outlined below. Inclusion of *Orlitia borneensis* in CITES Appendix II is expected to result in a reduction in international trade in the species, as it affords greater control over imports in recipient Parties and is expected to lead to a higher level of scrutiny of trade levels and the status and biological data used to determine acceptable trade levels through non-detriment findings, quotas and other mechanisms. Listing will also result in jurisdiction over management of the species being shifted to the CITES MA in Indonesia and Malaysia.

- *Orlitia borneensis* inhabits the lowland wetlands of Peninsular Malaysia, Sarawak (Malaysian Borneo), Kalimantan (Indonesian Borneo) and Sumatra (Indonesia), namely rivers, estuaries, lakes, large vegetation-choked ponds and other large bodies of fresh water. Nesting occurs in loose soil, sandy riverbanks or piles of debris. No information is available on growth rate and age at maturity, and little on reproduction. Females lay a clutch of up to 40 eggs; it is not known whether a female may produce more than one clutch per year.

- The 1996 IUCN Red List of Threatened Animals listed *Orlitia* at Lower Risk: near threatened. In the 2000 IUCN Red List the species was upgraded to Endangered A1cd + 2cd, reflecting current levels of exploitation.

- Large quantities of *Orlitia* are sold in East Asian food markets. These are suspected to derive to a large extent from illegal exports from Indonesia, but once brought into other States the sale of these turtles is legal. It was noted that the species has been exported from Kalimantan since 1980 and that exports increased in 1994. According to other sources, *Orlitia* was the third most common species in turtle trade in Sumatra in 1996-97 and the second to fourth most numerous species counted during surveys of traders in Medan and Tembilahan, Sumatra, by September 1999. – The Department of Wildlife and National Parks of Peninsular Malaysia recorded a total of 21,972 wild-collected *Orlitia borneensis* exported during the period of January to October 1999, representing 0.89% of total Malaysian turtle exports during that period.

- While hard quantitative data is not available, it is widely accepted among traders that supplies of *Orlitia* to their businesses by local trappers are declining considerably. This decline has happened during the recent years of intensive collection and is unlikely to be caused by habitat loss, which is a much slower process.

- This species meets the criteria listed in Resolution Conf. 9.24, Annex 2a, B (i), namely that "it is known, inferred or projected that the harvesting of specimens from the wild for international trade has, or may have, a detrimental impact on the species by exceeding, over an extended period, the level that can be continued in perpetuity".

- The Indonesian Management Authority announced the willingness of the country to act as a co-proponent. China approved the proposal and asked to act as a co-proponent as well. – All participants of the "Technical workshop on conservation of and trade in freshwater turtles and tortoises", held at Kunming, P.R. China, on 25-28 March 2002, including representatives from range and non-range countries, supported this proposal. At this occasion, the Endangered Species Import & Export Management Office of the People's Republic of China has suggested that *Orlitia borneensis* be uplisted to Appendix II of CITES.

C. Supporting statement

1. Taxonomy

1.1 Class: Reptilia

1.2 Order: Testudines (Chelonia)

1.3 Family: Bataguridae (Geoemydidae)

1.4 Genus and species: *Orlitia borneensis* Gray, 1873

1.5 Scientific synonyms: *Bellia borneensis* (Gray, 1873)
Clemmys (*Heteroclemmys*) *gibbera* Peters 1874
Hardella baileyi Bartlett, 1895
Brookeia baileyi (Bartlett 1895)
Adelochelys crassa Baur, 1896
Liemys inornata Boulenger, 1897

No subspecies are currently recognised.

See Wermuth & Mertens (1961: 134-136, 472-473) for full nomenclatural history and citations.

