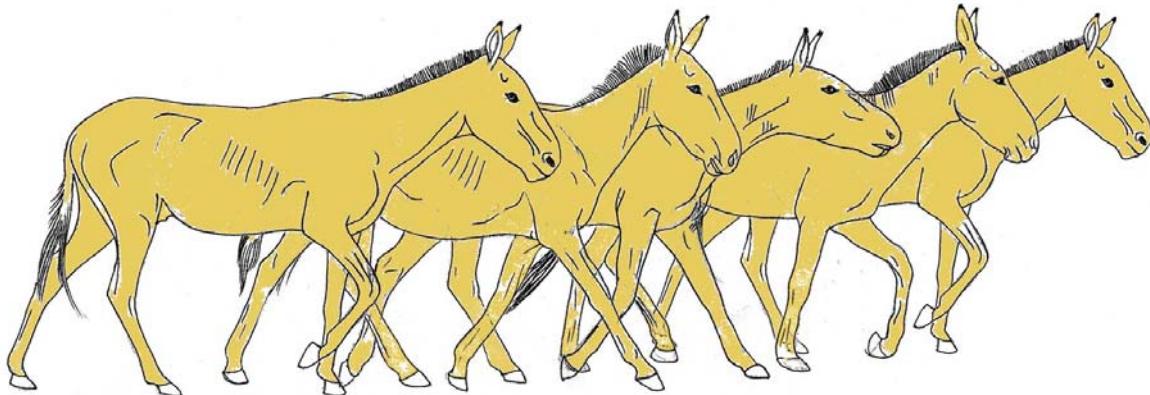


Landscape level research for the conservation of Asiatic wild ass in Mongolia

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Observation of wild asses in Toodog us

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Photo: P. Kaczensky

1. Observation period

The observation of wild asses at *Toodog us* water point started with almost one week delay. The ger planned to be used by the observation crew was first used for the Nadaam celebration in Bugat. It took until the 26th of July to bring the ger to the water point. In the end, the observation started on the 27th of July and consisted of two periods: (1) from 27.07.06 until 02.08.2006 and (2) from 06.08.2006 until 17.08.2006. In between we had a break at the Takhi camp. In total we spend 279 hours counting wild ass at *Toodog* water point (Fig. 1, Table 1).

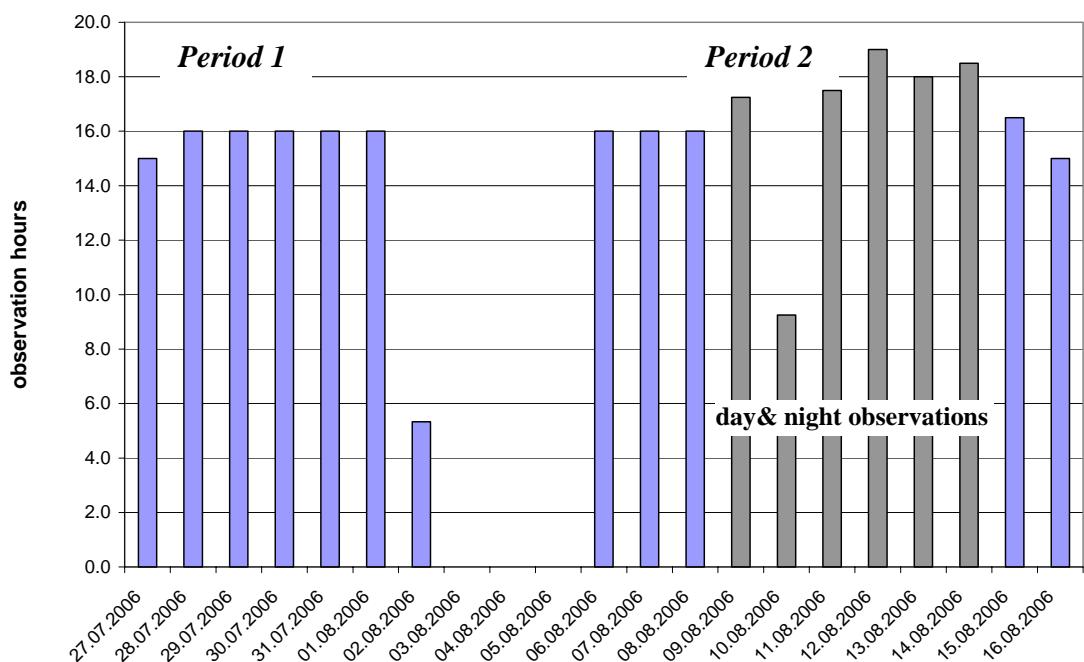


Fig. 1: Observation periods in July & August 2006 (blue=day observations only, grey=day & night observations around full moon).

Table 1: Distribution of observations periods over the 24-hours.

Time / Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
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2. Observation crew

Three people stayed for the whole observation period: Otgonbayar (Ogi), Daniela and Valentin. For the first two days, a fourth person, G. Dorvchindorj (researcher from the Great Gobi A SPA), had joined. To test the khulan costume, Shaggy and Yderee came to Toodog us for two days.

3. Khulan costume

To test the khulan costume, we chose the 16th and the 17th of August. These were the last days of the observation period. The idea was, not to disturb the observation, by choosing a time in the middle of the period. Unfortunately for some reason the wild ass frequency declined to the end of the observation period. On the days we wanted to test the costume, not a single wild ass came to the water point. Therefore it was not possible to make any tests.



Photo: G. Dorvchindorj

Fig. 2: Khulan costume. This decoy was designed to be used to approach and anesthetise khulan at water points.

