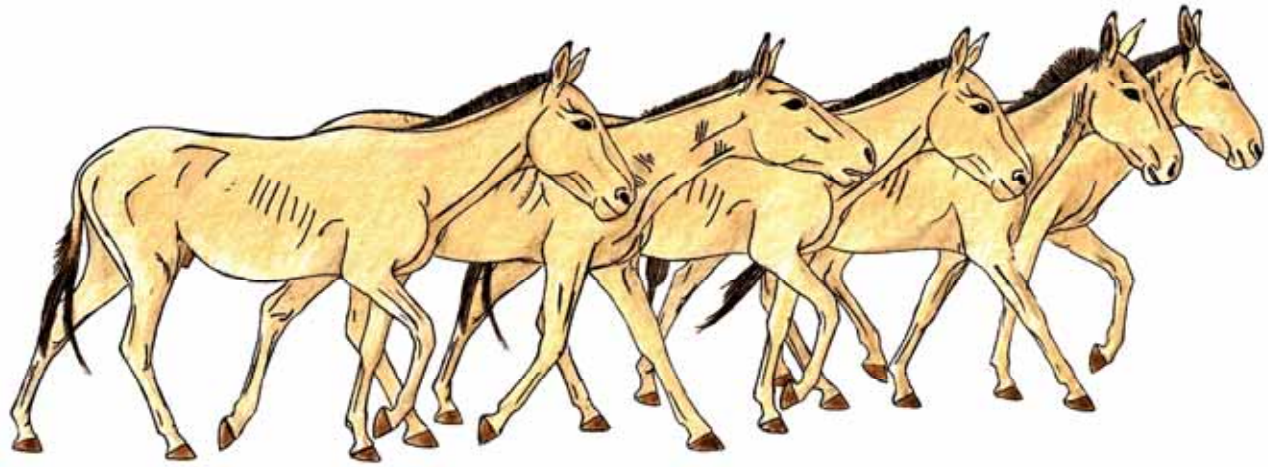
Landscape level research for the conservation of Asiatic wild ass in Mongolia

Report July 2007



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Research activities in Great Gobi B SPA

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July 2007

Newly collared khulan stallion in the Great Gobi B SPA ***Photo: P. Kaczensky***

Within the framework of:

"Landscape level research for the conservation of Asiatic wild ass in Mongolia" funded by the Austrian Science Foundation (project P18624)

1. Introduction

Mongolia is an important stronghold of the Asiatic wild ass (*Equus hemionus*, khulan in Mongolian) and has a global responsibility to ensure their conservation. At the present time, Mongolia is anticipating the development of a commercialized agricultural sector that could cause a far greater intrusion of human activities into the Gobi environment than current pastoral livestock production. Development of other sectors of the Mongolian economy, especially mining and road construction, could also impact environmental security in general and habitat needs of the khulan and associated wildlife in particular. Thus the impact of habitat fragmentation and the presence of people and their livestock on wild ungulates has become a key research focus in Mongolia (Ito et al. 2005, Kaczensky et al. 2006).

For our research project "Landscape level research for the conservation of Asiatic wild ass in Mongolia" funded by the Austrian Science Foundation (project P18624) we selected three focal areas: Great Gobi B Strictly Protected Area (SPA), Great Gobi A SPA and the SE Gobi. The three areas vary in respect to habitat productivity and the intensity of human land use. This year our focus was on collaring khulan in Great Gobi A SPA (Kaczensky et al. 2007) and the Great Gobi B SPA. In Great Gobi B SPA we also continue our research activities around the re-introduced Przewalski's horse population (*Equus ferus przewalskii*) in part funded by a previous FWF project (project P14992).

In June we additionally captured khulans in the SE Gobi for a research project run by Takehito Ito from the Arid Land Research Centre of the Tottori University, Japan.

In Great Gobi B SPA this year's research focus was on:

- collaring 10 khulan with store on board GPS collars, which collect GPS locations at 15min intervals
- retrieve 2 expired GPS / ARGOS collars from Przewalski's horses (P-horses)
- set up intensive behavioural monitoring of Przewalski's horses to investigate possible factors leading to foal losses
- blood sample collection from khulan for disease screening

2. Time table & route

We conducted all fieldwork in Great Gobi B SPA between 30 June and 12 July. This very tight timetable left us with just two nights in Ulaanbaatar to re-arrange the equipment after returning from the field trip for khulan collaring in the SE Gobi (18-27 June 2007; Fig. 1).

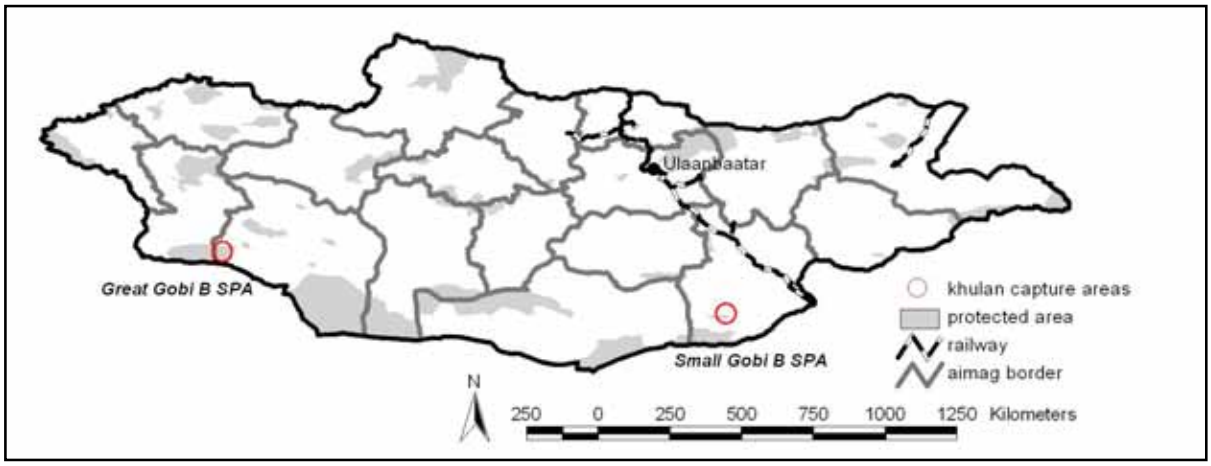

Fig. 1: Capture locations for khulans in the SE Gobi and Great Gobi B SPA in June/July 2007.

