

# Studbook breeding programme

## Indotestudo elongate

(Yellow-headed tortoise)



Photo: Henk Zwartepoorte

## Annual report 2011

**Henk Zwartepoorte, ESF studbook keeper**

**Wim Fontijne, ESF co studbook keeper**



European  
Studbook  
Foundation

KvK. Nr. 41136106

[www.studbooks.eu](http://www.studbooks.eu)

## **Contents:**

- 1. Introduction and activities 2011**
- 2. Studbook population**
- 3. Locations**
- 4. Births**
- 5. Imports**
- 6. Deaths**
- 7. Transfers**
- 8. Discussion**
- 9. References**

### **1. Introduction and activities 2011:**

“Since the arrival of more endangered and rarer species such as *Geochelone elegans*, *Astrochelys radiata*, *Geochelone platynota* the somewhat more old fashioned species such as *Geochelone carbonaria*, *Geochelone denticulata* and *Indotestudo elongata* are no longer that popular among hobbyists as one or two decades ago. This is a serious development. If commercial motives are going to play a role in the hobby sector the private sector is on the wrong track.

With these words I opened” the annual report 2010 and I am afraid that this situation did not change in the meantime. Therefore I thought it would be wise to repeat these words. Although the studbook population can be considered as stable participation by EAZA institutions and involvement in conservation of this species by them the situation is decreasing. Due to the European financial crisis a number of zoos decided to move this species from their collections. Several animals are put on the EAZA available and wanted list as surplus or are reported to me personally as surplus and as such as available. The international turtle trade for human consumption in Asian countries however is ongoing and new sources from countries within the range of the species are found where either consuming tortoises by humans occur or export to China. Therefore the establishment of an assurance colony is of most importance in order to save the species from extinction is more vital and needed than ever.

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

December 31, 2011 the total reported number of living studbook specimens was 35.49.116 (200).

The total historically reported animals were 44.57.143 (244) animals.

### **3. Locations:**

December 31, 2011 the species was kept at 39 locations in 9 different countries (Netherlands, Belgium, England, France, Germany, Spain, Denmark, Poland, Czech Republic.).

Within these 39 collections 5 EAZA zoos are included; Vissensbjerg, Tregomeur, Wroclaw, Plzen and Rotterdam.

#### **4. Births:**

During 2011 2 births are reported at the location Martinez in Spain.

#### **5. Imports:**

During 2011 two new specimens are reported; according the Sparks software these must be considered as new imports or entries to the studbook.

#### **6. Deaths:**

During 2011 no deaths have been reported.

#### **7. Transfers:**

During 2011 4 animals between two participants have been transferred.

#### **8. Discussion:**

##### **8.1 Morphology within the studbook:**

Large numbers of tortoises have been exported from various countries within the original habitat since the past four decades. As trade routes are not exactly known outside the international trade world the origin of the exported specimens is unknown of the majority of the shipments.

This original range recognizes a variety of habitats ranging from semi arid areas to sub tropical and tropical forests and climates ranging from dry to humid conditions. Over the past decade there are signs that at least different morphological forms exist within the whole original range of the species. The specimens present within the studbook differ in size from 20+cm to 30+ cm, color and shape. In order to breed genetically as healthy as possible and preventing cross breeding of different forms it is one of the priority aims within the studbook to assess these different forms. The action to obtain a clear picture of all studbooks specimens announced in the annual reports 2009 and 2010 last year will be executed this year. The cooperation of all studbook participants keeping founder animals will be approached this year.

During the history of the ESF studbook 17 studbook specimens have been listed in the Sparks overview as Lost To Follow Up (LTF) indicating that these specimens simply disappeared. In the majority of the cases there were further reports by the keepers or they disappeared for other mysterious reasons. 28 specimens died during this same period of which 11 concerned captive born

studbook animals indicating 17 concerned either unknown origin or wild caught animals. During 2012 another 6 specimens at two locations possibly will be removed from the studbook. This is a sad situation but with new entries and births during the past few years and a total living population of 200 specimens this studbook/breeding program must be considered as viable and stable. The fact that during 2011 no deaths were reported and during 2010 and 2011 12 animals were born is a very positive one.

