

## Action Plan for the Conservation of the Giant Yangtze Softshell *Rafetus swinhoei*

Draft produced at the *Rafetus* Conservation Workshop,  
Suzhou, 20-21 September 2006

The Yangtze giant softshell (*Rafetus swinhoei*) is arguably the largest freshwater turtle in the world, and the most critically endangered. Little is known about the species ecology, but it is believed to have inhabited lakes and large river habitats in the lower Yangtze and the Red River, and perhaps in river basins between these two fluvial systems. Natural populations in China and Vietnam are now believed to be extinct or very close to extinction. Only five living captive specimens are known, four in China and one in Vietnam. This workshop was organized by the Office of Aquatic Fauna and Flora Conservation (OAFFC), Ministry of Agriculture, PRC, the Wildlife Conservation Society (WCS) and the China Zoo Association (CZA) in order to address the extraordinarily urgent need to develop a conservation program for this species in China.

The workshop was held at the Garden Hotel, Suzhou, Jiangsu Province on 20-21 October, 2006. The list of participants and the agenda are annexed.

In China, living specimens are known from:

1. The region of the Tai Hu lake in eastern China (N=3), held in captivity in two institutions in Suzhou, Jiangsu province, China.
2. The Red River basin in Yunnan Province, China (N=1) in the Shanghai Zoo. Another *Rafetus* from this area held in the Beijing Zoo died in 2005. Another specimen from this river basin is in Hoan Kiem Lake in urban Hanoi, Vietnam.

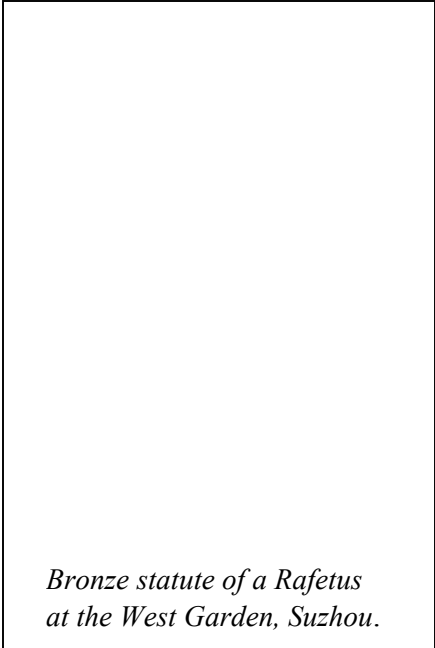
The only location where two *Rafetus* are held together is the West Garden, a well known Buddhist temple in Suzhou. However, there have been no reports of successful reproduction of these animals in recent years. Participants discussed the urgent need to

1. Develop a captive breeding program
2. Conduct surveys in areas where wild *Rafetus* may still remain
3. Conduct applied research in several important areas, and
4. Coordination of conservation efforts

Overall Program Coordination by Office of Aquatic Fauna and Flora Conservation,  
Ministry of Agriculture

Captive Breeding Program (coordination by Zhang Enquan, Beijing Zoo)

1. Turtles from Shanghai Zoo and Suzhou Zoo are brought together (in Suzhou) (2007). Priority actions include:



*Bronze statue of a Rafetus  
at the West Garden, Suzhou.*

- a. Determine the sex of the individual in the Suzhou Zoo
  - b. Creation of a *Rafetus* captive breeding technical team that will design plans for:
    - i. Improvements to Suzhou pool to house turtles and promote reproduction
    - ii. Seek input from turtle reproductive physiologists on how to get old turtles to start reproducing
    - iii. Plans for housing and husbandry of animals
    - iv. Plans for the introduction of the two animals into the same enclosure
    - v. Design of egg incubator and agreed upon egg incubation techniques
    - vi. Design for construction of juvenile rearing pens and husbandry
    - vii. Detailed plan prepared for how to transport animal with input from international experts with experience in this
    - viii. Recommendations for diet
  - c. Pool modifications completed (2007) (Requires permits?)
  - d. Animals captured, measured, sexed and
    - i. Health evaluations (ID who will do this)
    - ii. Tissue sample for genetic work (Chengdu Zoo)
    - iii. Transport of Shanghai animal to Suzhou and release (Suzhou and Shanghai Zoos)
  - e. Technical team assembled to periodically review program in Suzhou Zoo and WG
2. Facilities at the Western Garden (WG) are modified to provide optimal conditions for reproduction
    - a. Rafetus technical team develops detailed plans for
      - i. Modifications of WG ponds to improve possibility of nesting
      - ii. Improved diet of animals and other husbandry concerns
    - b. Plan presented to WG council
    - c. Goal is for
      - i. Immediate diet changes
      - ii. Creation of a nesting area by May 2007

Search for additional captive individuals (Coordination by CZA)

1. Guide to identification and clarification of common name (distinguish it from “*Yuen*”) to reduce confusion
2. Canvas zoos, parks-(has been done & is ongoing through CZA Parks- need to address facilities outside the Association such as Safari Parks- belong to Forest Bureau or Tourist Bureaus)
  - a. Make list of all zoos, parks, Safari Parks, etc facilities that might keep turtles (do by Province)
  - b. Contact each about large softshells
  - c. Follow up possible reports
3. Information to local fisheries offices

Wild Population Program (Coordination by WCS)

1. Surveys in Yunnan – Guizhou/Red River region
  - a. Develop proposal by Wen Cheng & Wang Jian
2. Surveys in Guangdong and Guangxi
  - a. Surveys by Shi Haitao group
3. Surveys in Tai Hu region
  - a. East China Normal University



Education Program (Coordination by WCS)

1. Volume of history & poems on Rafetus?
2. Publicity campaign for conservation

Research Program (Coordination by WCS)

1. Genetic/morphological evaluations of Red River vs Tai Hu animals
2. Collate historical records on distribution

Fund raising

1. International
2. National
3. Local (at WG) donations

Vietnam Coordination Program

Attach List of Participants