3. Khulan collaring in Great Gobi B SPA

From the data of seven Khulan monitored between 2002 and 2004 (Kaczensky and Walzer 2001-2006, Kaczensky et al. 2007, Kaczensky et al. in prep.) and the monthly wildlife surveys conducted by the park rangers (Kaczensky et al. 2007) we have already gained a good understanding of the large-scale movements and the habitat use of khulans in Great Gobi B SPA. To deepen our understanding of smaller-scale movements and the time budget relative to various habitat variables we deployed new GPS store-on-board collars, designed and produced by our colleague Gerhard Fluch (FIWI). The collars are designed to collect and store GPS position every 15minutes over a 12 months period. To allow collar retrieval, we equipped all collars with pre-programmed drop-offs (CR-2a, Telonics, USA) which were programmed to open on the 10th July 2008. Previous data has shown that most khulans move to the eastern part of the Great Gobi B SPA in June/July, which should facilitate in locating dropped collars via the integrated VHF transmitters in the GPS collars.

The capture team was supplemented by Dr. Endre Sos a zoo and wildlife veterinarian from the Budapest Zoo in Hungary, O. Ganbaatar (Ganbaa), director of Great Gobi B SPA, N. Altansukh (Aagii), his new assistant as well as Tania Hoesli from Switzerland and Tanja Nikowitz from Austria, who are in Takhin Tal for an internship on Przewalski's horses. Thanks to the excellent team and a modified UAZ jeep (Fig. 2) adapted to chase Khulan over rough terrain all captures

went smooth and we were able to capture and collar all 10 khulans (5 females and 5 males) within 2.5 days (Table 1, Fig. 3)! We employed the same capture protocol as described previously (Walzer et al. 2006; Kaczensky et al. 2007).

Fig. 2: Khulan capture team in Great Gobi B SPA. From left to right: a) Endre, Petra, Tania & Chris, b) Tanja, Tania, Petra, Ganbaa & Agi.

Table 1: Khulans collared in Great Gobi B SPA in July 2007.

Nr.	date	time	sex	age (years)	VHF	ear tag right	ear tag left	YCO	XCO	comments	drop-off
1	02.07.07	18:20	female	4-5	150.420	9	8	45.2507	93.4339	abort	10.07.2008
2	02.07.07	21:45	male	>11	150.660	10	22	45.1260	93.6834	abscess on testicles	10.07.2008
3	03.07.07	12:45	female	6-7	150.340	32	15	45.3665	93.1513	abort	10.07.2008
4	03.07.07	13:20	female	9-10	150.580	16	23	45.3676	93.1359	pregnant	10.07.2008
5	03.07.07	14:15	male	4	150.500	33	14	45.3694	93.1416	small testicles	10.07.2008
6	03.07.07	15:10	male	>12	150.300	41	42	45.3724	93.2631		10.07.2008
7	03.07.07	17:40	male	4-5	150.540	24	25	45.2038	93.1520		10.07.2008
8	03.07.07	20:00	male	8	150.460	34	26	45.2811	93.3960	very fast	10.07.2008
9	05.07.07	13:55	female	3-4	150.380	17	43	45.3832	93.1113	skinny	10.07.2008
10	05.07.07	15:07	female	6-7	150.620	44	18	45.3616	92.9545	pregnant	10.07.2008

The lack of rain and the very poor condition of the Gobi pastures seem to have concentrated Khulan near the large oasis, especially Chonin us and Takhin us (Fig. 3).

Fig. 3: Part of a large concentration of several hundred khulans near Takhi us on 10 July 2007.

For capture we mainly targeted khulans in and around Chonin us and the Toodog water point, where the terrain is acceptable for chasing (Fig. 4).

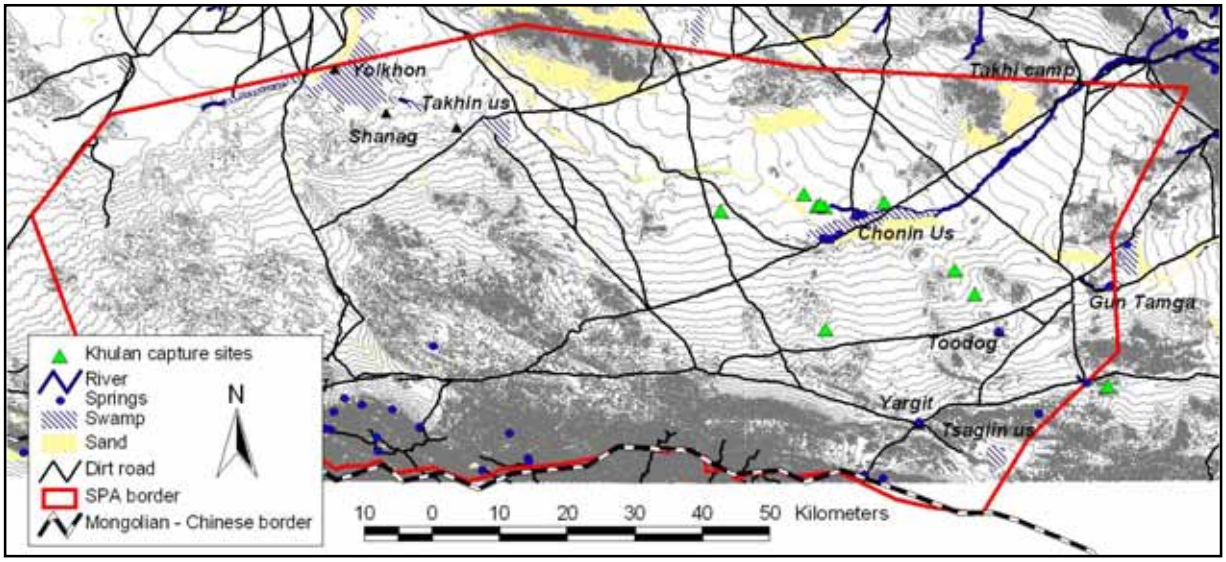

Fig. 4: Capture locations of 10 khulans collared in Great Gobi B SPA in July 2007.

The new collars fit the animals nicely and we can hardly wait to re-collect them for data analysis (Fig. 5, also see Title)!

