

Status of the Przewalski's horse population in the Great Gobi B Strictly Protected Area in SW Mongolia in 2012

P. Kaczensky, O. Ganbaatar & N. Altansukh



Photo: P. Kaczensky

January 2013

1. Population size and composition

By the end of 2012 the Przewalski's horse population in the Great Gobi B Strictly Protected Area (SPA) consisted of 73 animals in 4 harem groups, 2 bachelor groups and one mare group at the acclimatization facilities in Takhin Tal. There may be another 4 stallions, but their presence could not be confirmed for sure and thus they were given the status "missing" (Fig. 1, Table 1).

In horse year 2012/13 fifteen foals were born of which 13 survived until the end of December. Furthermore, eight Przewalski's horses were brought into the population from captive facilities. Four stallions were transported entirely by truck from the Jimsar breeding center in adjacent Xinjiang province in China

(http://www.savethewildhorse.org/media/index/1205_TAKHITRANSPORT.pdf). Another four mares were flown in from Czech Republic to Bulgan, Khovd province and subsequently transported by truck to Takhin Tal

(http://www.mzv.cz/ulaanbaatar/en/business_and_trade/czech_development_cooperation/pr/ceska_republik_a_rozsiruje_populaci.html).

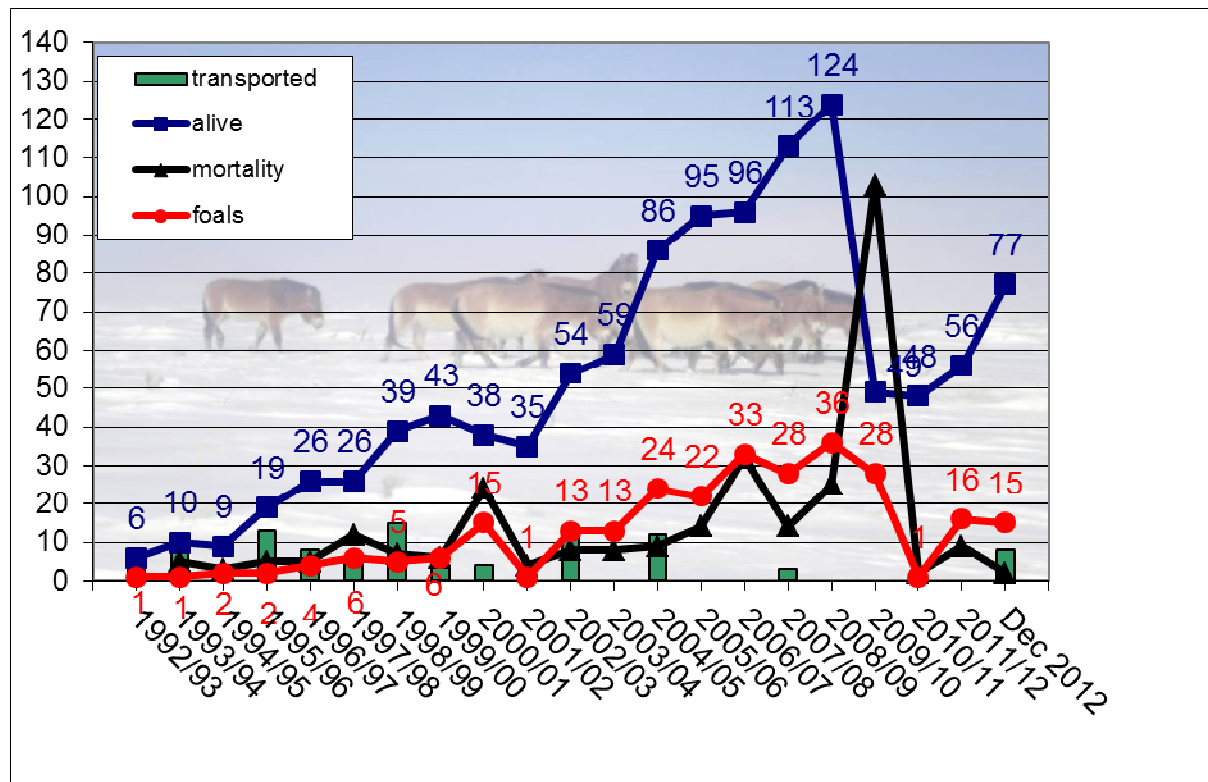


Fig. 1: Development of the Przewalski's horse population in Great Gobi B SPA, SW Mongolia.