1.6 Common names:

English:	Malayan Giant Turtle, Malaysian Giant Terrapin
French:	Emyde géante de Borneo
Spanish:	
Bahasa Indonesia:	Bajuku/Biuku, Tuntung, Kura-Kura Gading
Bahasa Malayu:	Juku Juku Besar; Baning Dayak (Borneo)
German:	Borneo-Flußschildkröte

1.7 Code numbers:

2. Biological parameters

Orlitia borneensis is a large freshwater turtle that may reach up to 80 cm carapace length; Iskandar (2000) indicates an exceptional maximum carapace length of 117 cm. Juveniles have a rounded, highly domed shell with a distinct vertebral keel; with growth this develops into a relatively low, oblong shell without keel. The vertebral scutes grow along the front margin, developing into a mushroom-shape. The plastron is solidly attached to the carapace; both plastral lobes are rather short and narrow, the posterior lobe roundly notched. It has a proportionally large, blunt head and short snout; the skin on the back of the head forms small shields. The scales on the front legs are small, rounded or shaped like narrow strips. There are five claws on the front legs; hands and feet are strongly webbed. The tail is short in females, moderately long and thicker in males.

The carapace (upper shell) is generally dull grey-black above, the plastron (bottom shell) and under-surfaces of marginal scutes are uniform creamy yellow or pinkish white, rarely with black blotches. Head,

limbs and tail are dark grey above, grading to pale grey on the under-surfaces; often there is a pale spot below and behind the jaw angle. Juveniles have dark spots along the margin of the plastron and fine greenish pattern on the head. (de Rooij, 1915; Peters, 1874; Lim & Das, 1999).

No information is available on growth rate and age at maturity, and little on reproduction. Females lay a clutch of up to 40 eggs (Iskandar, 2000); it is not known whether a female may produce more than one clutch per year.

2.1 Distribution

Countries of Origin: Indonesia, Malaysia

Orlitia borneensis inhabits the lowland wetlands of Peninsular Malaysia, Sarawak (Malaysian Borneo), Kalimantan (Indonesian Borneo) and Sumatra (Indonesia) (Iverson, 1992). The species has not been reported from either Brunei Darussalam or Singapore.

2.2 Habitat availability

Orlitia borneensis inhabits rivers, estuaries, lakes, large vegetation-choked ponds and other large bodies of fresh water (Ernst & Barbour, 1989; Lim & Das, 1999; Ernst, Altenburg & Barbour, 2000; Sharma & Tisen 2000; Iskandar, 2000). Nesting occurs in loose soil, sandy riverbanks or piles of debris (Moll, in Ernst & Barbour, 1989; Iskandar, 2000).

Substantial areas of appropriate habitat continue to exist: Sharma & Tisen (2000) noted that the freshwater swamps and natural lakes in the southern part of Peninsular Malaysia provide ample habitat for *Orlitia*. All rivers south of the Bernam River that could harbour the species remain intact, with low impact riverine development mainly at the estuarine areas. No details are available about the remaining extent of appropriate habitat in Sumatra and Borneo.

2.3 Population status

Samedi & Iskandar (2000) rated the species as 'uncommon' in Indonesia.

Sharma & Tisen (2000), based on secondary information, supposed that good populations existed in two locations in southeastern Peninsular Malaysia. No status information is available for Sarawak.

2.4 Population trends

Little information is available on population trends of *Orlitia*. Samedi & Iskandar (2000) noted that the species had 'declined considerably' in Indonesia, based on information from hunters and traders. Little information on population trends is available for Malaysia: Lim & Das (1999) noted that the species was once abundant along the Klang River in the Peninsula, from which the species has since disappeared. Shelford (1916) noted the species to occur 'not uncommonly in the lakes of the Batang Lupar district' of Sarawak at the turn of the 19th to 20th Century.

2.5 Geographic trends

Older records from Peninsular Malaysia suggest that the range of the species included the Klang Valley of Selangor, the Perak river basin, and possibly as far North as Penang (Boulenger, 1912). No recent records exist from these rivers and it appears that the species' range has contracted towards the south.

2.6 Role of the species in its ecosystem

Beyond incidental observations that *Orlitia* feeds on a variety of animal and plant foods, including fish, shrimp, snails and a watersnake, in the wild (Lim & Das, 1999; Iskandar, 2000) and that

captives accept a wide variety of vegetables, fruits and meats (Mehrtens, 1970; Lim & Das, 1999), no natural history information has been recorded and no information is available about the species' role in the ecosystem.

2.7 Threats

The species is threatened by a combination of habitat loss and targeted exploitation.

