Inclusion of Annam Pond Turtle *Annamemys (Mauremys) annamensis* in Appendix II. Proponent: China and Germany (on behalf of the Member States of the European Community).

Summary: The Annam Pond Turtle, Annamemys (Mauremys) annamensis, is a moderately large omnivorous freshwater turtle, reaching a maximum size of just under 30 cm, which is currently thought to be restricted to the marshes and slow-flowing streams of the Boung River drainage basin in central Viet Nam; its presence in Cambodia requires confirmation. No information is available on the biology of this species, but like other turtles, the annual reproductive rate is expected to be low and maturity late. The species is likely able to tolerate some habitat modification although this is still considered a threat, and it is not known to occur in any protected areas. It was reportedly abundant in the 1930s but recent field surveys have failed to locate any individuals in the wild. Collection for local consumption in the past, and more recently for sale to traders, is understood to be the main threat. The species is classified as Critically Endangered by IUCN. Although exports of wild animals from Viet Nam have been prohibited since April 2000, the species has since been observed for sale in China and in Hong Kong SAR, where 743 specimens were recorded between October 2000 and October 2001. Official trade statistics from the USA report imports of over 200 Annam Pond Turtles during 1997-2001. A small number of individuals are bred in captivity on Hainan Island, China. The proponents seek to include the Annam Pond Turtle in Appendix II in accordance with Article II. Resolution Conf. 9.24. Annex 2a criteria A and Bi) and Bii) on the grounds that if international trade is not strictly regulated the species will meet the criteria for inclusion in Appendix I in the near future and that harvesting of specimens from the wild will exceed, over an extended period, the level that can be continued in perpetuity and will reduce the population to a level where its survival would be threatened by other influences.

**Analysis** Following Resolution Conf. 9.24, available information suggests that the species meets the criteria for inclusion in Appendix II (Bi, ii). The population appears to be scarce and although recorded trade levels are not exceptionally high, they are likely to be unsustainable and to cause the species to be negatively influenced by other factors. It is reasonable to assume that if international trade is not strictly controlled, the species may meet the criteria for inclusion in Appendix I in the near future, if it does not already do so.

# Supporting Statement (SS) Additional information **Taxonomy** Synonyms: Cyclemys annamensis, Annamensis merkleni, Mauremys annamensis Range Based on current understanding of distribution and Viet Nam, possibly Cambodia biogeography, it is unlikely but not impossible that the species occurs in Cambodia; the area of highest likelihood would be the Annamite mountain area of extreme north-eastern Ratanakiri (TRAFFIC Southeast Asia, 2002). **IUCN Global Category** CR A1d +2d Listed as M. annamensis

#### Biological and trade criteria for inclusion in Appendix II

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

Based on the IUCN Red List decline rate used for categorising this species as CR, this species will/may already meet criteria Ci) now/in the near future. Although this species was abundant in the 1930s, recent field surveys have failed to locate any individuals in the wild.

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

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

The species is restricted to the marshes and slow-

Where this species was once seized more frequently,

# Supporting Statement (SS)

flowing streams of the plains of Quang Nam-Da Nang Province, effectively the basin of the Boung River drainage, Viet Nam.

As with many other turtle species, late maturity and a generally low reproductive output make them susceptible to over exploitation. The species was considered abundant within its restricted geographical range in the 1930s, however, recent field surveys have failed to locate any specimens in the wild. It is not known to inhabit any protected areas. Available information also indicates that much of the suitable habitat has been converted to rice paddies and irrigation canals and, whilst the species may be able to tolerate this, its close proximity to humans leads to extensive collection. In the past, collection occurred mainly for subsistence purposes, but in recent years, these turtles are more likely to be destined for the international food market in China and a smaller number are exported to the USA, south-east Asia and Europe for the pet trade. Trade levels are not exceptionally high, but extensive and consistent enough for serious concern.

Although export of all wild animals from Viet Nam has been prohibited since April 2000, specimens of *A. annamensis* have been observed in Chinese markets, and between October 2000 to October 2001, over 740 Annam Pond Turtles were seen for sale in markets in Hong Kong SAR. Trade statistics from the USA report the import of over 200 individuals during 1997-2001.

### Additional information

only a few specimens were seized in 1998 and 1999. This reduction, combined with loss of habitat and continued hunting pressures within its extremely limited known range, would suggest that A. annamensis is under serious threat of extirpation (Hendrie, 2000).

A. annamensis is not considered to have the same medicinal efficacy as other turtle species but is often sold as such, since very few traders or consumers are able to identify them accurately; these animals commanded prices of CNY 230-420 per Jin (= USD 60-105 per kg) in Guangzhou, China in October 2001 (van Dijk, 2002).

### Other information

### **Threats**

Habitat degradation and collection are considered the main threats to this species.

# Conservation, management and legislation

No population monitoring is known and no legislation specifically protects this species in Viet Nam.

A permit issued at the provincial level is required for trade. Export of all native turtle species has been prohibited from Viet Nam since April 2000.

A Turtle Conservation and Ecology project began in Cuc Phong National Park in 1998 (Anon., 2002).

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

### Similar species

A. annamensis can be distinguished from other species.

A. annamensis is sufficiently similar to Mauremys mutica (Chan, 2002, TRAFFIC East Asia, 2002) that turtle traders and breeders confuse the two species, and nonspecialists can easily confuse A. annamensis with any other Mauremys species, Ocadia sinensis, Chinemys reevesii, juvenile Hieremys annandalii or perhaps even Cuora amboinensis (Praschag, 2002; TRAFFIC Southeast Asia, 2002).

#### **Captive Breeding**

The species is bred in captivity on a commercial scale on Hainan Island (China) where at least 25 adults and 50 juveniles were recorded in October 2001, and occasionally bred in captivity in Europe, the USA and Hong Kong SAR.

In January 2001, 77 animals were held within the Asian

# Supporting Statement (SS)

### Additional information

Turtle Consortium in the USA and a further 54 animals were registered with European studbooks.

### Other comments

All participants of the Technical Workshop on Trade in Freshwater Turtles and Tortoises in Asia, Kunming, China, 25-28 March 2002, including representatives from range and non-range countries, supported this propos al.

Rhodin (2002) proposed that this species should be considered for inclusion in Appendix I or in Appendix II with a zero quota for exports from the wild.

The Cambodian Department of Fisheries treats the protection of turtles in Cambodia as a priority and is undertaking species inventories. Studies have not yet been extended to collect information on abundance and conservation management of turtles. The Department is reluctant to support the proposal without this information (CITES Management Authority of Cambodia, 2002).

Reviewers: P. Praschag, TRAFFIC East Asia, TRAFFIC North America, TRAFFIC Southeast Asia

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