STUDBOOK BREEDING PROGRAMME

TESTUDO KLEINMANNI EGYPTIAN TORTOISE



Photos: Henk Zwartepoorte

Annual reports 2010-2012



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Studbook and Breeding Programme Egyptian tortoise Testudo kleinmanni

Annual reports 2010-2012:

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1.Introduction and activities 2010, 2011 and 2012.

After the first EAZA specimens entered the ESF studbook during the first part of the past decade in 2008 a second number of EAZA zoo specimens were transferred to the ESFstudbook. Cause for this was the arrival of 275 Libya originated confiscated animals in Italy entering into the EAZA Testudo kleinmanni European Endangered species Programme (EEP). These animals were confiscated in 2005 and were transferred from the Rome zoo to a number of EAZA institutions. These receiving EAZA zoos decided to donate their already present EEP animals of unknown origin to ESF to create room in their collections for the Libyan tortoises. The Libyan animals will be separately managed within the EEP in order to create an assurance colony from which in the future reintroduction into protected habitat in Libya is possible.

Over the past five years in total 23 ESF-participants received 51 specimens from EAZA institutions. . 6 EAZA institutions in 3 EU countries were involved in these transfers over the past five years. This not only benefits both the EAZA EEP studbook and the ESF-studbook but also shows that exchange of tortoises between the studbooks is possible and that cooperation and trust at both sides is established. Apart from these exchanges cooperation by an ESF-private in Berlin is achieved with the Berlin Zoo.

2. Studbook population:

December 31, 2012 the total registered studbook population counted 117.130.212 (459) specimens. Compared to the latest published studbook 2005/2006 in 2006 this is an an increase of 85 specimens. The living population however counts 89.106.173 (368) specimens indicating that 28.24.39 (91) died since the start of the studbook.

3. Locations:

December 31, 2012 the studbook counted 98 historical participants. The increase of this number was mainly caused by the large numbers of offspring that were transferred by breeding participants to new studbook participants. During 2012 4 new participants registered their animals as well. Over the past 5 years a number of participants stopped their participation due to no longer keeping the species or simply by cancelling participation. The present number of participants is 80.

These participants are divided over 11 EU countries: The Netherlands, Belgium, Germany, Austria, The United Kingdom, The Czech Republic, Finland, Hungary, Switzerland, Spain and Poland. This means an increase of 3 participating countries compared to the last annual 2006 report.

4. Births:

During 2010 at 7 locations 21 births are reported; 3 locations in the Netherlands, 1 in Belgium and 3 in Germany.

Over the years before 2010 a larger number of animals were born so during 2010 a decrease can be seen. This is partly caused by the fact that a few breeding couples or groups stopped producing fertile eggs but also because of the fact that a number of keepers/breeders did not report their births to the studbook. This last fact is very disappointing.

During 2011 at 4 locations 16 births are reported; 3 in the Netherlands and 1 in Belgium. During 2012 at 6 locations 29 births are reported; 5 in the Netherlands and 1 in Belgium.

An increase of captive breeding can be seen by an increasing number of studbook participants. This is a very positive development.



Photo 1

Hatchling

5. Imports:

There has been no legal imports into the European Union reported over the past few years. Imports into the studbook of course occurred considered as new entries. The arrival of the former EAZA EEP specimens can be seen as new entries into the studbook. The donating EAZA institutions can be found in the 2010 studbook as EAZA institutions are not blanked. During the past three years several animals have been "dropped" at ESF-boardmembers doors. These animals were reported to the CITESbureau. These animals are called "front door animals". This procedure is an agreement between the Dutch CITES authorities and ESF. Such animals become property of ESF and are placed within the ESF-studbook accompanied by an ESF-contract and as such are a very welcome contribution to the European captive breeding programme.

This procedure must be seen as an exception and certainly not as "an easy way to legalize illegal animals". The animals which are brought/left behind will never be placed at the location of the people who found the animals or offered them at the doorstep of one of the ESF-board members. Every "door step animal" will be critically judged by the studbook keepers as well as the CITES authorities. As legal new entries by new participants 9 animals were reported in 2010 by two keepers in Germany and Hungary. In 2011 7 animals by 3 keepers in 2 countries were reported. In 2012 10 animals were reported by 5 keepers in 3 countries.

