

# **Studbook breeding programme**

## **GEOCLEMYS HAMILTONI**

Gray, 1831

**HAMILTON'S TERRAPIN**  
**BLACK POND TURTLE, BLACK SPOTTED TURTLE**  
**INDIAN SPOTTED TURTLE, SPOTTED BLACK TERRAPIN**  
**STRAHLEN – DREIKIELSCHILDKRÖTE**  
**GÉOCLEMYDE D' HAMILTON, TORTUE DE HAMILTON**  
**GÁLAPAGO RAYADO**  
**DRIEKIELSTRAALSCHILDPAD**



Photo by Harry J. Rotmans

## **ANNUAL REPORT 2012/2013**

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**E**uropean  
**S**tudbook  
**F**oundation

KvK nr. 41136106  
[www.studbooks.eu](http://www.studbooks.eu)

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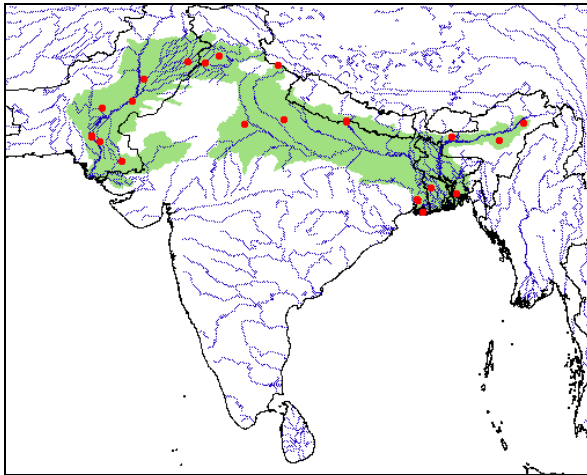
## 1. INTRODUCTION

The *Geoclemys hamiltoni* is still on the CITES Appendix I.

<http://www.cites.org/eng/app/appendices.php>

The status according to the IUCN Red List of Threatened Species, Version 2013.2 <http://www.iucnredlist.org/details/9029/0> is Vulnerable.

In the Indian Wildlife (Protection) Act the species is classified under Schedule I and in the Bangladesh Wildlife (Preservation) Act under Schedule III.



Distribution in the northern Indian subcontinent.

The threat to this species has several causes. First the bad situation in the natural habitats continues. Too much rain, tsunami, storm and agriculture expansion will destroy the nests on the riverbanks. The increased big floods of the riverbanks especially in Bangladesh are still disastrous for the nests. It's not to predict what the consequences of the global warming will be in the habitats in the future. Awareness of the environmental damage is an important step in the search for solutions.

Also smuggling out of the habitats and a substantial illegal trade in these protected animals still continues for food, Chinese medicines and international pet trade. The species is still observed on the food and trade markets in China (Chengdu, Qing Ping turtle, Yuehe and Chao Tou markets in Guangzhou, Shenzhen market, Tung Choi street market Hong Kong), Vietnam (Cau Mong market in Ho Chi Minh City, and Ha Tien market), Malaysia, Thailand (Chatuchack market) and Indonesia (Jakarta). <http://www.traffic.org/>  
<https://www.prowildlife.de/sites/default/files/Turtle%20report.pdf>  
<http://nytts.org/asianturtlecrisis.html>

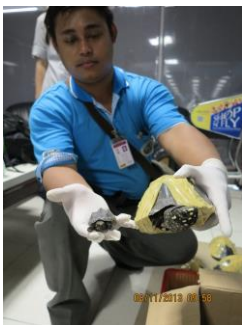
In India and Bangladesh tribal people rely on turtles as a source of food and as a source of income in the commercial trade with neighboring countries.

<http://www.wpsi-india.org/news/25012009.php>

Awareness of nature threats and seek for other food sources may contribute to the conservation of threatened plant and animal species.



Photo by unknown: left 2 specimen on the Chinese food market hanged in a net.



Confiscation in Thailand 2013



Confiscated *Geoclemys hamiltonii* (Black Pond Turtle) by the Royal Thai Customs in Bangkok, Thailand. Photo by Traffic, November 8, 2013



Photo by Sutthiwit Chayutvoraken, September 22, 2013

As far as has been inventoried in 2013 are in total 1247 young and adult smuggled turtles seized in Nara Canal, Sindh Province, Pakistan ; Railway station Kanpur, State of Uttar Pradesh India ; Tentulberia, West Bengal, India ; Tsuen Wan, Hong Kong, China ; Airport Bangladesh ; Suvarnabhumi Airport, Bangkok, Thailand.