Habitat loss involves a variety of alterations to the species' lowland wetland habitat, including conversion of wetlands to agricultural land, physical alteration of rivers by engineering works, sand mining, structural and water quality effects from reservoir construction and operation, and pollution from mining, agriculture, industrial and domestic sources (Moll, 1998).

The 1996 IUCN Red List of Threatened Animals listed *Orlitia* at Lower Risk: near threatened. Gregory & Sharma (1997) suspected that the 'lower risk' assessment might have been too optimistic. In the 2000 IUCN Red List the species was upgraded to Endangered A1cd + 2cd (Hilton-Taylor, 2000; IUCN TFTSG & ATTWG, 2000).

3. Utilization and trade

3.1 National utilization

The species is exploited locally in Malaysia for its meat, including for use during cultural and religious celebrations. Collection involves burning swamp habitat to force hidden animals into the open (Sharma & Tisen, 2000), as well as capture using baited hooks and lines (Lim & Das, 1999).

Sharma & Tisen (2000) noted that the species had not been observed in the domestic pet or local food trade in Malaysia; Moll (1976) recorded the species as available for sale, but subsequent surveys by Moll (1987) and Sharma (1999) did not encounter the species for sale.

3.2 Legal international trade

The Department of Wildlife and National Parks of Peninsular Malaysia (quoted in Sharma & Tisen, 2000) recorded a total of 21,972 wild-collected *Orlitia borneensis* exported during the period of January to October 1999, representing 0.89% of total Malaysian turtle exports during that period.

Large quantities of *Orlitia* are sold in East Asian food markets (Lau & Shi, 2000). These are suspected to derive to a large extent from illegal exports from Indonesia, but once brought into other States the sale of these turtles is legal. Reported trade volumes include "huge numbers of animals of all sizes" in China (Chan, Kan & Lau, in IUCN TFTSG & ATTWG, 2000), 50 animals in August 1995 (Meier, 2000), and "Hundreds of .... *Orlitia*, ..." in the Qing Ping market, Guangzhou, 6-9 November 2000 (Artner & Hofer, 2001). A survey was carried out of 3 food markets in Guangzhou and Shenzhen, China, and one turtle trader in Hong Kong SAR between 30 October 2000 and 13 October 2001, and 4127 individuals of *Orlitia* were seen offered for sale. These markets were surveyed twice during every winter month and once during each summer month; thus, the number observed is a minimum number, not an approximation of total annual turnover (Ades, 2002). A stock of about 50 adult *Orlitia* held by a single trader in the same market in May 2000 was sold and cleared overnight, indicating the scale of trade turnover (van Dijk, in litt. to BfN). Statistics of the Endangered Species Import & Export Management Office of the People's Republic of China indicate that permits were issued for the import of 99,220 *Orlitia* into China in the year 2000; no records were available of imports in 1998 or 1999. Actual quantities traded may be lower than quantities indicated on permits due to permit validity and logistic restrictions, or may be higher due to irregularities, casting some uncertainty about these statistics (Endangered Species Import & Export Management Office, P.R. China, 2002).

Wu and Zhang (2000) encountered 27 *Orlitia* over a 5-month survey in 1999 of markets and restaurants in Shanghai; prices ranged between RMB 50 and 500 (USD 6.04 - 60.40) per animal, while meal prices ranged from RMB 36 (USD 4.35) for a kg of turtle soup to RMB 58 (USD 7.01) for a dish of turtle & snake soup. Most of the *Orlitia* were acquired from traders at the Qing Ping market of Guangzhou. To avoid the risks of stock mortality, shipments of 150-200 kg at a time were purchased, consisting of selected animals of about 1-1.5 kg and costing about RMB 52 (USD 6.28) per kg; only about 15% of the turtle is edible. Daily sales during the prime season, generally the second half of the year, could reach 100-150 kg.