## **8.2 Activities planned for 2012:**

1. Drafting of all available literature and references.
2. Questionnaire to all participants regarding nutrition and growth.
3. Updating the sex ratio of the 116 unknown sexed specimens within the studbook.
4. Investigation and assessment of the different morphological types within the studbook.

## **9. References: collected and kindly made available by Hans Dieter Philippen.**

- Anonymus (1994): *Indotestudo elongata elongata* (Blyth, 1853). – Terra, 30(8): 121–122.
- Antenbrink-Vetter, S. & H. Vetter (1996): Schildkröten-Lexikon: Asiatische Landschildkröten  
*Indotestudo* Lindholm, 1929. - Schildkröten, 3 (3)
- Basile, I.A. (1989): Faszinierende Schildkröten - Landschildkröten. - Stuttgart (Verlag Stephanie Naglschmid), 143 S.
- Berg, (1916): Seltene Landschildkröten (*Testudo platynota* und *Testudo elongata*). - Blätter Aqu. Terr. Kde., 27: 86–88
- Blitz, C.I.R. (1994): Kweek, huisvesting en verzorging van *Geochelone elongata* (Geelkoplandschildpad) [Herpetoculture, housing and care of *Geochelone elongata* (elongated tortoise)]. – Terra, 30(5): 75–79
- Blyth, E. (1853): Notices and descriptions of various reptiles, new or little known. – J. Asiatic Soc. Bengal, 22(7): 639–655
- Bour, R. (1980): Essai sur la taxinomie des Testudinidae actuels (Reptilia, Chelonii). – Bull.Mus. Nat. Hist. nat. Paris, (4) A(2): 541–546
- Bour, R. (1984)[1985]: Les tortues terrestres géantes des îles de l’Ocean Indien Occidental:

données géographiques, taxinomiques et phylogénétiques. – *Studia Geologica Salmanticensia*, Vol. Especial 1. *Studia Palaeochelonologica*, 1: 17–76

Calmonte, A. (1971): Die Gelbkopf-Landschildkröte *Testudo elongata* Blyth, 1853. – *Aqua Terra*, 8(12): 122–124

Crumly, C.R. (1982): A cladistic analysis of *Geochelone* using cranial osteology. – *J. Herpetol.*, 16(3): 215–234

Crumly, C.R. (1984)[1985]: A hypothesis for the relationship of land tortoise genera (family Testudinidae). *Studia Geologica Salmanticensia*, Vol. Especial 1. *Studia Palaeochelonologica*, 1: 115–124.

Das, I. (1991): Colour guide to the turtles and tortoises of the Indian subcontinent. – R&A Publ., Portishead. iv + 133 pp + 16 pl.

Das, I. (1995): Turtles and tortoises of India. – Oxford University Press, Bombay. x + 176 pp + 16 pls.

Das, I., B. Dattagupta & N.C. Gayen (1998): History and catalogue of reptile types of the Zoological Survey of India. – *J. South. Asian nat. Hist.*, 3(2): 121–172

David, P. (1994): Liste des reptiles actuels du monde. I. Chelonii. – *Dumerilia*, 1: 7–127

Eberling, G. (2001): Haltung und Vermehrung der Gelbkopfschildkröte, *Indotestudo elongata* (Blyth, 1853). – *Elaphe* (N.F.), 9(2): 2–10

Eberling, G. (2005): Beobachtungen bei der Aufzucht von *Indotestudo elongata* (Blyth, 1853). – *Schildkröten im Fokus*, 2(3): 3–12

Farkas, B. (1999): Wat Prayunrawongsawar. – *Emys*, 6(3): 27–29

Furrer, J. (1981): Nachzucht bei *Testudo elongata*. – *DATZ*, 34(12): 438–439

Gad, J. (1994): Die Ultrastruktur der Eischalen von *Geoemyda spengleri*, *Indotestudo elongata* und *Sacalia bealei* (Testudines). – *Salamandra*, 30(4): 277–280

Groombridge, B. & L. Wright (1982): The IUCN Amphibia-Reptilia Red Data Book. Part 1-Testudines, Crocodylia, Rhynchocephalia. – IUCN, Gland, (4) + xiii + 426 pp.

