

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Erforschung biologischer Ressourcen der Mongolei
/ Exploration into the Biological Resources of
Mongolia, ISSN 0440-1298

Institut für Biologie der Martin-Luther-Universität
Halle-Wittenberg

2005

Beaver Research in the Uvs Nuur Region

Michael Stubbe

Martin-Luther-Universität

N. Dawaa

National University of Mongolia

R. Samjaa

National University of Mongolia, rsamjaa@yahoo.com

Annegret Stubbe

Martin-Luther-Universität, annegret.stubbe@zoologie.uni-halle.de

A. P. Saveljev

Allrussian Research Institute of Game Management and Fur Farming

See next page for additional authors

Follow this and additional works at: <http://digitalcommons.unl.edu/biolmongol>



Part of the [Asian Studies Commons](#), [Biodiversity Commons](#), [Desert Ecology Commons](#), [Environmental Sciences Commons](#), [Nature and Society Relations Commons](#), [Other Animal Sciences Commons](#), [Population Biology Commons](#), [Terrestrial and Aquatic Ecology Commons](#), and the [Zoology Commons](#)

Stubbe, Michael; Dawaa, N.; Samjaa, R.; Stubbe, Annegret; Saveljev, A. P.; Heidecke, D.; Sumjaa, D.; Ansorge, H.; Shar, S.; and Ducroz, J.-F., "Beaver Research in the Uvs Nuur Region" (2005). *Erforschung biologischer Ressourcen der Mongolei / Exploration into the Biological Resources of Mongolia, ISSN 0440-1298*. 125.
<http://digitalcommons.unl.edu/biolmongol/125>

This Article is brought to you for free and open access by the Institut für Biologie der Martin-Luther-Universität Halle-Wittenberg at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in *Erforschung biologischer Ressourcen der Mongolei / Exploration into the Biological Resources of Mongolia, ISSN 0440-1298* by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Authors

Michael Stubbe, N. Dawaa, R. Samjaa, Annegret Stubbe, A. P. Saveljev, D. Heidecke, D. Sumjaa, H. Ansorge, S. Shar, and J.-F. Ducroz

Erforsch. biol. Ress. Mongolei (Halle/Saale) 2005 (9): 101–106

Beaver research in the Uvs Nuur region¹

M. Stubbe, N. Dawaa, R. Samjaa, A. Stubbe, A.P. Saveljev, D. Heidecke, D. Sumjaa, H. Ansorge, S. Shar & J.-F. Ducroz

Abstract

In 1985, 1988, and 2002 *Castor fiber birulai* was introduced to the Tes Gol of the Uvs Nuur basin in North-western Mongolia. The beavers migrated through the Republic of Tyva and settled in the middle part of Tes Gol near the Tyvinian-Mongolian border. About 10 colonies were recorded in this region in 2002. Strict protection of *Castor fiber birulai* has to be ensured in Mongolia and the Republic of Tyva in future.

Keywords Beaver, *Castor fiber birulai*, Tes Gol, Mongolia, Tyva, management, introduction, nature conservation

Introduction

The history of research on the autochthonous Central Asiatic beaver population at the river Bulgan Gol in the Dzungarian Gobi of South-western Mongolia has previously been summarized by Bannikov (1954), and Stubbe & Dawaa (1983). Serebrennikov described the new subspecies *Castor fiber birulai* from Bulugun (synonym to Bulgan Gol) in 1929, and Hilbig & Schamsran (1977) characterized the vegetation of this region. In 1973 first studies on this beaver population commenced, and in 1974/75 and 1978 beavers caught at the Bulgan Gol were brought to the Khovd Gol in West Mongolia, where the newly established population increased remarkably (Stubbe et al., 1991; Uhlenhaut et al., 1977).

In the 1980s beaver research in Northwest Mongolia at Tes Gol continued and extended also to the Azas State Nature Reserve in the Republic of Tyva/Russia in South Siberia between 1999 and 2004 (see figure 1). In 1969 Lavrov described the new subspecies *Castor fiber twinicus* from the Azas river. Furthermore, a new method of live catching was established with great success (Saveljev et al., 2003). The history of research on the Tuvinian beaver *Castor fiber twinicus* was summarized by Saveljev et al. (2000). Some morphometric data for the Asiatic subspecies were published by Stubbe et al. in 2003.