Table 1: Structure of the Przewalski's horse population in Great Gobi B SPA, SW Mongolia at the end of December 2012.

Name	Sex	ZB-Nr.	Birth date	Origin*	Arrival TT	Dam	Sire
Aaza group							
Azaa	stallion	4529	21.05.05	Gobi B		3230	3069
Zuram	mare	4234	02.06.02	Karlsruhe (D)	10.06.2004	2638	2397
Huvhar	mare	4383	06.06.04	Gobi B		2141	1818
Tsovoo	mare	4398	16.06.04	Gobi B		2398	1818
Mazaalai	stallion	5769	09.05.11	Gobi B		4234	4529
Tsesen	stallion	5779	12.05.11	Gobi B		4398	4529
Zuram foal - Bozlog	mare	T123	27.04.12	Gobi B		4234	4529
Tsovoo foal - Tsoglog	mare	T124	04.05.12	Gobi B		4398	4529
Huvhar foal - Khanhohii	stallion	T125	04.05.12	Gobi B		4383	4529
Bundan group							
Bundan	stallion	4404	02.07.04	Gobi B		3391	2911
Imj	mare	2748	02.08.94	Schwerin (D)		1436	1236
Dorothee	mare	3230	06.06.99	Tachin Tal		3035	2503
Maral	mare	3387	23.05.00	Tachin Tal		3038	2363
Oroo	mare	3755	24.05.02	Gobi B		2787	1818
Saran	mare	3823	09.04.03	Tachin Tal		2645	2363
Buman	mare	4503	29.04.05	Gobi B		2748	3069
Sooton	stallion	4593	08.10.05	Tachin Tal		2948	3055
Khatan	mare	4751	21.05.06	Gobi B		3230	3069
Erhsaran	mare	5017	03.06.07	Gobi B		3084	3166
Setgel	mare	5148	20.05.08	Gobi B		2948	2363
Suld	mare	5160	01.06.08	Gobi B		3823	3166
Osokhoo	stallion	5504	14.08.10	Gobi B		4503	3166
Huder	stallion	5753	04.05.11	Gobi B		3230	4404
Tanan	stallion	5866	14.06.11	Gobi B		4751	4404
Oroo foal - Salhich	mare	T122	27.04.12	Gobi B		3755	4404
Dorothee foal - Amgai	mare	T131	13.06.12	Gobi B		3230	4404
Maral foal - Argai	mare	T132	16.06.12	Gobi B		3387	4404
Erhsaran foal - Songuuli	?	T133	18.06.12	Gobi B		5017	4404
Imj foal - Oswald	stallion	T134	24.06.12	Gobi B		2748	4404
Saran foal -							
Uranshuvuu	mare	T135	05.07.12	Gobi B		3823	4404