Small numbers of *Orlitia* are traded in the international pet trade. A review by the German Scientific Authority of 13 available offer lists (dating from 1990 to 2002) from German reptile wholesalers yielded a single offer of 'small animals' at DEM 175.00 per animal in 1997. Altherr & Freyer (2000) noted that *Orlitia borneensis* were offered for sale by pet traders in Germany, the Netherlands and Switzerland in 1999. A web search in October 2001 yielded one Spanish site offering juvenile *Orlitia* at ESP 32200 (193.53 Euro or USD 178.89). Records of the US Fish & Wildlife Service show no imports during 1996 or 1997, recorded 30 live animals of wild origin imported in 1998 (1 from ID, 14 from MY and 14 from CN [presumably transshipped, not a range state]), and 38 live wild animals imported in 1999 (6 from ID, the remainder from CN, including 17 trans-shipped through HK). Declared values mostly ranged from USD 1.00 to USD 10.00 per animal, with 6 animals at USD 23.33 and 4 animals at USD 100.00 each.

3.3 Illegal trade

The species is traded for export in substantial numbers from Indonesia. Suwelo (2001) noted that the species has been exported from Kalimantan since 1980 and that exports increased in 1994. Fritz & Gaulke (1997) found that it was the third most common species in turtle trade in Sumatra in 1996-97. Shepherd (2000) found it was the second to fourth most numerous species counted during surveys of traders in Medan and Tembilahan, Sumatra, by September 1999, including about 250 animals held by a single trader in Medan on 24 September 2001. Samedi *et al.* (2002) noted that '*Orlitia borneensis* is often illegally traded in high volume'.

A large shipment of live freshwater turtles was intercepted in Hong Kong on 11 December 2001 and confiscated. On arrival at the rescue facility, Kadoorie Farm and Botanic Garden, the shipment was found to contain 7544 live freshwater turtles and tortoises, and an unrecorded number of animals already dead. Among the living animals were 1381 *Orlitia borneensis*, mainly adults. The animals were in poor to very poor condition and despite provision of veterinary care the subsequent mortality of these animals was particularly high: 975 animals (70.6%) died between 15 December and 16 February 2002. A total of 165 animals were relocated to rescue facilities in the USA in December 2001, another 114 in January 2002, 126 animals were transported to rescue facilities in Europe on 17 January 2002, and one animal was placed at the Hong Kong Zoological & Botanical Gardens (Ades, 2002). During veterinary inspection including X-rays, most of the animals transported to the USA and Europe were found to have fish hooks deeply embedded in the throat or oesophagus (Rick Hudson, presentation at the Turtle Survival Alliance (TSA) Conference in Vienna, 16 January 2002).

3.4 Actual or potential trade impacts

While hard quantitative data is not available, it is widely accepted among traders that supplies of *Orlitia* to their businesses by local trappers are declining considerably (Samedi & Iskandar, 2000; Shepherd, 2000; Samedi *et al.*, 2002). This decline has happened during the recent years of intensive collection and is unlikely to be caused by habitat loss, which is a much slower process.

Inclusion of *Orlitia borneensis* in CITES Appendix II is expected to result in a reduction in international trade in the species, as it affords greater control over imports in recipient Parties and is

expected to lead to a higher level of scrutiny of trade levels and the status and biological data used to determine acceptable trade levels through non-detriment findings, quotas and other mechanisms.

Including *Orlitia borneensis* in CITES Appendix II will result in jurisdiction over management of the species being shifted from the Fisheries Department of Indonesia to the Directorate General of Forest Protection and Nature Conservation of the Ministry of Forestry (the CITES MA) in Indonesia, and from the Fisheries Department of Peninsular Malaysia to the Department of Wildlife and National Parks (Perhilitan, the CITES MA) in Peninsular Malaysia.

3.5 Captive breeding for commercial purposes

There is no information indicating that attempts are or have been made to commercially breed *Orlitia borneensis* within its range countries. On the contrary, Shepherd (2000) reported that there was no demand for eggs incidentally laid by gravid females held before export, and such eggs were discarded by traders.

Some turtle farms in China maintain adult *Orlitia* and claim to produce eggs and hatchlings (van Dijk, 2001, in litt. to German Scientific Authority; Shi *et al*., 2002), but these claims remain unverified by independent observers.

