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Hermann Ansorge

Senckenberg Museum of Natural History Görlitz, hermann.ansorge@senckenberg.de

Uwe Fritz

Dresden Museum of Zoology


Khayankhyarvaa Terbish

National University of Mongolia

Setev Shar

National University of Mongolia

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“*Agrionemys kazachstanica terbishi*” or the two-faced Mongolian steppe tortoise¹

H. Ansorge, U. Fritz, Kh. Terbish & S. Shar

Abstract

Although no extant native turtle and tortoise species is known to occur in Mongolia, a new subspecies of the Central Asian tortoise was described by Chkhikvadze under the name *Agrionemys kazachstanica terbishi* in 2009. The description was based on a mummified tortoise kept in a museum collection. Since then the Mongolian steppe tortoise has been considered as an endemic taxon *Testudo horsfieldii terbishi* (Chkhikvadze, 2009) for Mongolia.

However, there is no evidence for the occurrence of any wild tortoise species in Mongolia, even in the putative area of origin of the type specimen. The closest confirmed occurrence of Central Asian steppe tortoises is about 500 km away from Mongolia. Moreover, since 2010 the type specimen disappeared from the museum collection. Yet, there are several clues that the specimen in question was brought from Kazakhstan about 10 years ago to live as a pet in a yurt of a Mongolian nomadic family. Therefore, the recently described subspecies should be regarded as a “*nomen dubium*” and *T. horsfieldii* should be deleted from the faunal list of Mongolia.

Key words: *Testudo horsfieldii terbishi*, nomen dubium, Mongolia

1. Introduction

Turtles and tortoises have played an important role in Mongolian culture for ages, long time before the Tibetan Buddhism (TAUBE & TAUBE 1983). In general, turtles are symbols for longevity, wisdom and power. These iconic animals are involved in many established customs, e.g. the multi-colored turtle – a game with sheep anklebones – as a symbol for the richness of a family (IDSHINNOROV et al. 2006). Traditional Mongolian legends tell about a golden turtle that carry the golden world on its carapace. Often the large sculpture of a tortoise represents the foundation of a stele or a pillar, like in the symbol of Karakorum (fig. 1; NOWGORODOWA 1980, CHKHIK-VADZE & TERBISH 1988).

Turtles and tortoises are highly appreciated in Mongolia, although no extant native species is known to occur in the country. Even the recently published species list, red list and conservation action plans for Mongolian reptiles do not recognize any native tortoise species (TERBISH et al. 2006 a, b).

Completely contradicting to this general knowledge, a new subspecies of the Central Asian tortoise *Agrionemys kazachstanica terbishi* Chkhikvadze, 2009 was described from Mongolia (CHKHIK-VADZE 2009). Since then, Mongolia has been considered as a tortoise harbouring country, most notably by the IUCN Turtle and Tortoise Specialist Group (RHODIN et al. 2010). Therefore, since 2010 the authors tried to clarify the status of the “Mongolian steppe tortoise” which results are presented in this paper.

¹ Results of the Mongolian-German Biological Expeditions since 1962, No. 317.



Fig. 1: The stone tortoise of Karakorum from the 13th century (photo: H. ANSORGE).

2. Do extant turtles occur in Mongolia?

Already in 1995, the Mongolian and the Georgian herpetologists Terbish and Chkhikvadze discussed the possible occurrence of four turtle and tortoise species in their publication “Do turtles recently inhabit Mongolia?” and concluded that one or the other could occur there indeed (TERBISH & CHKHIKVADZE 1995).

In older Soviet publications, the Chinese softshell turtle (*Pelodiscus sinensis*) was considered to occur in Eastern Mongolia (TERENT'EW & CHERNOV 1949). However, BANNIKOV et al. (1977) did not mention the species for this region. Although the hydrogeographical and climatic conditions of the Mongolian part of the Amur basin seems to be suitable for the species, there are no records except subfossil remains, rather north of Mongolia (TERBISH & CHKHIKVADZE 1995). The next recent records of *P. sinensis* are about 500 km distant from Mongolia (BOBROV 2000).