6. Deaths:

During 2010 13 specimens died at 7 locations. The cause of death is either unknown or not reported to the studbook. A phenomena often seen is the sudden death of hatchlings or very young animals. Autopsies carried out on other dead animals of other species do not give a clear result. Suspected causes of death can be of a bacterial origin and sub optimal husbandry and nutrition can play a role in this. At one location 2 out of 11 born animals died shortly after birth. Of these 13 animals 9 were captive born, 3 were of unknown origin and 1 was a wild caught animal. During 2011 8 specimens died at 5 locations. 2 Of these 8 animals were captive born, 2 of unknown origin and 4 were wild caught.

During 2012 14 animals died at 11 locations. Of these 14 animals 7 were captive born, 3 were of unknown origin and 4 were wild caught.

7. Transfers:

During 2010 42 animals were transferred between ESF-privates, including the 10 ESF Belgium "front door animals" and another 6 confiscated "front door animals". Positive element within this "front door animals" agreement with the Dutch CITES authorities is the policy by the department of the ministry of Agriculture in the Netherlands dealing with confiscated animals (DR/IBG) to also donate confiscated tortoises to the ESF-studbooks after release from the juridical process. Also these animals are homed within the ESF-studbooks accompanied by a loan contract remaining ESF-property. During 2010 42 animals were transferred between 27 locations including ESF as a foundation. During 2011 7 animals were transferred between 10 locations.

During 2012 16 animals were transferred between 15 locations.

Not all these locations were studbook participants; some of them became participant through these transfers and some remained outside the studbook.

8.Discussion:

8.1 Breeding programme progress and involvement in general:

The donation of EAZA animals, the increase of captive breeding and the fact that more people realize that organized keeping and breeding of such delicate and critically endangered species within a studbook/breeding programme are the best possibilities for the future are causes for the growth of the studbook population and the increase of the number of participants.

Within the studbook the number of breeders now counts 15; an increase of 5 compared to the 2006 report. Compared to the number of 80 present and 98 historical participants this still is much too low. However an increase of breeding locations can be seen and a large number of new participants has started with captive born animals.

Important component and task of the studbook keepers is to guide the genetic health of the studbook population. With 459 specimens and 80 participants this will become more difficult within the near future. With this respect the involvement and commitment of the participants is vital and it is of upmost importance that transfers of captive born studbook animals is discussed with the studbook keeper before the transfers are carried out. Breeders must realize that advise by the studbook keeper is not a dictated law but an advice in the importance of the genetic health of the whole studbook population ensuring better options for the survival of the captive population.

8.2 The in situ component:

The status in the wild is still critically endangered despite the CITES-listing. In Egypt the species is virtually extinct while in Israel military movements and human settlements and in Libya illegal trade and export are ongoing factors for decline of the species in general.

In Egypt in the protected Zaranik Reserve however a recovery project is in progress already during several years instigated by Sherif and Mindy Baha El Din and Omar Attum (Attum, Baha El Din, Baha El Din, Habinan 2007). This project implies the involvement of local Sweirki Bedouin tribes into the protection and conservation of the species in that area. Sweirki people are trained to become ranger and as such acquire an income and a living (Zwartepoorte 2008). Below Sweirki rangers at work.



Photo 2



Photo 3



Photo 4

The fenced area in the Zaranik Reserve

Photo 5

Several large areas in the Zaranik reserve are fenced in order to protect suitable Testudo kleinmanni habitat. If enlarged photo 5 will show the square areas. These "reserves" are kept secret. Funds for this project are coordinated by the Indiana University in the USA (Omar Attum moved from the Purdue to the Indiana university). For additional funding in Europe but in particular in The Netherlands money is raised by the Dutch and Belgium Turtle and Tortoise Society (NBSV) and the European Studbook Foundation. The NBSV appointed the project two years in a row as her annual conservation project. Within ESF a new initiative was at the same time launched by co studbook keeper Rob Verhoeks. Some breeders did no longer sell their offspring but out placed them on a breeding loan basis within the studbook but also at new studbook participants; those new keepers paid a voluntary donation of 100 Euro per animal. ESF also received a donation in 2008 by HSN Steel Structures of 3500 Euro.