Blood samples were collected from all khulan in the SE and the Gobi B area. As sample freezing is always an issue in the field (no liquid nitrogen was available in UB prior to our departure to the SE Gobi) we resorted to using Whatman FTA cards (see http://www.whatman.com). FTA Cards contain chemicals that lyse cells, denature proteins and protect nucleic acids from nucleases, oxidation and UV damage. FTA Cards rapidly inactivate organisms, including blood-borne pathogens, and prevent the growth of bacteria and other microorganisms. After drying the cards were placed in Whatman Multi-Barrier Pouches. In the Gobi B we also collected plasma and serum samples. These were frozen to -18^{o}C at the research camp.

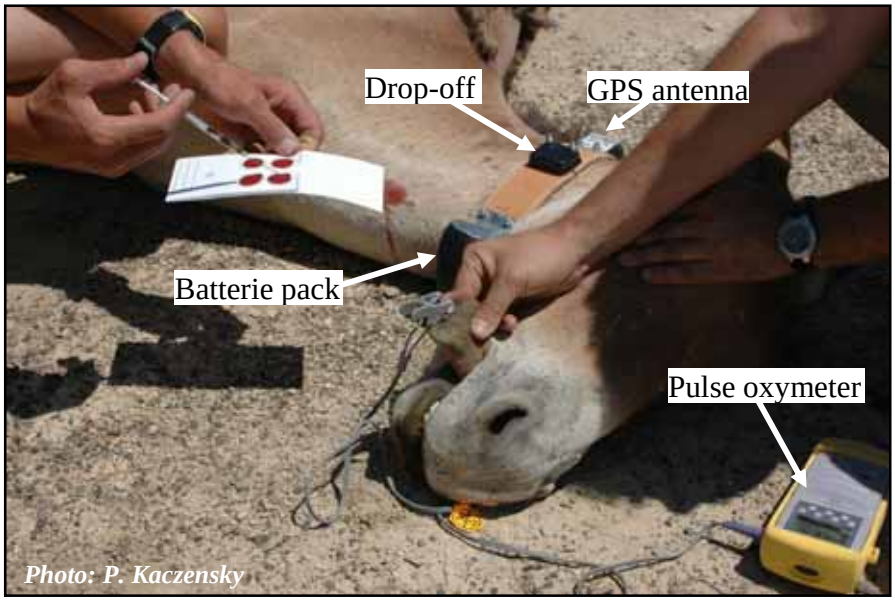

Fig. 5: Khulan with new GPS store-on-board collar. Anaesthesia is closely monitored with a pulse oximeter measuring the pulse and the blood O_2 saturation. For disease screening and genetic analysis we also collected blood samples.

4. Przewalski's horses in Great Gobi B SPA

4.1. Przewalski's horse population structure

The Przewalski's horse population in and around Takhin Tal continues to grow. As of 10 July 2007 a total of 113 P-horses, organized in 9 harem groups and 1-2 bachelor groups, roam the park (Table 2). To date 21 foals were born of which 16 are still alive. 5 foals disappeared within the first two weeks following their birth. No carcasses could be found and thus the reason for the losses is unknown.

Table 2: Overview of Przewalski's horses in Great Gobi B SPA as of 10 July 2007.