First explorations for the introduction of the Central Asiatic beaver *Castor fiber birulai* in the Uvs Nuur region began in 1984 by N. Dawaa, M. Stubbe, R. Samjaa, and A. Stubbe in co-operation of the Universities of Halle/Saale (Germany) and Ulaanbaatar (Mongolia) (figure 2).

The main goal was to assess the suitability of geographic conditions and vegetation at Tes Gol in Uvs and Zavkhan Aymag. The river has its source in Bulnaj nuruu (Northern Khangay) of Khövsgöl Aymag and crosses the northern part of Zavkhan Aymag, the south of the Republic of Tyva in the Russian Federation (about 100 km linear distance) before returning to Mongolian territory at Uvs Aymag, and subsequently flowing into the north-eastern part of Uvs Nuur basin.

Results & Discussion

One of our principal aims was the introduction of this subspecies in an isolated Central Asian hydrogeographic basin in order to protect the valuable gen-pool of *Castor fiber birulai*. Under this scheme expeditions to the Bulgan Gol in the Dzungarian Gobi, where the autochthonous

¹Results of the Mongolian-German Biological Expedition since 1962, No. 243.

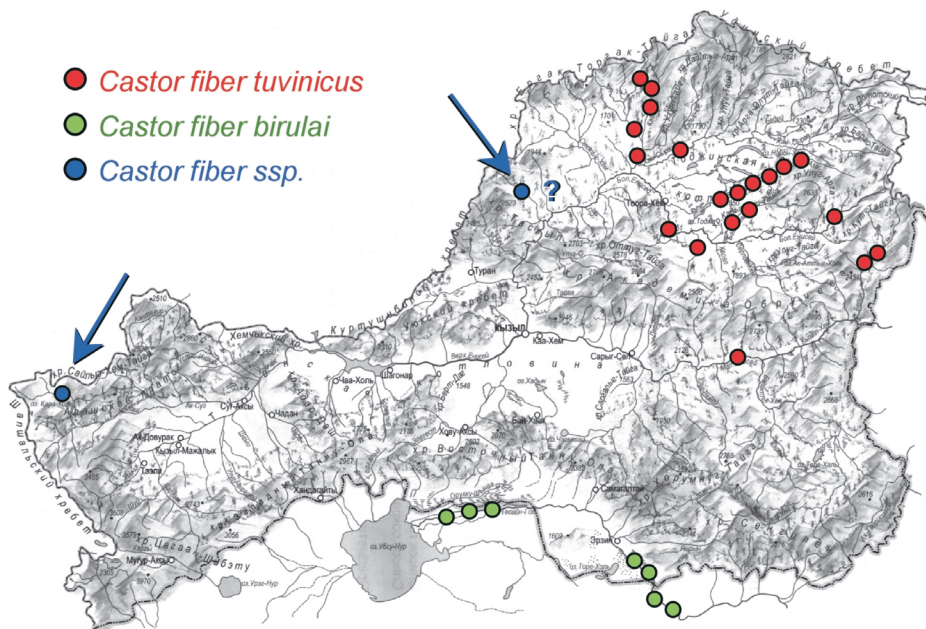


Figure 1: Distribution of *Castor fiber* in the Uvs-nuur region and in Tyva Republic.

subspecies still lives at Mongolian and Chinese territory, started in 1985 and 1988. During these expeditions 10 and 19 beavers, respectively, could be trapped alive and were transferred to the lower course of Tes Gol in Uvs Aymag.

After release, the major part of the introduced beavers at Tes Gol migrated from the Uvs Aymag through Tyva Republic (Russian Federation) to the middle part of Tes Gol downstream from Tes Sum in Zavkhan Aymag. The first beaver record from this part of the river near the Tuviniian-Mongolian border was made by the Mongolian botanist Tsendeekhuu from the National University Ulaanbaatar and dates back to 1990.

For the following years only very limited information is available, partly because planned winter expeditions to the lower part of the Tes river were not successful (figures 3 & 4). But in the end of the 1990s and the beginning of the new century the existence of beaver colonies in the eastern border region of Tyva and Mongolia at Tes Gol was reported.

In August 2002 a new beaver expedition was started in order to stabilize the population at Tes Gol. From Bulgan Gol we brought another 8 beavers to the Uvs Nuur basin. At the end of this expedition we made an inventory of beaver activity along the Tes river. 67 km of the river between the Sums Tes and Bajan-tes did not show any signs of beaver activity. Therefore, presently beavers can only be found in an area about 20 km downstream from Tes Sum up to the border (data gathered in co-operation with local people). In late summer 2002, it was impossible to collect sufficient data for estimating the total population size. However, we think that on Mongolian territory currently there are no more than 5 to 6 beaver colonies. At the same time our Russian colleagues studied suitable beaver biotopes in the tuviniian region near the Mongolian border and noted some 3 or 4 burrows.