All these fund raising activities by NBSV and ESF resulted in 11500 Euro within just 3 years. For 2013 a visit to the Rotterdam Zoo is planned by a Bedouin Sweirki representative in order to gain skills regarding tortoise captive husbandry and breeding. Due to the present political instable situation in Egypt this was postponed several times and even now (August 2013) this visit is not sure.

8.3 Breeding results:

During the past few years by 15 studbook participants breeding results are reported. Next to this quit a large number of captive born tortoises are included into the studbook which are bred by non participants. These results show that reproduction in Europe in general is improving which is promising for the future of the studbook and the future of the species in captivity. Several breeding results are published by Bulsing (2008) and Verhoeks (2006) in the Dutch magazine Trionyx. Husbandry and breeding guidelines are in progress and will be published in 2014.

8.4 Nutrition:

In relation to husbandry nutrition is an important issue probably still neglected within the Egyptian tortoise keeping community. Within the German AG (Arbeits Gruppe) Kleinmanni since about a year information is gathered on this issue and during several occasions of this Group in Germany nutrition is discussed. This AG is very well led by Michael Rothe and communication within the group is improving fast.

Within the EAZA EEP an initiative is taken to collect samples of food plants in Israel in order to analyze those in a laboratory. An American volunteer working at the Jerusalem Zoo recently collected plants which will be analyzed in a laboratory in the USA. Results will hopefully shed some more light on specific nutritional needs of the tortoises. Investigated is also the option to carry out a similar collection and research on food plants in Egypt and Libya. With respect to this research and what the outcomes means for captive tortoises there is full cooperation from the Rotterdam Zoo nutritionist Joeke Nijboer.

Acknowledgement photos No. 1 Henk Zwartepoorte Nos. 2,3 and 4 Omar Attum No. 5 Google Maps

8.5 References and further reading:

ATTUM, O.; ESAWY, M.; FARAG, W.; GAD, A.; BAHA EL DIN, S. & B. KINGSBURY (2007): Returning them back to the wild: movement patterns of repatriated Egyptian tortoises.-Zoology of the Middle East ATTUM, O.; BAHA EL DIN, M.; BAHA EL DIN, S. & S. HABINAN (2007). Egyptian Tortoise Conservation: A Community-Based, Field Research Program Developed From a Study on a Captive Population .- Zoo Biology 26: 397-406 BAHA EL DIN, S. (2006): A Guide to the Reptiles and Amphibians of Egypt.- The American University in Cairo Press. Cairo, Egypt. 304 S. BAHA EL DIN, S. & O. ATTUM (2000): The Herpetofauna of Zaranik Protected Area, Egypt, with notes on their ecology and conservation. Herpetological Bulletin, 37: 17-21 BAHA EL DIN, S.; ATTUM, O. & M. BAHA EL DIN (2003): The status of Testudo kleinmanni and T. werneri in Egypt.- Chelonian Conservation, 4 (3): 648-655 Bulsing. P. (2008): Kweeksucces met Testudo kleinmanni Lortet 1883 en toch heel veel om over na te denken. Trionyx 6 (3): 54:64 and Trionyx 6(4): 86:101. BUSKIRK, J.R. (1985): The endangered Egyptian Tortoise, Testudo kleinmanni: status in Egypt and Israel, pp. 3-51. In MC KEOWN, S.; CAPARASO F. & K.H.PETERSON (eds.): Proceedings of the 9th International Herpetological Symposium on captive propagation and husbandry, Thurmont: Zoological Consortium Inc. Verhoeks, R.: (2006): De Eyptische landschildpad, lastig te houden. Trionyx 4(3) 70:79. Zwartepoorte, Henk (2007): Die Ägyptische Landschildkröte (Testudo kleinmanni) -Sehr beliebt und kritisch bedroht. DRACO Nr 32, Jahrgang 8 (2007-4). Zwartepoorte, Henk (2008): The Egyptian tortoise, Linking captive population management with wild population protection. TSA Newsletter August 2008.

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