Name	Sex	ZB-Nr.	Birthdate	Age	Origin	Mother	Father
Bachelor / alone							
Aduuch	stallion	4534	27.05.05	2	Gobi B	3194	3066
Tsast	stallion	3888	12.06.03	4	Gobi B	2398	1818
Zegst	stallion	4352	25.05.04	3	Gobi B	3332	1818
Nomkhon	stallion	3717	07.05.02	5	Gobi B	2141	1818
Zagal	stallion	3720	10.05.02	5	Gobi B	3035	2866
Magnai	stallion	3426	02.07.00	7	Rotterdam	2671	2040
Osama	stallion	3808	11.09.02	5	Tachin Tal	2586	2363 or 1818
Shijee	stallion	3821	03.04.03	4	Tachin Tal	2786	2363
Sansar	stallion	4314	02.05.04	3	Tachin Tal	2645	2363
Jonon	stallion	4392	13.06.04	3	Gobi B	3387	2911
Bundan	stallion	4404	02.07.04	3	Gobi B	3391	2911
Arslan	stallion	4405	07.07.04	3	Tachin Tal	1669	2363
Sooton	stallion	4593	08.10.05	2	Tachin Tal	2948	3233
Bosoo (4 adults)							
Bosoo	stallion	3750	21.05.02	5	Gobi B	2398	1818
Michid	mare	2921	13.05.96	11	Tierpark Berlin	744	2041
Mandal	mare	3758	26.05.02	5	Gobi B	2940	2866
Ganzaga	stallion	4417	24.07.04	3	Gobi B	2921	1818
Hubsugul (13 adults, 2 foals)							
Hubsugul	stallion	3233	21.05.97	10	Langenberg	1320	1374
Zur	mare	3301	06.06.99	8	Köln (D)/WPL	1022	1852
Shandas	mare	3312	11.06.99	8	Ahaus (D)/WPL	3312	1852
Shandas foal	?		27.06.07	0	Gobi B	3312	3233
Beltes	mare	3145	07.05.98	9	Ahaus (D)/WPL	2318	1118
Zolboo	mare	3811	19.10.02	5	Stuttgart (D)	1767	2480
Tolbo	mare	3807	30.06.02	5	Wien (A)	2173	2444
Tolbos foal	?		27.06.07	0	Gobi B	3807	3233
Nergui	mare	3708	26.04.02	5	WPL	2018	2805
Mandhai	mare	3730	13.05.02	5	Winterthur (CH)	1897	1742
Audi	mare	4688	09.04.06	1	Gobi B	3145	3233
Altai	mare	4690	16.04.06	1	Gobi B	3312	3233
Suvd	mare	4778	30.05.06	1	Gobi B	3807	3233
Ynzagahan	mare	4855	25.08.06	1	Gobi B	3811	3233
Shandast	stallion	4856	01.09.06	1	Gobi B	3301	3233
Jiguur (11 adults, 5 foals)							
Jiguur	stallion	2363	12.06.92	15	Langenberg	486	1772
Sogoo	mare	2586	01.12.92	14	Australien, Dubbo	974	787
Sogoos foal	stallion		31.05.07	0	Tachin Tal	2586	2363
Gurguul	mare	2786	07.05.95	12	Winterthur	1879	1742
Gurguuls foal	stallion		26.04.07	0	Tachin Tal	2786	2363
Od	mare	2645	23.04.94	13	Prag	1847	1135
Ods foal	mare		22.04.07	0	Tachin Tal	2645	2363
Sonja	mare	3415	13.06.00	7	Salzburg	2017	1433
Sonjas foal	stallion		31.05.07	0	Tachin Tal	3415	2363
Itgel	mare	2948	12.06.96	11	Köln (D)/WPL	1557	1118
Itgels foal	stallion		09.05.07	0	Tachin Tal	2948	2363
Taikhar	stallion	4328	12.05.04	3	Tachin Tal	2586	2363
Huleg	stallion	4500	27.04.05	2	Tachin Tal	2786	2363
Agsam	stallion	4559	24.06.05	2	Tachin Tal	2586	2363
Naran	mare	4566	01.09.05	2	Tachin Tal	2645	2363
Maizii	mare	4701	24.04.06	1	Tachin Tal	2786	2363
Khuchit (4 adults, 1 foal)							
Khuchit	stallion	3320	16.06.99	8	Langenberg	2254	1374
Uugan	mare	2398	02.09.92	15	Tachin Tal	1831	?
Nuden	mare	4343	20.05.04	3	Gobi B	3273	3066
Holog	mare	4561	30.06.05	2	Gobi B	2398	1818
Uugans foal	?			0	Gobi B	2398	1818
Tayan (6 adults)							
Tayan	stallion	3066	24.04.97	10	Tierpark Berlin	1431	2041
Mongon	mare	3273	06.05.99	8	Winterthur	2483	1742
Zogii	mare	3375	15.05.00	7	Winterthur	1897	1742
Kheren	mare	3803	28.07.02	5	Gobi B	2712	2866
Kheren foal*	?		03.06.07	0	Gobi B	3803	3066
Harz	mare	4313	02.05.04	3	Gobi B	3045	3069
Doroo	stallion	4356	27.05.04	3	Gobi B	3375	3066
Mondol (15 aults, 3 foals)							
Mondol	stallion	3069	10.05.97	10	Tachin Tal	2130	1818
Tsgaadai	mare	2940	06.06.96	11	Tachin Tal	1297	1772
Imj	mare	2748	02.08.94	13	Schwerin	1436	1236
Dorothee	mare	3230	06.06.99	8	Tachin Tal	3035	2503
Dorothees foal*	mare		10.05.07	0	Gobi B	3230	3069
Khokhoo	mare	2984	19.11.96	10	Langenberg	1359	1374
Khokhoos foal	stallion			0	Gobi B	2984	3069
Soir	mare	3045	31.03.97	10	Langenberg	2018	1374
Soirs foal	mare		03.06.07	0	Gobi B	3045	3069
Telmen	mare	3735	15.05.02	5	Gobi B	3072	1818
Telmens foals	stallion			0	Gobi B	3735	3069
Sormuus	mare	4393	13.06.04	3	Gobi B	3383	3066
Buman	mare	4503	29.04.05	2	Gobi B	2748	3069
Azaa	stallion	4529	21.05.05	2	Gobi B	3230	3069
Khatan	mare	4751	21.05.06	1	Gobi B	3230	3069
Bokhoo	mare	4787	03.06.06	1	Gobi B	2984	3069
Sumber	stallion	4815	24.06.06	1	Gobi B	3045	3069
Tumen	mare	4822	30.06.06	1	Gobi B	2748	3069
Matar	stallion	4824	02.07.06	1	Gobi B	2940	3069
Moogii (11 adults)							
Shagai	mare	2141	15.06.91	16	Askania Nova	966	1008
Tschandaga	mare	2130	11.05.91	16	Askania Nova	600	1159
Bulga	mare	2787	07.05.95	12	Langenberg	2018	1374
Toot	mare	3072	11.05.97	10	Zoo Berlin	1813	1618
Moogii	stallion	3342	08.10.99	8	Neusiedl/Wien	1386	2444
Mondor	mare	3194	17.06.98	9	Springe	2187	1118
Kharaatsai	stallion	3881	06.06.03	4	Gobi B	3230	3069
Tsombon	stallion	4308	29.04.04	3	Gobi B	3194	3066?
Shankhat	mare	4339	17.05.04	3	Gobi B	3084	3069?
Tenges	mare	4399	25.06.04	3	Gobi B	2787	1818
Bohon	stallion	4535	27.05.05	2	Gobi B	2141	1818
Myangan (6 adults, 1 foal)							
Myangan	stallion	3361	01.05.00	7	Tachin Tal	1669	2866
Zuram	mare	4234	02.06.02	5	Karlsruhe (D)	2638	2397
Zurams foal*	?		03.06.07	0	Gobi B	4234	3361
Ners	mare	3784	10.06.02	5	Karlsruhe (D)	1648	2397
Ners foal	?		08.06.07	0	Gobi B	3784	3066
Udam	mare	3734	15.05.02	5	Wien (A)	1386	2444
Borkhul	mare	4306	28.04.04	3	Tachin Tal	2786	2363
Borkhuls foal*	stallion		04.05.07	0	Gobi B	3273	3066
Huvhar	mare	4383	06.06.04	3	Gobi B	2141	1818
Selenge (2 adults)							
Selenge	stallion	3441	28.08.00	7	Marvel Zoo	1497	2507
Yyl	mare	2712	17.04.94	13	Oberwil	486	1772
Zandan							
Zandan	stallion	3166	28.05.98	9	Tachin Tal	2398	1818
Misheel	mare	3084	28.05.97	10	Tachin Tal	1977	1159
Misheels foal	?		03.06.07	0	Gobi B	3084	3166
Maral	mare	3387	23.05.00	7	Tachin Tal	3038	2363
Maral foal	?		07.07.07	0	Gobi B	3387	2911
Kherlen	mare	3391	26.05.00	7	Tachin Tal	3035	2363
Kherlen foal	?			0	Gobi B	3803	3166
Orkhon	mare	3430	15.07.00	7	Tachin Tal	2645	2363
Orkhon foal	?			0	Gobi B	3430	2911
Oroo	mare	3755	24.05.02	5	Gobi B	2787	1818
Erdene	mare	3040	19.02.98	9	Rotterdam	1633	1429
Zorgol	mare	3383	20.05.00	7	Winterthur	1892	1742
Saran	mare	3823	09.04.03	4	Tachin Tal	2645	2363
Bars	stallion	4511	09.05.05	2	Gobi B	3430	3069
Burd	stallion	4533	25.05.05	2	Gobi B	3040	2911
Taij	stallion	4731	09.05.06	1	Gobi B	3383	2911
Sarans foal*	?		26.05.07	0	Gobi B	3823	2911

