

Studbook breeding programme

TESTUDO KLEINMANNI

(Egyptian tortoise)



Photos: Henk Zwartepoorte

Annual reports 2012-2013

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1. Introduction and activities 2012 and 2013:

While the last report also included 3 years (2010 until 2012) and as such a rather long time ago it makes sense to repeat the 2012 changes here and discuss the past two years 2012 and 2013 in order to achieve a better overview and create options for comparison.

Regarding births, deaths, transfers and newly entering animals quite a lot happened during the past two years. The agreement with the in situ recovery project in Egypt was prepared and planned. Communication and co operation with an American student at the Jerusalem zoo was established. Field research in the Sinai desert in Israel on the species and in particular its feeding behaviour was carried out.

2. Studbook population:

December 31, 2013 the total registered studbook population counted 134.140.231 (505) specimens showing an increase of 46 specimens compared to the latest report. In total 512 specimens are registered in the Sparks software program. This difference in number is caused by the fact that during the past 14 years of the existence of this studbook several studbook numbers have been deleted from the studbook.

The living population is, as always, much smaller than the registered total population. At December 31, 2013 the living population counted 99.104.174 (377) specimens. An increase of 29 specimens. This shows a constant growth of the studbook population which is mainly caused by the continuing breeding results by an increasing number of studbook breeders and the entering of new specimens bred outside the studbook by a number of known non participating breeders and a number of totally unknown breeders.

3. Locations:

December 31, 2013 eighty private keepers were participating. This number showed an increase during the past decade. These keepers/breeders lived in 12 countries; Germany, Belgium, United Kingdom, Hungary, Czech republic,

Poland, Sweden, Spain, France, Finland, Switzerland and the Netherlands. This number of participants is stable but it is worth to note that several people stopped participation and several new keepers entered the studbook.

Compared to the historical number of eighty nine participants a decrease can be seen of eighteen.

Although communication and commitment of the majority of people is good in general it must be mentioned here that out of the eighty participants twenty eight did not report the 2013 status of their collection animals to the studbook despite 3 reminders during the first 3 months of this new year.

This is a disappointing phenomenon and makes proper studbook keeping and coordination complicated and figures mentioned unreliable.

It will be considered to phase out a number of continuing participants next year. Non reliable numbers and information will blur the image of the studbook/breeding program. These non responding participants will be individually approached this year by the studbook with the question whether they want to remain participating or not.

4. Births:

During 2012 and 2013 at eight locations thirty two births are reported in 2012 and twenty three in 2013; 6 locations in the Netherlands, 1 in Belgium, 1 in the United Kingdom, 1 in the Czech Republic and 2 in Germany.

Interesting to report here are the numbers of breeders during the existence of the studbook.

The historical number is twenty four and with nineteen % of the participants this can be called significant.

Of this historical twenty four breeders thirteen proceeded breeding over the past two years.

An increase of captive breeding can be seen by an increasing number of studbook participants.

This is a very positive development.

From outside the studbook a significant number of captive bred animals arrived into the studbook. 10 private known breeders are involved and 6 EAZA zoos.



Photo 1 Hatchling

5. Imports:

No legal imported animals can be reported. The twenty one new arrivals into the studbook came from known breeders in Europe and from a number of unknown breeders.

6. Deaths:

During 2012 and 2013 twenty nine animals died. 7.3.5 (15) in 2012 and 4.6.4 (14) in 2013. Furthermore an additional number of 2.3.2 (7) dead animals were reported at 3 locations. These last 7 animals died before 2010 and were not reported “dead” earlier to the studbook. This is a disappointing fact and the slow participants within the studbook will be encouraged to respond more directly. As always the cause of death is often unknown. Quite frequently this species dies suddenly without any signs of disease. Suspected causes of death can be of a bacterial origin and/or sub optimal husbandry and nutrition can play a role in this as well. Deaths are reported of wild caught as well as captive born origin.

7. Transfers:

During 2012 and 2013 forty nine animals were transferred to other studbook participants. These were mainly captive born animals that moved to other participants in order to create new breeding possibilities or to rather beginning participants in order to form larger groups. Some even to new participants.

8. Discussion:

8.1 Breeding programme progress and involvement in general:

The donation of EAZA animals over the past decade, the increase of captive breeding and the fact that more people realize that organized keeping and breeding of such a 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 historical number of breeders now counts twenty four; an increase of 9 compared to the 2006 report..

Important component and task of the studbook keepers is to guide the genetic health of the studbook population. With 377 living 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 the utmost importance that transfers of captive born studbook animals is discussed with the studbook keeper before the transfers are carried out. This unfortunately is not always the case. Breeders must realize that advice by the studbook keeper is not a dictated law but an advice for the benefit of the genetic health of the whole studbook population ensuring better options for the survival

of the captive population. Along with the increasing ESF studbook population and an increasing number of captive born animals by an increasing number of unknown keepers the market price of the species is dropping. It seems that the interest for the species is decreasing along since the start of the studbook in the year 2000.

The establishment of a genetically healthy vital captive population, that may be used in the future as a source for reintroduction in the wild, is still an important aim of the studbook. Important aim for the near future is reproduction with so far non breeding preferably wild caught founder animals. The total captive capacity within Europe seems to have reached its limitations. An exact number of a desired and manageable studbook population seems to be around 750. Much is also depending on the reproductive development within the EAZA zoos European Endangered species Program (EEP).

In the course of this year it will be a point of discussion with a number of breeders whether future breeding is desired or not. The decision on this topic will be made at the end of this year.

8.2 A brief analyse:

The number of 100% certain wild caught founder animals is low. 8.17 (25) living animals are currently registered; of these 25 animals 2.8 (10) have reproduced over the past twenty years of the existence of the studbook. The number of deceased 100% certain wild caught animals is 15.15 (30); of these 30 dead animals only 3.1 (4) have reproduced over the past twenty years of the existence of the studbook. This means that only in total 5.9 (14) 100% certain wild caught founder animals have reproduced over the past twenty years. Fortunately and important to note here is that a much larger number of unknown origin animals is reproducing. The cause for this uncertain/unknown data is that a significant number of participants do not have a proper record keeping system or they simply did not know the origin of their animals at the moment of acquirement. These unknown factors makes proper analyses of the current status of the studbook population unreliable.

8.3 The in situ component:

The status in the wild is still critically endangered despite the CITES-listing and as such international protection. 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 in the northern Sinai desert 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, conservation

and recovery 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 fenced 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 (ESF). 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 per animal. During the past two years €2200 was raised by the transfer of twenty two animals within the studbook and to new participants through this agreement. All these fund raising activities by NBSV and ESF resulted in €12000 within just 4 years. For 2013 a visit to the Rotterdam Zoo was 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. The visit by Nature Conservation Egypt officer Basem Rabia Motwaly, who is

representing the Sweirki people, is now planned February 2014 and all hurdles are made. This visit is executed in the meantime and a separate report on this visit will be separately sent to all studbook keepers

8.4 Breeding results:

During the past two decades by 24 studbook participants breeding results were 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.

8.5 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 student 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 and Basem Rabia Motwaly

No. 5 Google Maps

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