The beaver population may be threatened by illegal hunting, but sufficient data on this as well as on the reproduction rate in this region are still lacking. Therefore, a public campaigning for the protection of this unique beaver subspecies in the Uvs Nuur region in Mongolia as well as in Tyva is necessary.



Figure 2: Beaver habitats at Tes-gol in the Uvs-nuur-region, above right: Prof. Dr. R. Samjaa and the ranger for nature conservation of the Somon Bulgan/Aimag Chovd with *Castor fiber birulai* (2002).



Figure 3: Winter expedition to the Tes-gol region in January 2004. On horses: left N. Batsajchan, middle R. Samjaa.



Figure 4: Beaver activities at the Tes-gol in winter, above feeding place (*Salix spec.*), below beaver's lodge.

References

- Bannikov, A.G. (1954): Mammals of the Mongolian Peoples' Republic. Academija Nauka, Moscow. [In Russian]
- Hilbig, W. & Schamsran, Z. (1977): Beitrag zur Kenntnis der Vegetation im Chovd Aimak (Mongolische Volksrepublik). *Archiv für Naturschutz und Landschaftsforschung* 17: 35–82.
- Lavrov, L.S. (1969): Novyj podvid bobra (*Castor fiber*) s istokov eniseja. *Zool. Žurnal* (Moskva) 48: 456–457.
- Saveljev, P.A., Stubbe, M., Stubbe, A. & Unžakov, V.V. (2000): Zur Historie der Erforschung des Tuvinischen Bibers *Castor fiber tuvinicus* Lavrov, 1969. *Beiträge Jagd- und Wildforschung* 25: 247–263.
- Saveljev, P.A., Unžakov, V.V., Stubbe, M., Stubbe, A. & Vasin, A.M. (2003): Die sibirische Methode zum Lebendfang von Bibern. In: *Methoden feldökologischer Säugetierforschung 2*. Edited by: Stubbe, M. & Stubbe, A. Halle/Saale: 321–328.
- Stubbe, A., Stubbe, M., Saveljev, A.P. & Unžakov, V.V. (2003): Der Lebendfang als Grundlage für Wachstumsanalysen und Morphometrie von Körpermaßen in autochthonen Biberpopulationen. In: *Methoden feldökologischer Säugetierforschung 2*. Edited by: Stubbe, M. & Stubbe, A. Halle/Saale: 329–347.
- Stubbe, M. & Dawaa, N. (1983): Akklimatisation des Zentralasiatischen Bibers – *Castor fiber birulai* Serebrennikov, 1929 – in der Westmongolei. *Erforschung biologischer Ressourcen der MVR* 2: 3–92.
- Stubbe, M., Dawaa, N. & Heidecke, D. (1991): The Autochthonous Central Asiatic Beaver Population in the Dzungarian Gobi. In: *Mammals in the Palaearctic Desert*. Moscow: 258–268.
- Uhlenhaut, K.; Stubbe, M.; Piechocki, R.; Dawaa, N. (1977): Der Lebendfang des Flußbibers *Castor fiber* L., 1758. *Archiv für Naturschutz und Landschaftsforschung*: 211–222.

**Michael Stubbe¹, Annegret Stubbe¹
& D. Heidecke²**

Institute for Zoology
Martin-Luther-University Halle-Wittenberg
Domplatz 4
D-06099 Halle/Saale, Germany

¹ stubbe@zoologie.uni-halle.de

² heidecke@zoologie.uni-halle.de

N. Dawaa, R. Samjaa³ & D. Sumjaa

Department of Zoology
Faculty of Biology
National University Ulaanbataar
Post-box 348

Ulaanbataar 210646, Mongolia

³rsamjaa@yahoo.com

A.P. Saveljev

Allrussian Research Institute of Game Management and Fur Farming
Kirov, Russia

H. Ansorge

State Museum of Natural History
Post-box 425
D-02806 Görlitz, Germany

S. Shar

Branch of National University of Mongolia in Khovd

J.-F. Ducroz

UFZ-Centre for Environmental Research
Leipzig-Halle

Department of Community Ecology
Theodor-Lieser-Straße 4

D-06120 Halle/Saale, Germany