**disappeared for unkown reasons, no carcass found*

4.2. Behavioural monitoring

This summer two Biologists, Tania Hoesli from Switzerland and Tanija Nikowitz, from Austria (see Fig. 2) will participate in an internship on Przewalski's horses. The focus will be on observing harem groups with foals in order to determine possible factors resulting in the loss of foals. In 2006, despite good pasture condition, only 12 out of 33 foals (36%) survived until winter. Our Mongolian colleagues see the reason for the losses in wolf predation. However, we hypothesize that harem group instability may be an important cause. In the summer 2006 group stability has decreased due to the loss of several lead stallions. This resulted in new group formations and frequent shifts between groups.

We speculate that the social unrest, rather than wolf predation or disturbances, may cause the high foal losses. Foals have been reportedly killed by a new harem stallion or may accidentally find themselves between rivalling hoses and thus receive fatal injuries (Fig. 6). Thus our main working hypothesis for foal losses is: aggressive behaviour within harem groups, aggressive behaviour among P-horse groups, poor maternal behaviour of the mare and predation by wolves. We hope that Tania and Tanja will help us to gain a better understanding of this important aspect of P-horse population dynamics.

Fig. 6: Is social instability in P-horse harem groups a factor influencing foal mortality? Here two young stallions in Jiguur group are "play-fighting" among two foals.

4.3. P-horse locational data

We removed expired GPS / ARGOS collars which had faulty drop-offs (Lowtec, USA) from two mares: *Uugan* of the Khuchit group and *Shandas* of the Hubsgul group. Both mares were darted from the jeep as khulan (*Uugan* was darted on 8 July and *Shandas* on 10 July). The stress to the rest of the group seemed small as the chase time was only 3-4 minutes due to the much lower speed of the P-horses when compared to the khulans. The handling time for removing the collar was only 1-2minutes and both mares were re-united with their harem group and their foal within minutes upon recovery (Fig. 7a&b). The collars (Telonics, USA) appeared to be in good shape and we are confident that we will be able to retrieve the GPS data stored on board (Fig. 7c).

Fig. 7: a) Petra holding Uugan while Chris is preparing the antidote, b) Ganbaa (left) and Aagii (right) holding Shandas mare (middle) after collar removal. b) Chris holding Shandas collar which she was wearing since June 2005.

Independently of the high-tech GPS / ARGOS monitoring, our ranger observation data shows that the P-horse groups are slowly expanding their range. In spring/summer 2007 P-horses have been observed in the new areas of Yolkhum and Khairkhan bulag (Fig. 8). The total P-horse distribution range in the Great Gobi B SPA now covers 3441 km². This large expanse is mainly due to the release of one harem group (Hubsgul group) in Takhi Us in the summer of 2005.

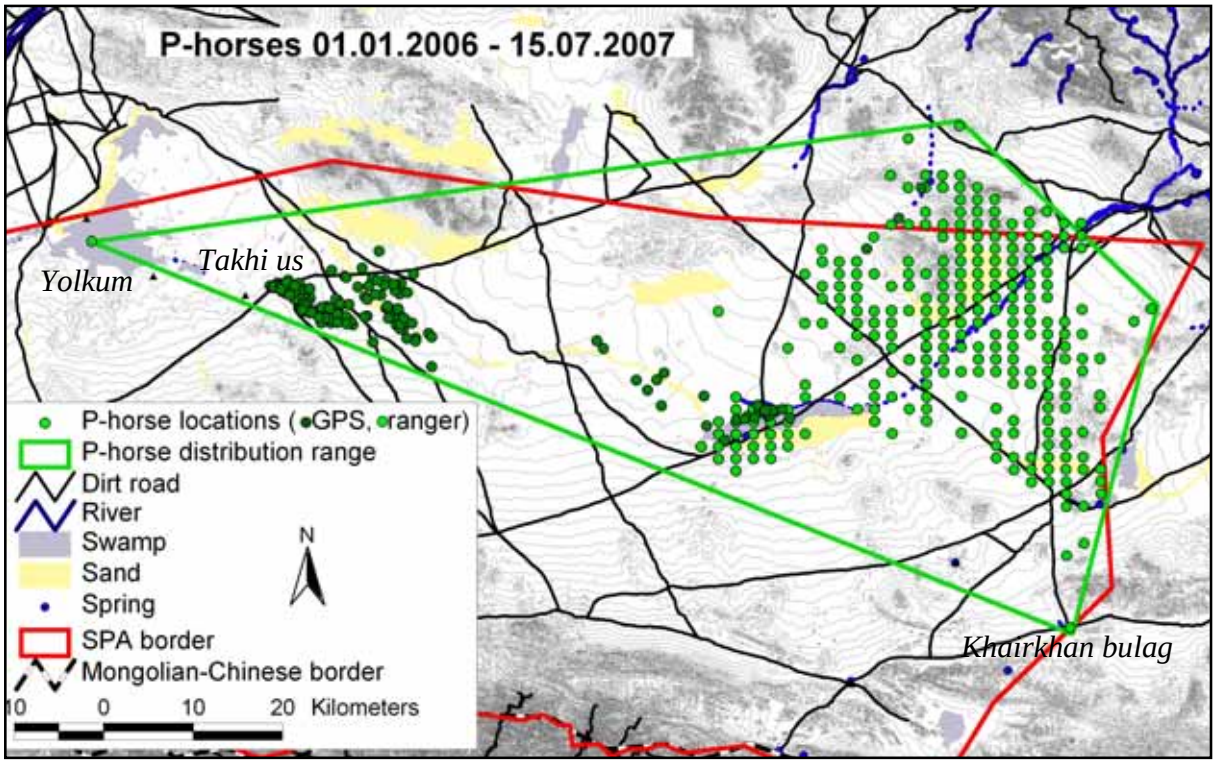

Fig. 8: Total P-horse distribution range in Great Gobi B SPA as of 15 July 2007. The total distribution range now covers 3441 km².

Between 1 January and 15 December 2006 there were eight harem groups, two bachelor groups and several observations of single horses (Fig. 9a&b).