4. Conservation and Management

4.1 Legal status

4.1.1 National legislation

In Indonesia, the species is strictly protected from exploitation under decree 327/1978 from the Ministry of Agriculture and under Government Regulation No. 7 of 1999. No utilization in any form is thus allowed, except with special permission from the Minister and with the consent of the Scientific Authority, for special purposes such as research and captive breeding. No capture or export quotas are set. Extensive illegal trade (see above) indicates that implementation of this legislation is less than perfect. The main regulatory shortcoming that facilitates extensive illegal trade in *Orlitia* is explained by Samedi et al. (2002): Trade in 'freshwater turtles' represents exploitation of a resource that is regulated and supervised by the Fisheries Department through local district (regency) government, which issues permits for trade in a particular number of freshwater turtles without specifying species or other details. As such *Orlitia* and other protected species are included in shipments beyond the supervision of the regulatory authority for protected and CITES-listed species, the Directorate General of Forest Protection and Nature Conservation, of the Ministry of Forestry.

In Peninsular Malaysia, legislation covering *Orlitia* is complicated by inadequate species definitions and unresolved differences in interpretation of the jurisdiction of Federal and State legislation (Gregory & Sharma, 1997; Sharma & Tisen, 2000). Nevertheless, it is understood that egg harvesting and trapping of *Orlitia* is restricted in Perak, while state legislation in Johor, Kelantan, Malacca, Negeri Sembilan and Trengganu can be interpreted as affording some degree of protection to the species. The Wild Life Enactment 1997 of Sabah lists *Orlitia* as a protected species, while it is listed as a 'Totally Protected Species' in the Wild Life Protection Ordinance 1998 of Sarawak.

4.1.2 International legislation

Orlitia borneensis is not covered by bilateral or inter-governmental legislation.

Under Notice of Strengthening the Trade Management on Turtles and Tortoises, issued on June, 17, 2001, the People's Republic of China suspended all commercial imports of all

turtles from Indonesia, including *Orlitia borneensis* shipped as part of unspecified 'freshwater turtles' shipments.

4.2 Species management

4.2.1 Population monitoring

The best available information indicates that no population monitoring actions have taken place or are in preparation throughout the species' range.

4.2.2 Habitat conservation

A number of locations that are known or suspected to be inhabited by *Orlitia borneensis* are protected in both Indonesia and Malaysia.

Samedi & Iskandar (2000), based on the Wetlands International Indonesia Program Wetland Database, reported *Orlitia* from a number of protected areas in Indonesia: Berbak National Park (Sumatra), Kerumutan Baru Nature Reserve (Riau), Giam-Siak Kecil Wildlife Reserve (Riau), and Lake Sentarum Wildlife Reserve (Kalimantan).

Sharma & Tisen (2000) noted that the freshwater swamps and natural lakes in the southern part of Peninsular Malaysia provide ample habitat for *Orlitia*. All rivers south of the Bernam River that could harbour the species remain intact, with low impact riverine development mainly at the estuarine areas. *Orlitia* has been suggested to occur in Taman Negara National Park (Moll & Khan, 1990) based on species occurrence outside the park and the presence of suitable habitat within the park, but remains unconfirmed. No information is available on the occurrence of the species in protected areas in Sarawak. While protected areas serve to protect natural flora and fauna in Malaysia, aboriginal communities have subsistence exploitation rights that are at times abused to collect natural resources for commercial trade. Occurrence of *Orlitia* inside a Protected Area cannot be equated with guaranteed undisturbed survival of the population.

4.2.3 Management measures

To the best available information, no management measures have taken place or are in preparation throughout the species' range. There are some efforts by hobbyists in Europe and North America to breed the species in conservation assurance colonies. As far as known, the only recorded captive reproduction occurred at the New York Zoological Garden, where 11 hatchlings emerged in 1991 and 7 hatchlings in 1992 (Slavens & Slavens, 2002).

4.3 Control measures

4.3.1 International trade

Animals of *Orlitia* legally exported from Peninsular Malaysia are subject to the usual national regulations pertaining to customs regulation and quarantine, and may be subject to similar measures when entering the importing country.

4.3.2 Domestic measures

No control measures such as quotas are known to be in effect in Peninsular Malaysia, the only part of the species' range where some degree of exploitation is legally permitted.

5. Information on Similar Species

Siebenrockiella crassicollis has large scales on the front limbs, usually has bold white spots on the head, and does not exceed 20 cm carapace length. All other Asian turtles lack triangular to mushroom-shaped vertebral scutes.