Another turtle suspected by TERBISH & CHKHIKVADZE (1995) to occur in Mongolia belongs to a genus of snapping turtles (*Chelydropsis*), considered as extinct since the Pliocene at least 2.5 million years ago (DANILOV 2005). Nevertheless, TERBISH & CHKHIKVADZE (1995) reported that Palaeolithic stone drawings of Southern Siberia and Mongolia show, according to their interpretation, “snapping turtles”. Apart from this, they mentioned a single observation of a medium-sized turtle with a long tail by a Russian palaeobotanist at the Tuin-gol in 1986. This led to the idea a species of the genus *Chelydropsis* survived in Mongolia. However, thorough search in this region was not successfully (TERBISH & CHKHIKVADZE 1995).

The same authors found and examined several mummified carcasses of the Chinese pond turtle *Mauremys reevesii* in the yurts of local families and in collections of the museums of Khovd and Bajankhongor. These turtles should originate from massive imports from China during the first decades of the last century. TERBISH & CHKHIKVADZE (1995) speculated that the Chinese

pond turtle once occurred in central and western Mongolia, still in historical time, but there is no proof evidence.

Moreover, in 1990 two living steppe tortoises were found in Khovd sum (district centre) independently in two yurts of the local families (TERBISH & CHKHIVADZE 1995). According to some morphological characters, the two tortoises could belong to the subspecies *T. h. kazachstanica* described by CHKHIVADZE (1988). Obviously the tortoises were imported from Kazakhstan or even from Moscow pet shops (TERBISH & CHKHIVADZE 1995). However, TERBISH & CHKHIVADZE (1995) did not exclude the occurrence of this subspecies in the border area of western Mongolia, although the next records of the steppe tortoise are about 500 km away in northwestern China (FRITZ et al. 2009).

3. The case of the Mongolian steppe tortoise

After the above-mentioned record of steppe tortoises in Mongolia approximately 14 years ago, the Georgian herpetologist Chkhikvadze described a new subspecies of the Central Asian steppe tortoise from Mongolia in the Turkmenian journal “Problems of Desert Development” (CHKHIVADZE 2009). The description of *Agrionemys kazachstanica terbishii* subspec. nov. was based on a mummified tortoise kept in the museum collection of the former Pedagogical Institute of Khovd city (province centre), now the Khovd University (fig. 2). This is probably one of the steppe tortoises mentioned above because the time and the locality are identical. Although the collector of the type specimen Kh. Terbish suggested that the tortoise may have been brought from Central Asia to Mongolia and adapted here, the describer V.M. Chkhikvadze was convinced of its native Mongolian origin.

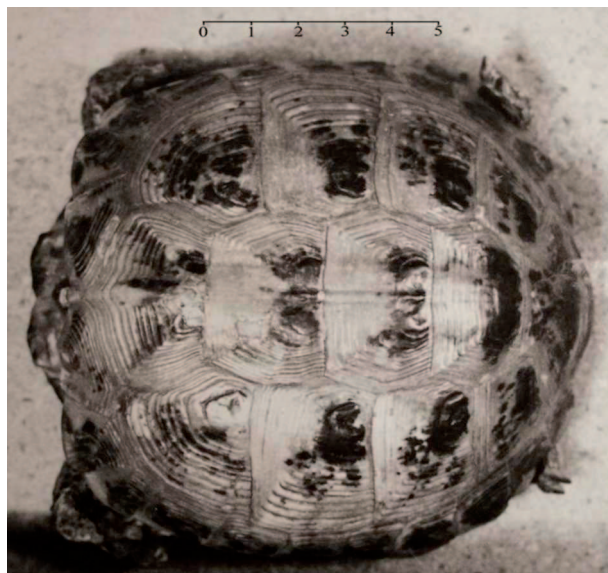


Fig. 2: Lost holotype of *Agrionemys kazachstanica terbishii* in the museum collection of the Pedagogical Institute of Khovd City (photo: Kh. TERBISH).