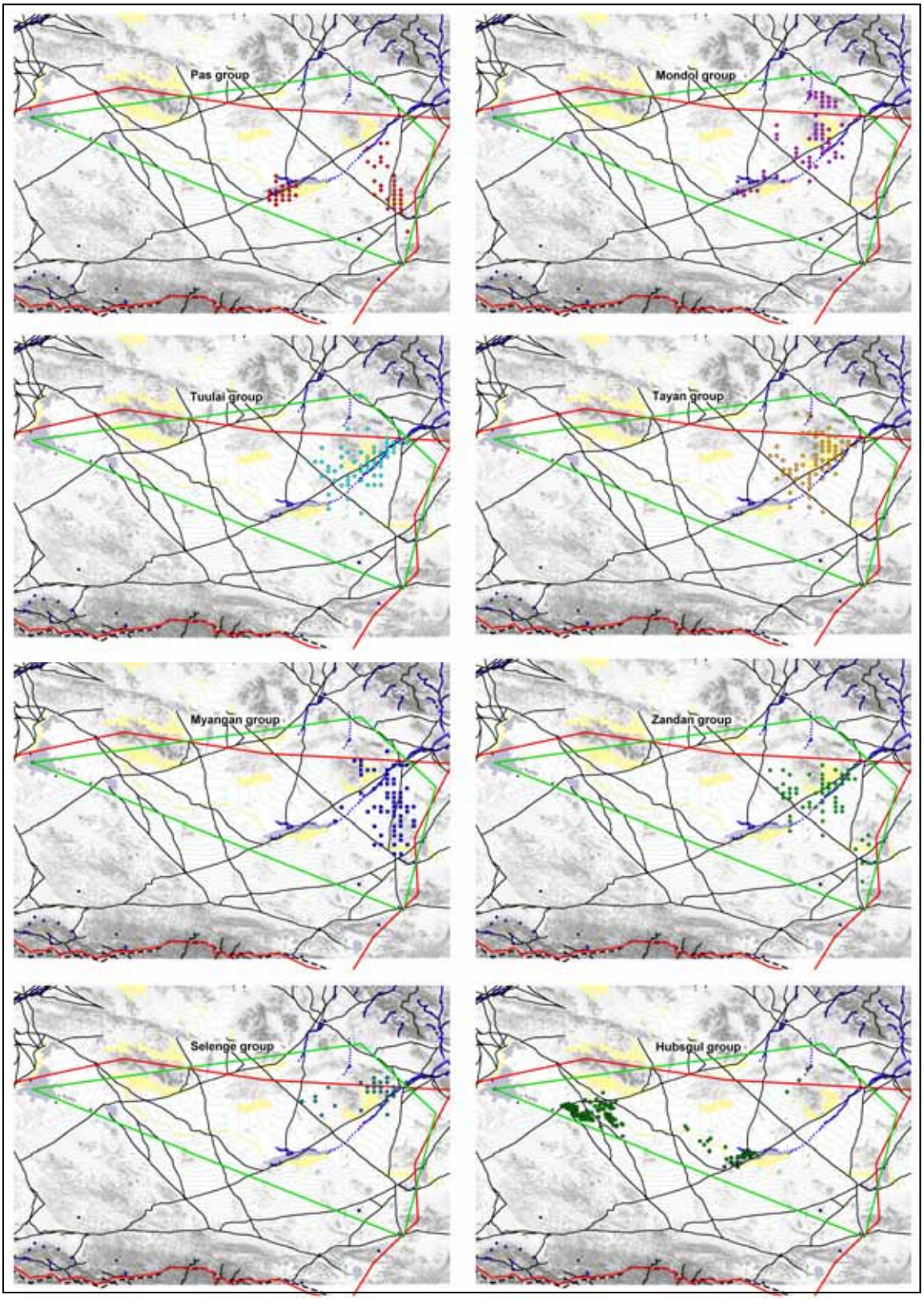

Fig. 9a: Distribution of harem groups in the Great Gobi B SPA from 1 January – 15 December 2006.

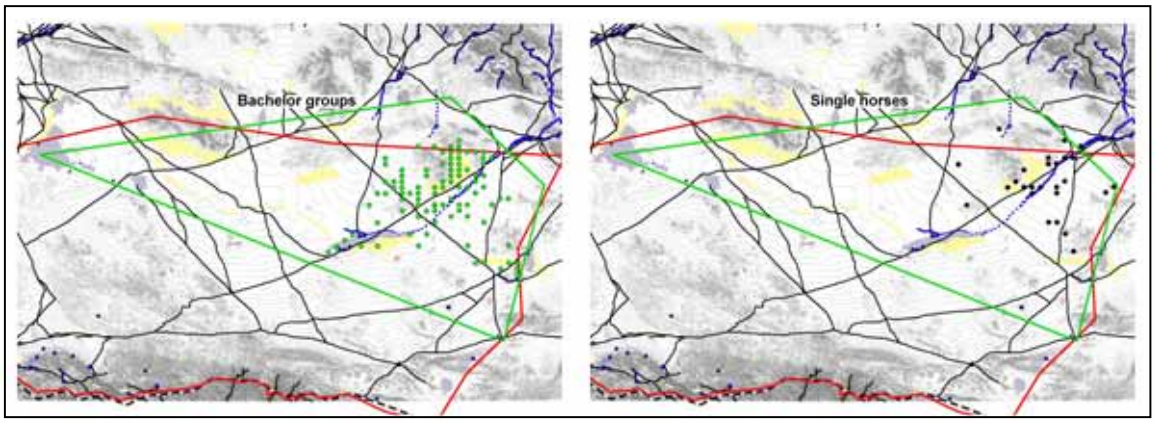

Fig. 9b: Distribution of Bachelor groups and observations of single P-horses in the Great Gobi B SPA from 1 January – 15 December 2006.

4.4. Takhi transport from Hustai Nuruu to Takhin Tal

The first intra-Mongolian transport of Przewalski's horses had been scheduled for June this year. Six stallions from Hustai Nuruu National Park (http://www.owc.org.mn/macne/hustai/about.htm) were to be brought to Takhin Tal. The goals of the transport were: (1) to reduce the large bachelor population in Hustai Nuruu which creates social unrest, (2) supplement the Takhin Tal population with stallions with a slightly different genetic makeup (however, due to the limited number of founders, both populations are very similar and due to careful selection by the EEP, founder representation is fairly balanced and rather similar in Hustai Nuruu and Takhin Tal), (3) test the feasibility of an inner-Mongolian exchange of wild-born Przewalski's horses, and (4) document the adaptation of wild born Przewalski's horses transferred from the productive mountain steppe to the harsh desert steppe environment.