6. Other Comments

Both the Management and Scientific Authorities of the range states had been contacted in March 2002. The **Indonesian** Management Authority announced the willingness of the country to act as a co-proponent (see copy attached). **China** approved the proposal and asked to act as a co-proponent (see copy attached).

All participants of the "Technical workshop on conservation of and trade in freshwater turtles and tortoises", held at Kunming, P.R. China, on 25-28 March 2002, including representatives from range and non-range countries, supported this proposal.

7. Additional Remarks

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8. References

Ades, Gary W. J. 2002. *Turtle Trade Monitoring in South China & Summary of Turtle Rescue Operation in Hong Kong.* Report and Presentation presented at the Technical workshop on conservation of and trade in freshwater turtles and tortoises in Asia, Kunming, Yunnan Province (People's Republic of China), 25-28 March 2002.

Altherr, Sandra, and Daniela Freyer. 2000. *The Decline of Asian Turtles*. Pro Wildlife, München, Germany. 23 pp.

Artner, Harald, and Andreas Hofer. 2001. Observations in the Qing Ping Free Market, Guangzhou, China, November 2000. *Turtle and Tortoise Newsletter*, issue 3:14.

Boulenger, George Albert. 1912. *A Vertebrate Fauna of the Malay Peninsula from the Isthmus of Kra to Singapore including the adjacent Islands. Reptilia and Batrachia.* Taylor & Francis, London. 294 pp.

van Dijk, Peter Paul. 2001. Observations on reptile trade in China and Hong Kong, May 2000. Letter to Bundesamt für Naturschutz, 3 Oct 2001.

Endangered Species Import & Export Management Office of the People's Republic of China. 2002. *Conservation, Management and Trade Status of Wild Turtles and Tortoises in China*. Report and Presentation presented at the Technical workshop on conservation of and trade in freshwater turtles and tortoises in Asia, Kunming, Yunnan Province (People's Republic of China), 25-28 March 2002.

Ernst, Carl H., Ruud G. M. Altenburg, and Roger W. Barbour. 2000. *Turtles of the World* - CD-ROM edition, version 1.2. ETI Expert Center for Taxonomic Identification, Amsterdam, UNESCO Publishing, Paris, and Springer Verlag, Heidelberg & New York.

Ernst, Carl H., and Roger W. Barbour. 1989. *Turtles of the World.* Smithsonian Institution Press, Washington D.C. 313 pp.

Fritz, Uwe & Maren Gaulke. 1997. Zur Herpetofauna Nord-Sumatras. Teil 1: Schildkröten. *Herpetofauna*, vol. 19 (110): 12-22.

Gray, John E. 1873. On a new Freshwater Tortoise from Borneo (*Orlitia borneensis*). *Annals & Magazine of Natural History*, Series 4, vol. 11(62): 156-157.

Gregory, Rick, & Dionysius S. K. Sharma. 1997. Review of legislation affecting marine and freshwater turtle, terrapin and tortoise conservation and management in Malaysia: recommendations for change. Project MYS 343/96 Report to WWF Malaysia.

Hilton-Taylor, Craig (Compiler). 2000. *The 2000 IUCN Red List of Threatened Species*. IUCN, Gland, Switzerland and Cambridge, UK. 79 pp + CD-ROM database, also accessible at www.redlist.org.

Iskandar, Djoko T. 2000. *Turtles & Crocodiles of Insular Southeast Asia & New Guinea*. IUCN, World Bank and Bandung Institute of Technology. 191 pp.

IUCN TFTSG & ATTWG (IUCN/SSC Tortoise & Freshwater Turtle Specialist Group and Asian Turtle Trade Working Group). 2000. Recommended changes to 1996 IUCN Red List Status of Asian turtle species. Pp. 156-164 in *Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia* (van Dijk, Stuart & Rhodin, eds.). Chelonian Research Monographs, Number 2.

Iverson, John B. 1992. *A Revised Checklist with Distribution Maps of the Turtles of the World.* Privately Printed, Richmond, Indiana, 363pp.