In the present study, we adopt the view that *Agrionemys* is a junior synonym of *Testudo* (FRITZ & BININDA-EMONDS 2006) and, consequently, treat the taxon in question below as *T. h. terbishii* (Chkhikvadze, 2009). Since the description of *T. h. terbishii*, the Mongolian steppe tortoise has been considered as an endemic taxon in Mongolia. There are currently more than one-thousand hits for the species in combination with Mongolia in the World Wide Web, and even official IUCN publications include now Mongolia into the species range (RHODIN et al. 2010).

To clarify the origin of this tortoise, we tried to examine the type specimen in the museum collection of Khovd City and to take a tissue sample for genetic comparisons. However, first efforts by S. Shar and Kh. Terbish failed because in October 2010 the type specimen could not be located in the collection anymore.

During our field work campaign of 2010, we visited the putative type locality of *T. h. terbishi*, the Dzungarian Gobi in the southern part of the Khovd district (fig. 3). Besides our own searches, local nomads and national park rangers were interviewed about the possible presence of tortoises. Although they know very well the different reptile species of this desert steppe region, they have never seen or heard about wild tortoises.



Fig. 3: The Dzungarian Gobi – the putative type locality of *T. h. terbishi* (photo: H. ANSORGE).

Neither the herpetologist Kh. Terbish himself nor other Mongolian or foreign zoologists found any evidence of wild-living tortoises in Mongolia. It is very unlikely that introduced species can survive in this extremely continental climate. On the other hand, mummified turtles of different taxa or their carapaces are used as talismans by nomadic families in their yurts to protect against evil spirits. In a similar manner, the skins of hedgehogs or feathers of the eagle owl are used. It is possible to buy mummified tortoises at the “black market” of the capital Ulaanbaatar.

Finally, in the opinion of the Mongolian herpetologist and collector of this tortoise, Kh. Terbish, the specimen in question may have been brought from Kazakhstan to live in a yurt of a local nomadic family in south-western Mongolia for more than 10 years. The family got the tortoise alive, but they did not know anything about its origin. The closest proven occurrences of Central Asian steppe tortoises are in the Xinjiang province in north-western China and in Kazakhstan, about 500 km away from Mongolia.

4. Conclusions

The type specimen of the Mongolian steppe tortoise has been lost. There is no evidence for wild native tortoises in Mongolia, and their presence seems to be very unlikely. Therefore, the recently described subspecies *Testudo horsfieldii terbishi* (Chkhikvadze, 2009) should be regarded as a “nomen dubium”, meaning a “doubtful name”, and allocated to the synonymy of *Testudo horsfieldii* Gray, 1844. The name exists, but there is no species or animal behind it and Mongolia should be excluded from the distribution of the species.

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Addresses:

Hermann Ansorge*
Senckenberg Museum of Natural History Görlitz
Am Museum 1
D-02826 Görlitz
Germany
e-mail: hermann.ansorge@senckenberg.de

Khayankhyarvaa Terbish
Setev Shar
National University of Mongolia
School of Biology and Biotechnology
Ulaanbaatar-210646
Mongolia

Uwe Fritz
Senckenberg Natural History Collections Dresden
Museum of Zoology
Königsbrücker Landstraße 159
D-01109 Dresden
Germany

* Corresponding author



Session of zoological reports during the symposium, speaker: Prof. Dr. Hermann Ansorge (Senckenberg Museum, Görlitz); in front: Prof. Dr. Vlamimir N. Bolshakov (RAS, Ekaterinburg), Oliver Lindecke (MLU Halle), behind: Prof. Dr. Scott L. Gardner (Lincoln, University of Nebraska).