The plan was to:
- capture six stallions in Hustai Nuruu over the course of 3-5 days
- hold them in a small holding pen for up to a week until the transport
- box them the night before the transport
- fly them with MIAT – AN26 to Takhin Tal in the early morning
- release them in the adaptation enclosure for a 1-2 week surveillance period
- release them into the Great Gobi B SPA

N. Enksaikhan, ITG's Mongolian office manager and Hustai staff prepared the transport boxes and holding facility in Hustai Nuruu. The holding facility consisted of a wire fence enforced by 3 lines of electric fence on the inside. On 14 June, Chris Walzer tranquilized the first stallion which was quickly transported to the holding pen. However, 10 sec. after reversal of the anaesthesia this animal demonstrated the weakness of the fence – it literally fell out of the enclosure (Fig. 10). Thereupon further captures were postponed until a reinforced holding pen is available. Discussions with Hustai Nuruu NP director N. Bandi are presently ongoing.

Fig. 10: First stallion selected for transport to Takhin Tal falling through the fence of the holding pen at Hustai Nuruu.

4.5. Weather condition

The winter of 2006/2007 in Takhin Tal was rather mild (Fig. 11), but with only sparse snow cover. Spring brought almost no rain and at the beginning of July the pasture condition was extremely poor. Finally in the afternoon of 10 July a big thunderstorm brought the much needed rain: starting with a big downpour, but subsequently continuing up and on until the evening of the next day (Fig. 12). People in the Takhi camp were delighted and are looking forward to the much needed green-up.

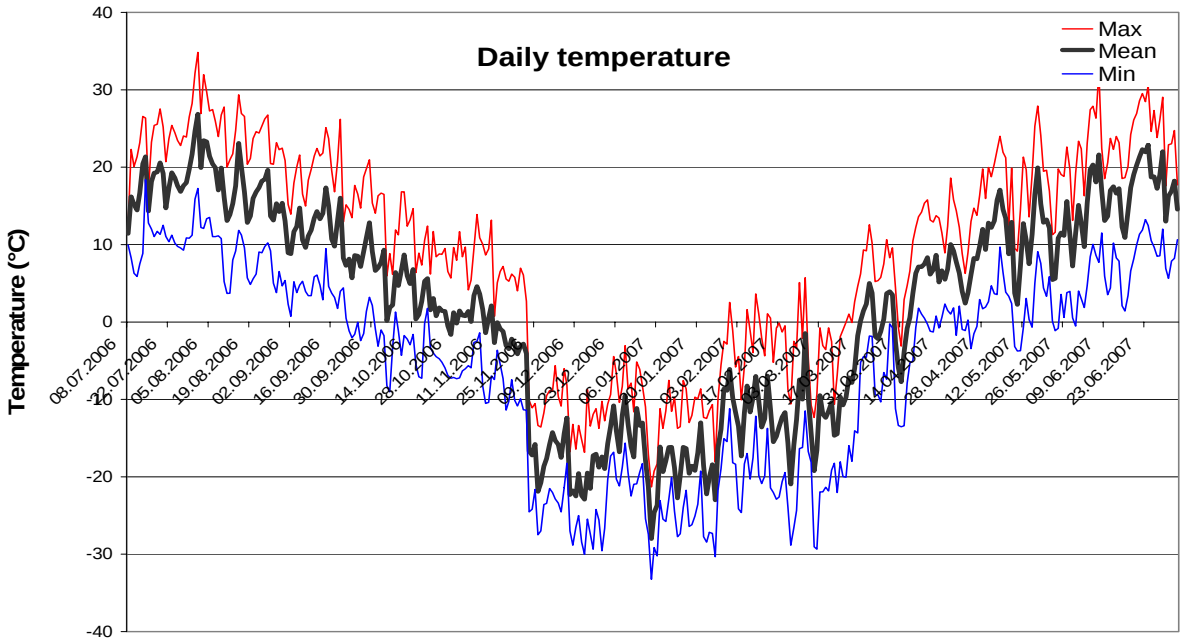

Fig. 11: Average daily temperatures in Takhin Tal from 8 July 2006 until 4 July 2007 (Hobo datalogger, Hoskin, Canada).

Fig. 12: On 10 July it finally started to rain to Takhin Tal.

4.6. Miscellaneous

4.6.1 The Research camp at Takhin Tal

The house and all the auxiliary buildings are in a very good condition. Under Batsuur's watchful care all the storerooms and the equipment is well ordered and functioning. The massive rain on the 10th July did however demonstrate that the room would need some significant waterproofing with silicone before the winter. Satellite email had been down the past months but was reinstalled and once again allows the exchange of information and data. The new email address of the camp is: takhi@fiwi.at. Please do not send large attachments without prior consent to this address. The secondary solar system (200 W) mounted on the old container will need new gel batteries before the winter and this work will be performed shortly.

4.6.2 Vehicles

At the present the camp has 4 UAZ jeeps. Ganbaa's jeep, which was sponsored by Vienna zoo in the year 2003, is now after 90,000 km in rather poor condition (even by Mongolian standards). Nisechui's jeep is stationed in the west of the park in Altai Khovd. This jeep we acquired in the year 2000 and since than has run an excess of 150000 km and thus is also in poor shape. Chimbat's jeep has also run 140000 km since 2002 and likewise needs some significant TLC. The latest jeep is in very good condition and will be the main vehicle for the research activities in the remote areas of the park. The costs of the necessary repairs of the 3 jeeps are estimated at 1500 – 2000 US$.

The park administration also has two practically new Chinese motorcycles that have replaced the former Russian bikes. Following the visit by the Minister of the Environment we hope to get an additional motorbike later this summer.

4.6.3 Rangers

The park staff in Great Gobi B SPA presently consists of 12 people, of which 5 are regular rangers and 2 are specific P-horse rangers ("takhiman", Tab. 3).