Nomkhon group							
Nomkhon	stallion	3717	07.05.02	Gobi B		2141	1818
Od	mare	2645	23.04.94	Prag (CZ)		1847	1135
Kherlen	mare	3391	26.05.00	Tachin Tal		3035	2363
Mandal	mare	3758	26.05.02	Gobi B		2940	2866
Holog	mare	4561	30.06.05	Gobi B		2398	1818
Taniya	mare	5018	30.07.07	Gobi B		4234	3361
Otgonbor	mare	5038	15.06.07	Gobi B		2398	1818
Tamir	stallion	5782	13.05.11	Gobi B		3758	3717
Goyhaliun	stallion	5818	20.05.11	Gobi B		5018	3717
Emeelzeg	mare	5835	27.05.11	Gobi B		4561	3717
Handgai	stallion	5872	17.06.11	Gobi B		3391	3881
Otgonbor foal -							
Tengeriinhuleg	stallion	T126	06.05.12	Gobi B		5038	3717
Holog foal - Huselt	mare	T128	26.05.12	Gobi B		4561	3717
Od foal - Argamag	stallion	T129	27.05.12	Gobi B		2645	4404
Mandal foal - Biger	?	T130	11.06.12	Gobi B		3758	3717
Shandast group							
Shandast	stallion	4856	01.09.06	Gobi B		3301	3055
Zur	mare	3301	06.06.99	Köln (D) / WPL (GB)	10.06.2004	1022	1852
Shandas	mare	3312	11.06.99	Ahaus (D) / WPL (GB)	10.06.2004	2948	1852
Zolboo	mare	3811	19.10.02	Stuttgart (D)	10.06.2004	1767	2480
Tolbo	mare	3807	30.06.02	Wien (A)	10.06.2004	2173	2444
Nergui	mare	3708	26.04.02	WPL (GB)	10.06.2004	2018	2805
Mandhai	mare	3730	13.05.02	Winterthur (CH)	10.06.2004	1897	1742
Audi	mare	4688	09.04.06	Gobi B		3047	3055
Altai	mare	4690	16.04.06	Gobi B		3312	3055
Suvd	mare	4778	30.05.06	Gobi B		3807	3055
Shuudan	mare	5055	25.06.07	Gobi B		3807	3055
Surguuli	mare	5190	01.07.08	Gobi B		3708	3055
Altaisayan	mare	5201	15.07.08	Gobi B		3807	3055
Angarag	mare	5470	21.05.09	Gobi B		3708	3055
associated with this group and competing with Shandast							
Khaan	stallion	5054	25.06.07	Gobi B		3312	3055
Bachelor 1 group							
Aptek	stallion	5161	01.06.08	Gobi B		3047	3055
Khovd	stallion	4963	11.05.07	Jimsar (CN)	23.05.2012	1251	1662
Tumee	stallion	4986	19.05.07	Jimsar (CN)	23.05.2012	2997	3015
Oidov	stallion	5094	06.09.07	Jimsar (CN)	23.05.2012	4107	3311
Chimbaa	stallion	5301	02.05.08	Jimsar (CN)	23.05.2012	3001	3015

Bachelor 2 group							
Doroo	stallion	4356	27.05.04	Gobi B		3375	3066
Erhes	stallion	4932	03.05.07	Tachin Tal		2786	2363
Mogoi	stallion	4961	11.05.07	Tachin Tal		2586	2363
Ugalz	stallion	5120	05.05.08	Gobi B		3758	3750
New mares at TT enclosure							
Tsagaanaa	mare	5341	07.06.08	Doebritzer Heide (D)	19.07.2010	2958	2928
Boroo	mare	5372	03.05.09	Doebritzer Heide (D)	19.07.2010	2638	3852
Bulgan	mare	4943	05.05.07	Hutweide Lüneburg (D)	19.07.2010	2187	3107
Alag	mare	5719	01.06.09	Dobrejov (CZ)	19.07.2010	3251	2324
Missing							
Tairshir (Hubsugul)	stallion	3055	29.04.97	Winterthur (CH)		1320	1374
Zegst	stallion	4352	25.05.04	Gobi B		3332	1818
Bars	stallion	4511	09.05.05	Gobi B		3430	3069
Ynzagahan	stallion	4855	25.08.06	Gobi B		3811	3055

* Takhin Tal = born in enclosure, Gobi B = born in the wild

2. Spatial organization

From January to December rangers located the different Przewalski's horse groups 476 times on 152 days (or on average once every 2.4 days). The different groups and the occasional single individuals roamed over two distinct areas, one of 153 km² in the west around the Takhi us oasis and one of 1603 km² in the east along the lower Bij river watershed (Fig. 2). There appears to be little or no contact between the horses in the two areas. Within the two areas, the ranges of the different horse groups overlap quite largely (Fig. 3).