1. <http://www.traffic.org/home/2013/11/12/royal-thai-customs-intercept-three-attempts-to-smuggle-torto.html>
2. [http://www.robindesbois.org/english/animal/ON\\_THE\\_TRAIL\\_3.pdf](http://www.robindesbois.org/english/animal/ON_THE_TRAIL_3.pdf)
3. [http://www.robindesbois.org/english/animal/ON\\_THE\\_TRAIL\\_2.pdf](http://www.robindesbois.org/english/animal/ON_THE_TRAIL_2.pdf)

## 2. NATURAL HISTORY

In 1993 Rotmans bred *Geoclemys hamiltoni* in captivity in Europe for the first time. Many years there was only one breeding pair in Europe. In the meantime there arose a large F2 generation in Europe.

In 1995 Lowry Park Zoological Garden Tampa USA had the first hatchlings.

In 2005 the studbook *Geoclemys hamiltoni* was enlarged with two adult couples of the Hong Kong SAR government and Kadoorie Farm and Botanic Garden of Hong Kong, China. These new bloodlines are very important in the studbook.

One of these adult pairs (adult numbers E and F) is placed at Artis Zoo, Amsterdam NL. This wild couple has laid eggs in 2011 for the first time in captivity. One hatchling was born on June 6, 2011. It means the following important landmark to build up a genetic healthy population in captivity of this species for the future in Europe.

The other adult pair (CD63) is placed with Cologne Zoo DE. This has 16 hatchlings produced. Unfortunately the male of this couple died. The female is thus moved to Leipzig Zoo, DE. Cologne Zoo then received four captive-bred animals of the former breeding pair CD63.



Photo by Henk A. Zwartepoorte



Photo by Harry J. Rotmans : 52 years old male B62

Also in 2011 there is a F2-generation in the EU countries and in Switzerland. This F2-generation is almost completely coming from the studbook primal breeding pair AB62. This F2-generation is not registered in this studbook.



Photo by Markus S



Photo by Christopher V. Anderson

### 3. STUDBOOK POPULATION

March 2014 in the Studbook *Geoclemys hamiltoni* are 280 animals registered:  
 12 adult wild genetic independent turtles: 6.6.0 animals (2 males are dead).  
 268 F1 hatchlings (19 are dead).

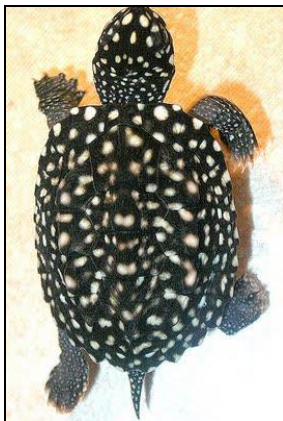


Photo by Marcelo López



Photo by unknown

The hatchlings were born in:

1993 - 6  
 1994 - 23  
 1995 - 40  
 1996 - 22  
 1997 - 30  
 1998 - 21  
 1999 - 31  
 2000 - 16  
 2001 - -  
 2002 - -

2003 - 20  
 2004 - 10  
 2005 - -  
 2006 - 36  
 2007 - 4  
 2008 - -  
 2009 - 8  
 2010 - -  
 2011 - 1  
 2012 - -  
 2013 - -

Because of the very many F1 hatchlings and the impossibility to keep those animals all in The Netherlands, most hatchlings has been transported in the past 15 years to other European countries and unfortunately go out of sight at a certain moment, so at this moment the sex of all these animals isn't always clear. Unfortunately not every studbook participant cooperates fully of his own accord.

#### **4. LOCATIONS**

March 2014 there are 40 locations registered:

Netherlands	- 17	Germany	- 8
United Kingdom	- 3	Bonaire	- 1
Italy	- 3	Austria	- 2
France	- 1	Czech	- 1
Sweden	- 2	Majorca	- 1
Spain	- 1		

Among all these locations are at this moment 10 zoos: 2 in the Netherlands, 1 in the United Kingdom, 1 in Corsica FR, 2 in Sweden and 4 in Germany.

In Spain participates 1 private breeding and study centre. This centre strive to become also a EAZA member.

#### **5. IMPORTS**

In 2012 and 2013 there has been no import in Europe of confiscated specimens from the wild in Asia.

In 2014 it is intended to place a number of confiscated turtles from the Hong Kong SAR government in Europe and to register in this studbook. For some specimens Chester Zoo UK and Emmen Zoo NL are also willing to place some of these animals in their reptile collection.

All these new bloodlines are very welcome.

#### **6. DEATHS**

In July 2013 one specimen, born in 2006, died. This was a F1hatchling from the adult breeding pair CD63.