Table 3. Overview of the employees in the Gobi B Park administration

Name	Short name	Job Description
GANBAATAR Oyunsaikhan	Ganbaa	Director
CHINBAT Baarkhuu	Chinbat	Bookkeeper
ALTANSUKH Nanjid	Aagii	Specialist
NISEKHKHUU Gaanjuur	Nisekhhkuu	Ranger
BATSUURI Borkhuu	Suur	Ranger + Camp manager
KHUDERCHULUUN Tsogtsol	Khuder	Ranger
BAAST Zentger	Zaga	Ranger
OINBAYAR Lkhachin	Oinbayar	Ranger
CHINBAT Bilegt	Chinbat	Ranger and Takhiman
NYAMBAYAR Oyunsaikhan	Nyambo	Takhiman
GALBADRAKH Bilegt	Gala	Driver
TUNGALAGTUYA Sengee	Tunga	Cook + Camp manager

4.6.4 Minister of Nature and Environment Mr. I. Erdenebaatar visits Takhin Tal

Between the 26-29 June the Mongolian Minister of Nature and Environment Mr. I. Erdenebaatar visited Takhin Tal. N. Enksaikhan, ITG's Mongolian office manager, and O. Ganbaatar, director of Great Gobi B SPA, accompanied him (Fig. 13). The delegation was shown the new park house and facilities and the various activities of ITG and the SPA were explained and demonstrated. Furthermore, problems and difficulties in the local implementation of project and conservation work in general in the area of Great Gobi B SPA were discussed. The minister thanked the ITG for its contribution, cooperation and technical support in managing the Przewalski's horse reintroduction and in assisting in the management of the Great Gobi B SPA.

Especially the wildlife monitoring methods employed in the Great Gobi B Park were seen as an extremely important contribution. This method developed and implemented in the Great Gobi B to gather scientific information and survey the park on a regular basis is now being used as a blueprint for other protected areas of Mongolia.

The National Park house, facilities and knowledge base in Takhin Tal has moved the ministry to denoting Takhin Tal as the main centre for research within the Mongolian ecological monitoring web in the south-western Gobi of Mongolia.

Fig. 13: Minister of Nature and Environment Mr. I. Erdenebaatar (centre back row) with staff and Great Gobi B rangers in front of the National park house

5. Khulan collaring in the SE Gobi

Following the successful trip to the Gobi A (Kaczensky et al. 2007) Chris Walzer and Petra Kaczensky together with B. Lhagvasuren and Y. Adija from the Mongolian Academy of Sciences travelled to the South-East Gobi to meet up with their Japanese colleague Takehiko Ito from the Arid Land Research Centre at Tottori University in Japan. The common plan was to collar a further 16 Mongolian wild ass with Argos satellite collars in order to evaluate habitat fragmentation and disturbance in this seemingly remote area. Dr. Endre Sos a zoo and wildlife veterinarian from the Budapest Zoo in Hungary further reinforced the team. His support would allow the simultaneous work of two capture teams. Dr. Takeshi Sanekata from the Laboratory of Veterinary Infectious Disease at Tottori University in Japan came along as a guest.

Takehiko Ito and Chimeddorj, also from the Mongolian Academy of Sciences, had scouted out the area the previous weeks and suggested a capture site near Khataan Bulaag sum centre (Fig. 1). The area had a high number of grazing wild asses and was relatively flat which made a short chase and darting from the jeep door a good capture option. In the sum centre two UAZ jeeps were rented and quickly adapted for the chase. The next morning the first team was able to capture 8 animals while the second team was severely hampered by a slow jeep and only managed to catch a single female (Fig. 14). In the evening the slow jeep was inspected and modifications made to the carburettor – with a big smile on his face the driver demonstrated that the jeep now easily did 90 km/h. Considering that the wild ass runs at the most 70 km/h this seemed more than sufficient.

Photo: P. Kaczensky

Fig. 14: Endre Sos carefully selecting the next Khulan for darting and collaring.

Next morning both teams swarmed out over the plain and actually finished the job by lunchtime. In this area it proved essential to closely follow the darted animal as finding a recumbent wild ass proved extremely difficult. The entire team was ecstatic that they had managed to capture and collar 16 (9 males, 7 females) in only two days. “The data from these collars should help us understand how fences, railroad and mining activities in this very fragile habitat, cause fragmentation and disruption. It could prove essential for the long-term survival for the Mongolian wild ass, already hard-hit by poaching,” stresses Takehiko Ito. The success was celebrated with a delicious goat meal in the picturesque canyon of Shivnee (Fig. 15).

Fig. 15: Khulan capture celebration at Shivnee canyon.

One collared animal, a stallion, was seen about 40 km from the capture area on 23 June in a group of ~300 khulans (Fig. 16).

Fig. 16: Re-sighting of a collared Khulan in the SE Gobi.

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Many people have worked very hard and helped so much to make this summers trip a success. We are grateful for our new office manager N. Enksaikhan for his organisational skills and the good communication – things have become so much easier! We want to thank O. Ganbaatar for his great work in Takhin Tal. We are fully aware of his qualities and the huge workload and responsibility he has to burden. In B. Chinbaat not only O. Ganbaatar has a reliable bookkeeper and organizer, but so have we. We sincerely mourn the death of his son and hope he and his family find the necessary strength.

We are very much indebted to B. Batsuuri and his wife S. Tungalagtuya for making sure that the camp remains in excellent condition. Without S. Tungalagtuya's wonderful cooking, research activities would be severely hampered. Due to the excellent work and the watchful eyes of the rangers and takhimen G. Nisekhkhuu, T. Khuderchuluun, B. Batsuuri, Z. Baast, L. Oinbayar, B. Chinbat, and O. Nyambayer we know the fate of each and every Przewalski's horse and get regular information about wildlife and human activities in the park. B. Galbadrakh is doing his best to keep the heavily used jeep and motorbike fleet running. N. Altansukh, has only been working at the Takhi camp for one month, but has already proven his worth by helping O. Ganbaatar and us with communication, organization and data management.

A big thank you also goes to Endre Sos who got infected with the khulan fever – only slow jeeps, nightfall and a return ticket could stop him from darting even more khulans. Tania Hoesli and Tanja Nikowitz also seem on the brink to catch the Gobi fever and we are grateful for their motivation to protocol P-horse behaviour. Last but not least we would like to thank our Japanese collegue Takehito Ito for initiating and B. Lhagvasuren for organizing the joint Japanese-Mongolian-Austrian-Hungarian-German expedition - a truly intercultural and interdisciplinary venture.

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