Lau, Michael, and Shi Haitao. 2000. Conservation and Trade of Terrestrial and Freshwater Turtles and Tortoises in the People's Republic of China. Pp. 30-38 in *Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia* (van Dijk, Stuart & Rhodin, eds.). Chelonian Research monographs, Number 2.

Lim, Boo Liat, and Indraneil Das. 1999. *Turtles of Borneo and Peninsular Malaysia*. Natural History Publications (Borneo), Kota Kinabalu. x + 151 pp.

Mehrtens, John. 1970. *Orlitia* the Bornean Terrapin. *International Turtle & Tortoise Journal*, Vol 4 (5): 6-7, 33.

Meier, Elmar. 2000. Sind die Schildkröten Asiens noch zu retten? Pp. 171-176 in *Schildkröten – Grosses Schildkrötensymposium 5. Jahrestagung der SfÖ* (Artner & Meier, eds.). Natur und Tier-Verlag, Münster.

Moll, Edward O. 1976. West Malaysian Turtles: Utilization and Conservation. *Herpetological Review*, Vol. 7 (4): 163-166.

Moll, Edward O. 1987. The River Terrapin conservation program in Malaysia: Follow-up study and evaluation. A report to the Department of Wildlife and National Parks, Malaysia.

Moll, Edward O. 1998 "1997". Effects of Habitat Alteration on River Turtles of Tropical Asia with Emphasis on Sand Mining and Dams. Pp 37-41 in *Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles – An International Conference* (van Abbema, ed.). New York Turtle and Tortoise Society and WCS Turtle Recovery Program.

Moll, Edward O., and Mohamed Khan bin Momin Khan. 1990. Turtles of Taman Negara. *Journal of Wildlife and Parks*, Vol. 10: 135-138.

Peters, Wilhelm C. H. 1874. *Monatsberichte der Königlich Preussischen Akademie von Wissenschaften zu Berlin*, 1874: 622.

de Rooij, Nelly. 1915. *The Reptiles of the Indo-Australian Archipelago. Vol. 1. Lacertilia, Chelonia, Emydosauria.* E.J. Brill, Leiden, 384pp.

Samedi, and Djoko T. Iskandar. 2000. Freshwater Turtle and Tortoise Conservation Utilization in Indonesia. Pp. 106-111 in *Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia* (van Dijk, Stuart & Rhodin, eds.). Chelonian Research Monographs, Number 2.

Samedi, Akhmad Rukyani, and Irvan. 2002. *Utilization and Trade in Freshwater Turtles and Tortoises in Indonesia.* Country Report and Presentation presented at the Technical workshop on conservation of and trade in freshwater turtles and tortoises in Asia, Kunming, Yunnan Province (People's Republic of China), 25-28 March 2002.

Sharma, Dionysius S. K. 1999. *Tortoise and Freshwater Turtle Trade and Utilisation in Peninsular Malaysia*. TRAFFIC Southeast Asia, Petaling Jaya, Malaysia. 39 pp.

Sharma, Dionysius S. K., and Oswald Braken Tisen. 2000. Freshwater turtle and Tortoise Utilisation and Conservation Status in Malaysia. Pp. 120-128 in *Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia* (van Dijk, Stuart & Rhodin, eds.). Chelonian Research Monographs, Number 2.

Shelford, Robert W. C. 1916. *A Naturalist in Borneo*. T. Fisher Unwin Ltd., London. 331 pp. [reprinted by Oxford University Press, Singapore, 1985, and Borneo Natural History Publications, Kota Kinabalu, 1999].

Shepherd, Chris R. 2000. Export of live freshwater turtles and tortoises from north Sumatra and Riau, Indonesia: A case study. Pp. 112-119 in *Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia* (van Dijk, Stuart & Rhodin, eds.). Chelonian Research Monographs, Number 2.

Shi, Hai-tao., Michael Lau, Tien-hsi Chen, and James Ford Parham. 2002. *The Status of Trade, Captive Breeding, Research and Conservation of the Chelonians in China, including Hong Kong and Taiwan.* Country Report and Presentation presented at the Technical workshop on conservation of and trade in freshwater turtles and tortoises in Asia, Kunming, Yunnan Province (People's Republic of China), 25-28 March 2002.