Grossmann, W. (1997): Zur Carapaxgröße der Gelbkopf-Landschildkröte *Indotestudo elongata* (Blyth, 1853). – *Sauria*, 19(2): 7–10

Gruber, U. (1998): Die Schildkröten auf dem indischen Subkontinent. – *Schildkröten*, 5(1): 3–12

Harvan, M. & H. Artner (2004): Nachzucht der Gelbkopf-Landschildkröte *Indotestudo elongata*

- Blyth, 1853 in menschlicher Obhut. – *Emys*, 11(6): 25–32
- Hoogmoed, M. S. & C. R. Crumly (1984): Land tortoise types in the Rijksmuseum van Natuurlijke Histoire with comments on nomenclature and systematics (Reptilia: Testudines: Testudinidae). – *Zool. Mededel. Rijksmus. Van Natuurl. Hist. Leiden*, 58(15): 241–259.
- Kuchling, G. (1995): Turtles at a market in western Yunnan: Possible range extensions for some southern Asiatic chelonians in China and Myanmar. – *Chelonian Conservation and Biology*, 1(3): 223–226
- Lilley, G. (1995): Some chelonia of Indonesia. – *Reptilian*, 3(2): 18–24
- Lindholm, W.A. (1929): Revidiertes Verzeichnis der Gattung der rezenten Schildkröten nebst Notizen zur Nomenklatur einiger Arten. – *Zool. Anz.*, 81: 275–295
- Loveridge, A. & E.E. Williams (1957): Revision of the African tortoises and turtles of the suborder Cryptodira. – *Bull. Mus. Comp. Zool., Harvard*, 115(6): 163–557
- Meier, E. (2000): Die unglaubliche Vielfalt der asiatischen Schildkröten. – *Reptilia*, 5 (2): 18–25
- Moll, E.O. (1989): *Indotestudo elongata*. S. 116–117. In: Klemens, M. & I.R. Swingland (Hrsg.): *The conservation biology of tortoises*.
- Müller, G. (1987): *Schildkröten*. - Stuttgart (Eugen Ulmer Verlag), 214 S.
- Müller, V., Schmidt, W. (1995): *Landschildkröten*. - Münster (Natur und Tier - Verlag), 191 S.
- Obst, F. J. (1980): *Schildkröten*. - Leipzig - Jena - Berlin (Urania-Verlag), 64 S.
- Obst, F. J. (1988): *Die Welt der Schildkröten*. - Leipzig (Edition Leipzig), 235 S.
- Platt, S. G., S. T. Khaing, W. K. Ko and Kalyar. 2001. A tortoise survey of Shwe Settaw Wildlife Sanctuary, Myanmar, with notes on the ecology of *Geochelone platynota* and *Indotestudo elongata*. – *Chelonian Conservation and Biology*, 4(1):172–177
- Pritchard, P.C.H. (1979): *Encyclopedia of turtles*. – T. F. H. Publ., Neptune, N.J., 895 pp.
- Rogner, M (1996): *Schildkröten 2*. –Heidi-Rogner-Verlag, Hürtgenwald, 265 S.
- Ross, C. A. & C. R. Crumly. 1982. A range extension of *Geochelone elongata*. – *J. Bombay Nat. Hist. Soc.*, 79(2): 429–430
- Sanz, A. & J. Valverde Feliciano (2002): Captive breeding of the Elongate Tortoise *Indotestudo elongata*. – *Reptilia (GB)*, (20): 43–47

Schlegel, H. & S. Müller (1840): Over de Schildpadden van den Indischen Archipel., en beschrijving eener nieuwe soort van Sumatra. S.: 29–36. – In: C. J. Temminck (Ed).: Verhandelingen over de natuurlijke geschiedenis der Nederlandsche Overzeesche Bezittingen, 1839-44. Part 3. Zoölogie, Schildpadden. –Luchtmans & van den Hoek, Leiden  
Valentin, P. (2000): Das Ende asiatischer Schildkröten? Die Lebendtiermärkte Südostasiens. – Reptilia, Münster, 5(2): 30-33

June 1, 2012.

Henk Zwartepoorte, species coordinator and studbook keeper

-----