#### **7. TRANSFERS**

In 2012 two young specimens AB62 were transferred between private locations in The Netherlands. Two young specimens CD63 were transferred from a private location in the Netherlands to a private location in the United Kingdom. All these F1 specimens are born in 2006. In 2013 there were no transfers.

## 8. DISCUSSION

In the experience of Rotmans and Artner it is not always necessary to separate the turtles by gender for successfully breeding this species, provided enough space (water and land) is absolute available. But like Artner rightly notices crowded conditions can lead to market aggression, especially by females against females. Rotmans experiences that *Geoclemys hamiltonii* females are usually more aggressive than males.

Young and semi-adult specimens can be kept together. But plenty of living space with some hidden potential is always important for all *Geoclemys hamiltonii*. However the lack of space is a hindrance for keeping adult specimen for many private turtle lovers.

There was a discussion about the swimming abilities of these turtles. They turn out to be no poor swimmers, but in captivity must be taken to ensure that the water level is maintained proportionate to the size of the animals.

Sufficiently high temperatures, high quality feeding and a reasonable quiet environment are decisive factors for successful breeding.

## 9. ACTIVITIES in 2014

1. Once again the aim is to enlarge a genetic healthy population in captivity of this species for the future in Europe. Therefore the breeding with the very old adults A62 and B62 is stopped in 2009 in connection with the very large number of hatchlings in the previous period.

2. It is very important that all other studbook breeding pairs from the wild in the Netherlands, Germany and the United Kingdom will produce hatchlings of these new bloodlines. At a later stage F1 hatchlings of these other adult pairs can be linked to the F1 captive-bred animals of the old breeding pair AB62. In this way, a genetically healthy population in Europe can be built up.

Therefore creating and improving zoo /private cooperation should be intensified. The Draft Memorandum of Understanding (MOU) between the European Studbook Foundation (ESF) and the European Association of Zoos and Aquaria (EAZA) 4 July, 2012 (Jointly working towards sustainable amphibian and reptile populations in human care - on a non commercial basis -) is a very good base for this cooperation.

3. Also keepers of *Geoclemys hamiltonii*, who do not participate until this moment in this studbook, are gladly invited to contact the studbook keepers. Important herewith is the determining of the genetic origin of their specimen.

4. It is planned to publish more information on keeping, housing and behaviour of the *Geoclemys hamiltonii*.

March 2014, the Netherlands,

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### **Organizations**

CONVENTION on INTERNATIONAL TRADE in ENDANGERED SPECIES of WILD FAUNA and FLORA (CITES), is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

<http://www.cites.org/>

INTERNATIONAL UNION for CONSERVATION of NATURE (IUCN), has as its central mission the preservation of biodiversity.

Biodiversity is fundamental to addressing some of the world's greatest challenges such as climate change, sustainable development and food security.

<http://www.iucn.org/>

## IUCN RED LIST

The IUCN Species Programme working with the IUCN Species Survival Commission (SSC) and many partners assesses the conservation status of species, subspecies, varieties, and even selects subpopulations on a global scale in order to highlight taxa threatened with extinction, and therefore promotes their conservation.

The IUCN Species Programme provides the world with the most objective, scientifically-based information on the current status of globally threatened biodiversity. The scientifically rigorous approach to determine risks of extinction that is applicable to all species, has become a world standard.

The plants and animals assessed for the IUCN Red List are the bearers of genetic diversity and the building blocks of ecosystems, and information on their conservation status and distribution provides the foundation for making informed decisions about conserving biodiversity from local to global levels. The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information on plants and animals that have been globally evaluated using the IUCN Red List Categories and Criteria.

[http://www.iucn.org/about/work/programmes/species/our\\_work/the\\_iucn\\_red\\_list/](http://www.iucn.org/about/work/programmes/species/our_work/the_iucn_red_list/)

TURTLE SURVIVAL ALLIANCE (TSA), is a recognized force in turtle and tortoise conservation globally and transforms passion for turtles into effective conservation action through a global network of living collections and recovery programs. <http://www.turtlesurvival.org/>

TSA - EUROPE,

<http://www.turtlesurvival.org/component/taxonomy/term/summary/26/7#.UzFmCGdOU5g>

TRAFFIC, the wildlife trading monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature.

The vision of the organization is of a world in which trade in wild plants and animals is managed at sustainable levels without damaging the integrity of ecological systems and in such a manner that it makes a significant contribution to human needs, supports local and national economies and helps to motivate commitments to the conservation of wild species and their habitats.

<http://www.traffic.org/>

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