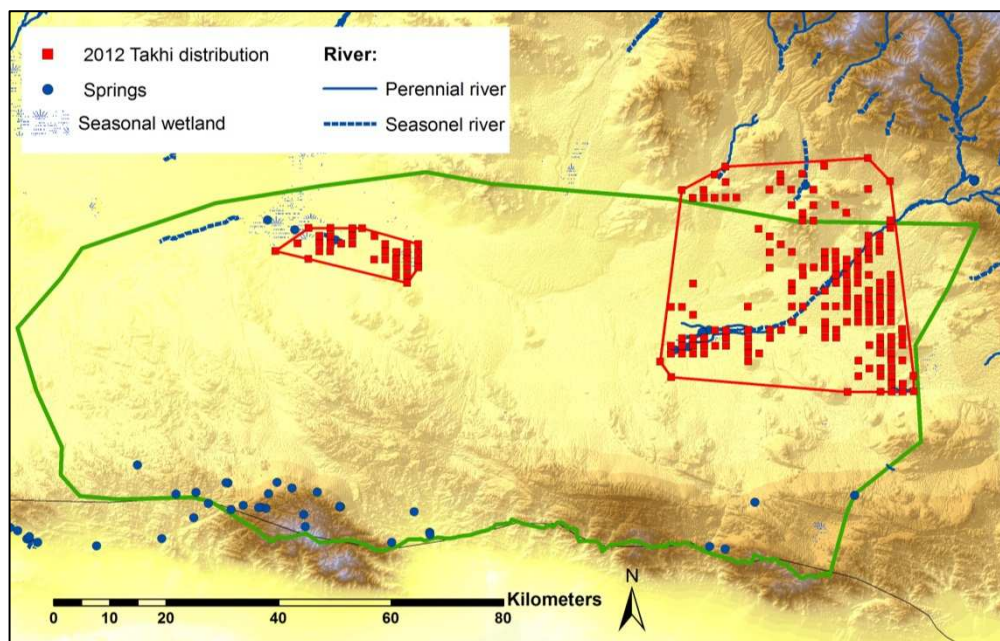


Fig. 2: Spatial distribution of the Przewalski's horse groups in Great Gobi B SPA, SW Mongolia in 2012.



Shandast / Khaan group in the west.