Slavens, F., and K. Slavens. 2002. Reptiles and Amphibians in Captivity - Breeding - Turtles, Crocodiles and Tuatara. http://fslavens.home.mindspring.com/bturtle.html (Apr 25, 2002).

Suwelo, Ismu Sutanto. 2001. The Threatened species of Indonesian Tortoises, Terrapins and Turtles. *Tigerpaper*, Vol. 28 (2): 11-13.

Wermuth, Heinz, and Robert Mertens. 1961. *Schildkröten, Krokodile, Brückenechsen*. Gustav Fischer Verlag, Jena. Reprinted in 1996 with an appendix (pages 425-506) by F. J. Obst. xxvi + 506 pp.

Wu, Yongpei, and Endi Zhang. 2000. Turtle Trade in Shanghai – report on Market Survey. Wildlife Conservation Society (WCS) – China Program and China Endangered Species of Wild Fauna and Flora Import & Export Administerative Office, Shanghai Branch Office. 23 pp.

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Jakarta, May 2002

TELEFAX
No. 503/IV/KK45/2002

To : Ms Elizabeth Munzert
German Federal Ministry for the Environment.
Fax : 49 228 8491200
From : CITES Management Authority Indonesia
Fax : 62 21 5720227
Subject : Consultation letter on Asian Freshwater Turtles

Dear Sir,

This is responding your consultation concerning listing proposal of Asian Freshwater Turtles. The CITES Management Authority Indonesia herewith would like to inform you as follows:

1. The population of fresh water turtles and tortoise are in general declining due to a number of factors such as over collecting to meet the demand of turtle trade. Many of the species are not covered by sufficient protection, nationally and internationally. However, little is known concerning the population status of the species, and trade data is not well-documented. The records of trade made by authorities may not reflect the actual exports as many exports can be directly undertaken by using permits only from the local district government. It is also known that trans-border transaction is also in existence without permit.

2. Based on the consultation and recommendation from CITES Scientific Authority of Indonesia and The Ministry of Marine Affairs and Fisheries, and also from the discussion in the Workshop on the Conservation and Trade in Freshwater turtle and Tortoises, held in Kunming, China 25-28 March 2002 the CITES Management Authority Indonesia strongly supports the proposal of Germany to list *Heosemys spinosa, Heosemys yuwonoi, Orlitia borneensis,* into Appendix II and Indonesia is willing to be the co-proponents.

Thank you for your kind assistance.

Sincerely yours,

YAYA MULYANA
Acting Director of Biodiversity Conservation

Cc:
1. Minister of Forestry of Republic of Indonesia
2. Secretary General of the Ministry of Forestry
3. Director General of Aquaculture, Ministry of Marine Affairs and Fisheries
4. Director General of Forest Protection and Nature Conservation

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The Endangered Species Import and Export Management Office of the People's Republic of China

From: Meng Xianlin, Vice Director General
The Endangered Species Import and Export Management Office of the People's Republic of China (CITES Management Authority of China)
Fax: +86 10 84256388

To: Dr. Emonds, Mr. Heiko Huapt
Scientific Authority of Germany
Fax: +49 1888 3055 3225, 49 228 8491 119

Cc: Dr. Kurt Johnson
Chief, Division of Scientific Authority, Fish and Wildlife Service,
United States Department of the Interior
CITES Secretariat

Pages:

Subject: Co-sponsor the Draft Proposals on Asian Freshwater Turtle

Dear Dr. Emond and Mr. Heiko Haupt,

Its my pleasure to formally inform you that, having got the final approval from concerning national authorities on the freshwater turtle issues, China would like to co-sponsor all draft proposals on freshwater turtles prepared by Germany, including Heosemys spp., Leucocephalon yuwonoi, Mauremys annamensis, and Orlitia borneensis.

If US and Germany decide to package all the 11 proposals on freshwater turtles, China will also co-sponsor that package.

I wish the above information helpful.

Best wishes,

Fernschreibstelle BMU 03.06.2002
03. Juni 2002
Lfd.Nr.
NT3
10235

Sincerely yours,

Meng Xianlin
2002/6/3

P.S. Is it necessary for me to formally write to the Secretariat on our decision? Or you can just attach this letter when submitting the proposals? Please tell me which way is preferred.

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