

# Studbook breeding programme

## CUORA MCCORDI

### MC CORD'S BOX TURTLE



Photo by Henk Zwartepoorte

## ANUAL REPORT 2007

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### **1. Introduction:**

Although the studbook breeding programme officially is an ESF studbook for several years and all relevant data regarding locations, births, deaths, transfers etc were registered by former studbook keeper Elmar Meier never a proper report was drafted and the data were never entered into a software studbook programme.

This situation was discussed with Elmar Meier during 2007 and finally consensus was found on taking over the studbook by Zwartepoorte. On my request and condition Elmar agreed to become co-studbook keeper.

December 21, 2007 all specimens present within to the collection of the Munster Zoo were photographed, numbered, weighed and measured. The same was done with the 4 Rotterdam Zoo specimens. Then all specimens were entered into the Sparks studbook software.

### **2. Studbook population:**

December 31, 2007 the total living studbook population counts 5.19.10 (34) specimens. Of these 34 specimens only 4.8 are certain wild caught specimens. These specimens originate from imports from China during the late 8ties and early 9ties.

Within the Munster group a further number of 1.5 captive born adult specimens are present, born out of 4 groups called the Reimanngroup, the Praedicowgroup, the Artnergroup and the Meiergroup. Dams and sires of these 1.5 are certainly wild caught but unknown.

Also present within the Munster collection are 10 unknown sex offspring born between 2004 and 2007. 7 specimens of these have a known dam and sire but certainly born out of 5 wild caught adults. In 2005 4 specimens born in 2004 at the Munster zoo were sent to the zoos of Rotterdam, Netherlands and Whipsnade, UK. The Rotterdam Zoo animals are females.

July 16, 2005 the Rotterdam zoo received two captive born specimens from private breeder Peter Valentin, Austria. These specimens are born out of wild caught specimens.

As 7 births occurred in mixed groups and proper administration of these births was not carried out properly the exact genetic composition of a part of the studbook population is uncertain.

Now all specimens are properly registered into the studbook but also in the Munster collection we are sure that this topic will improve from now on.

### **3. Locations:**

At present the whole studbook population is housed at 3 locations: the zoos of Munster, Rotterdam and Whipsnade.

### **4. Births:**

Between 2001 and 2007 22 specimens are born at 5 locations. 4 out of these 5 breeding locations are studbook participants at present. See for details the attached studbook.

### **5. Imports:**

As already mentioned above during the late 8ties and early 9ties 12 wild caught specimens were imported from China into Europe. All 22 captive born specimens now present in the three zoo collections are born out of the 12 wild caught specimens now present in the Munster Zoo as well as from an unknown number of wild caught dams and sires from the private collections Artner, Valentin, Praedicow, Meier and Reimann.

### **6. Deaths:**

During 2007 no deaths are reported.

### **7. Transfers.**

In 2005 four specimens (studbook numbers 20, 21, 31 and 32) are transferred from the Munster zoo collection to the zoos of Rotterdam and Whipsnade.

In 2005 two specimens were transferred from the private collection Valentin to the Rotterdam zoo. The dams and sires of these two are unknown. Valentin is not a studbook participant.

### **8. Discussion:**

The 4.8 wild caught founder stock of this studbook is rather small. The fact that not of all offspring dams and sires are known as they partly have been born in mixed groups during a period of time genetically healthy breeding was not a big issue, makes a good analysis of the group rather difficult. From this year on of all births exact data on dams and sires will be registered.

A further research will be carried out to find more studbook participants possibly keeping important wild caught specimens. Also exchange with the captive population in the USA will be investigated.. TSA globally considers this critically endangered species as a priority species. To our view the acquirement of captive born animals from non participating breeders must be considered. The studbook population must be increased drastically.

Within the studbook there is a shortage of males. The founder group of 4.8 is out of balance and so far almost all offspring is of the female sex. Just two births took place under exhibit conditions where temperatures were around 22 degrees C. The hope and expectance is that they will be males. This topic is also discussed within the ESF Cuora group last year with respect to the whole Cuora genus incubation.

The in situ status is under discussion. The species is never observed in the wild apart from the Chinese collectors. According the Red data book of China (1998) the species is only known from food markets. The estimated place of origin is the highlands of the Guangxi province, but was also apparently collected from the nearby Yunnan province (McCord and Iverson, 1991). It is estimated that the species is extinct in the wild. The species is protected by Cites 2 and listed by IUCN as critically endangered A1d+2d (2000).

#### **9. Activities planned for 2008:**

Drafting and publishing husbandry and breeding guidelines.

Research for additional studbook specimens.

Incubation temperature experiments with respect to producing males.

Improvement of the efforts exchanging specimens with TSA members in the USA.

Gathering and compiling of all relevant literature.

Completion of the studbook specimens photo archive.

Creating possibilities for reproduction at the other ESF studbook locations than the Muster zoo collection.

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