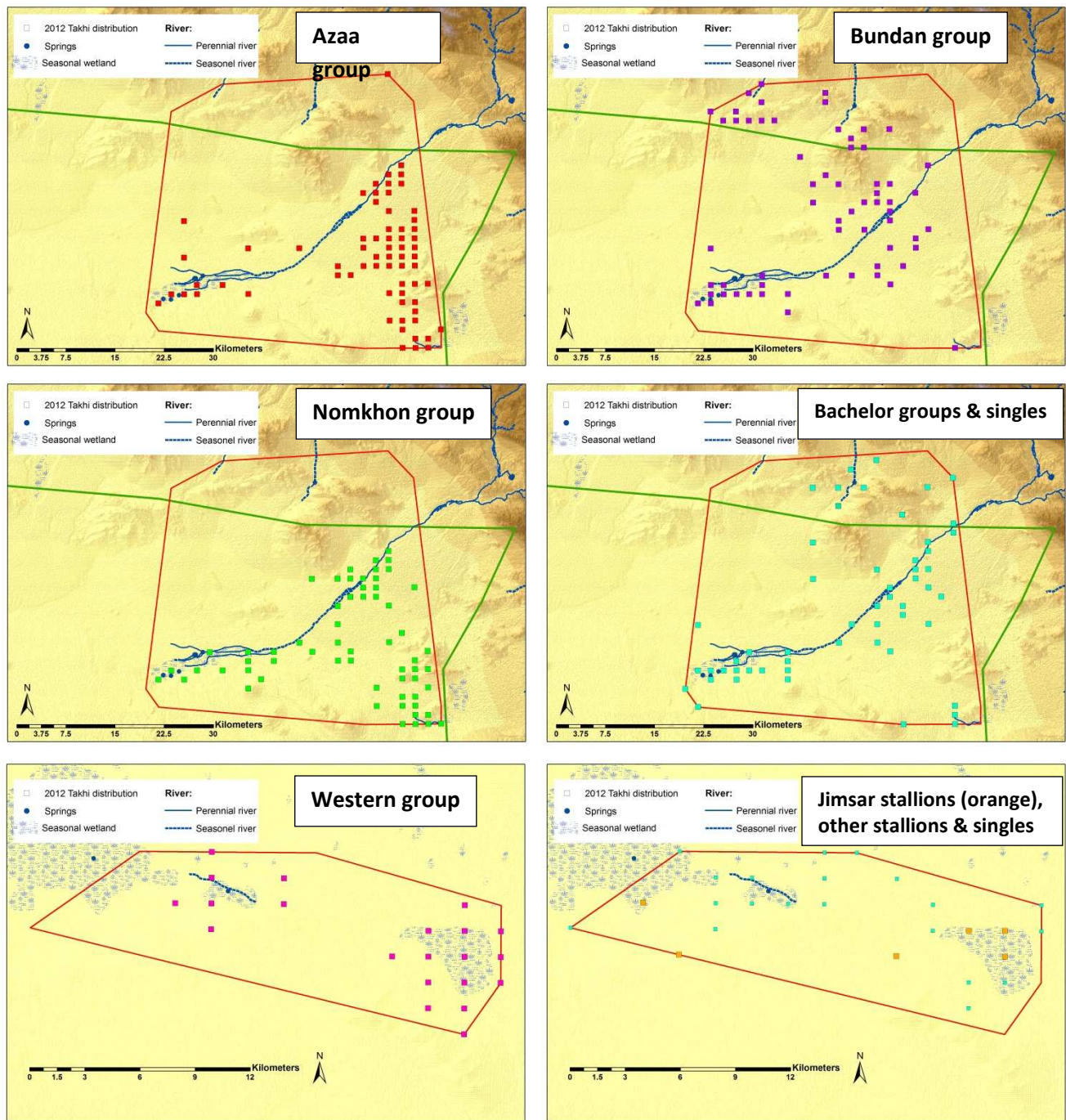


Fig. 3: The ranges of different Przewalski's horse groups in Great Gobi B SPA, SW Mongolia in 2012. [In the west, stallion Hubsugul first lost some and eventually all of his mares to his son Shandast, who in turn lost his mares to stallion Khaan, but was able to reclaim the mares again in December- thus we summarized the different groupings under the term "western group".]

3. Wildlife monitoring

From 24-28 November Ganbaatar, Galbadrah, Altansukh, and Baast conducted a 833 km, 5-day wildlife monitoring trip covering the entire park. Weather conditions were not ideal as it was foggy during parts of the first and second day. Nevertheless, the survey did provide some basic data on wildlife and livestock distribution within the park. Rangers saw relatively few khulan and gazelle groups and these were mostly in the western part of the SPA (Table 2, Fig. 4).

Species	N groups	N animals
Khulan	6	67
Gazelle	29	274
Takhi	2	21
Argali	1	1
Wolf	1	2
Fox	2	2
Eagle	1	2
Sheep and goats	4	720
Horse	10	197
Cow	4	111
Camel	6	61

Table 2: Number of groups and number of individuals of wildlife / livestock seen during the wildlife monitoring trip in November 2012.

[Please note these numbers are raw sampling data and do not represent population estimates!!!]

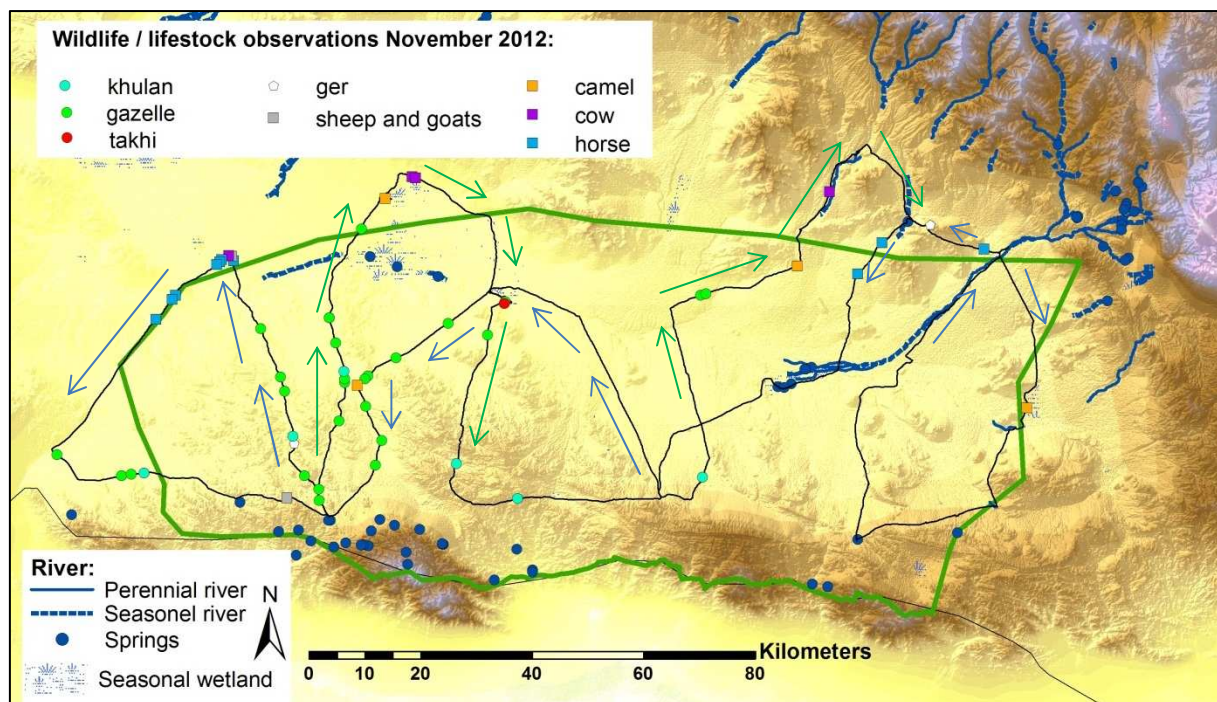


Fig. 4: Distribution of wildlife and livestock observations during the wildlife survey in November 2012.

The adapted survey track tries to more evenly cover the entire park and now also extends further to the west. In addition, the new monitoring protocol requires a distance calibration exercise before each survey and the monitoring sheet now clearly distinguishes between:

- Precise counts versus estimates of group sizes
- Presence of young seen and able to count, young of the year seen but not able to count, no young of the year seen and unable to say if young of the year are present
- Sex composition

This will hopefully allow us to be able to monitor group size variation and reproductive success of khulan and gazelles in the future. During the November 2012 survey, 10 of the 67 khulans seen were foals (15%; in all groups adults and foals could be counted/estimated N=6) and 21 of the 86 gazelles seen were fawns (20%; only using groups were adults and fawns could be counted N=20) and suggest a good reproductive output in 2012. However, the number of groups encountered was rather small and only one survey was done in 2012 – so numbers should not be over-interpreted.