4. Observations

4.1 Day observations

For the day observation we considered the time from 06:30 until 22:30. On the 2nd and the 17th of August observation stopped at noon, due to our return to the Takhi camp. On the 10th we stopped the observation because of a storm at 15:00.

On the days after the night observations, we started between 11:00 and 12:00.

The observation periods were divided into 2-hour-periods. After two hours the observer was changed. Due to the differences in start and end time for the single days, the number of relevant days differ between 14 and 19 for the 2-hour-periods.

In total, we observed 1,491 animals during the day time. The number of wild asses counted on a single day was highly variable and ranged from 0 to more than 600.

The very high numbers for the time between 16:30 and 18:30 result from one very big group of wild asses consisting of about 560 (± 20) animals. In this group we just distinguished between mares with foals (150) and other khulans. The counting of stallions and yearlings was not possible and all other khulans were noted as *unknown*.

The rather high amount of *unknown* animals in the early morning was due to poor light conditions.

Table 2: Number of wild asses during the day observation, divided into 2-hour-periods

time	mares	foals	yearling	stallion	unknown	total
06:30 – 08:29	49	23	29	89	30	220
08:30 – 10:29	64	35	23	45	-	167
10:30 – 12:29	34	27	36	30	2	129
12:30 – 14:29	34	23	12	19	12	100
14:30 – 16:29	46	27	8	26	5	112
16:30 – 18:29	156	155	1	16	260	588
18:30 – 20:29	39	26	7	38	3	113
20:30 – 22:30	4	4	-	26	-	34
total	432	325	117	305	312	1,491

4.2 Night observations

Observation dates: 09.08.2006 – 10.08.2006
 11.08.2006 – 12.08.2006
 12.08.2006 – 13.08.2006
 13.08.2006 – 14.08.2006
 14.08.2006 – 15.08.2006

Observation time: 22:00 – 06:00

For the night observation of the wild ass in *Toodog us* we divided the time from 22:30 until 6:00 in the morning of the next day into three periods. The first period took place from 22:30 until 01:30, the second one from 01:30 till 03:45 and the last one from 03:45 until 06:00.

We did the night observation around full moon when there was enough natural light for counting animals. We used binoculars because there was not enough light for the spotting scope. But even with binoculars it was sometimes difficult to count wild asses (e.g. clouds in front of the moon). Counting of mares with foals was just possible at best light conditions. To recognize stallions and yearlings was not possible at any time.

We did not use the night viewing scope because the magnification factor was too small to allow reliable counts.

Similar to the daytime observations, the number of asses counted was also highly variable between hours and days (Fig. 3). In the night with the most sightings we counted 255 wild, whereas in the night from the 13th to the 14th we just saw 14 wild asses. In total we observed 354 wild asses during the five nights (Table 3).

Table 3: Results of the night observation for five nights, divided into periods of 1 hour.

Date time	09.08 – 10.08	11.08 – 12.08	12.08 – 13.08	13.08 – 14.08	14.08 – 15.08	total
22:00 – 22:59	-	-	-	-	-	-
23:00 – 23:59	3	11	1	-	2	17
00:00 – 00:59	14	-	-	4	8	26
01:00 – 01:59	111	-	6	-	7	124
02:00 – 02:59	25	-	7	3	1	36
03:00 – 03:59	16	8	4	1	22	51
04:00 – 04:59	54	-	3	-	3	60
05:00 – 06:00	32	-	2	6	-	40
total	255	19	23	14	43	354

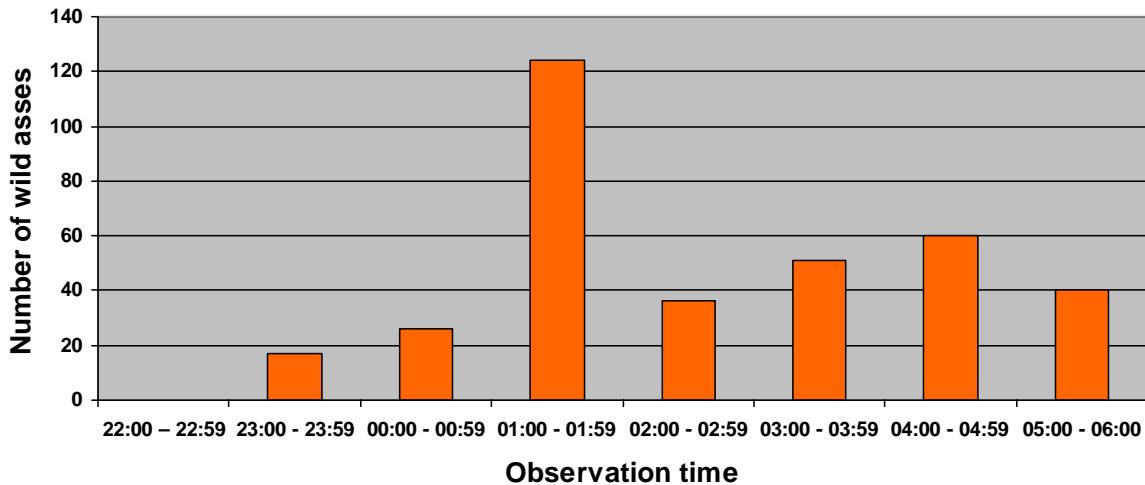


Fig. 3: Number of wild asses during the night.

4.3 Group sizes

For analysis of group sizes we combined the data from the day- and nighttime observation periods. The 1,845 animal observed came in 230 groups. Most frequently wild ass came to drink alone. However, one time we also observed a big group with ~560 animals (Fig. 4; please note the different ranges when the group size exceeds 10 animals).

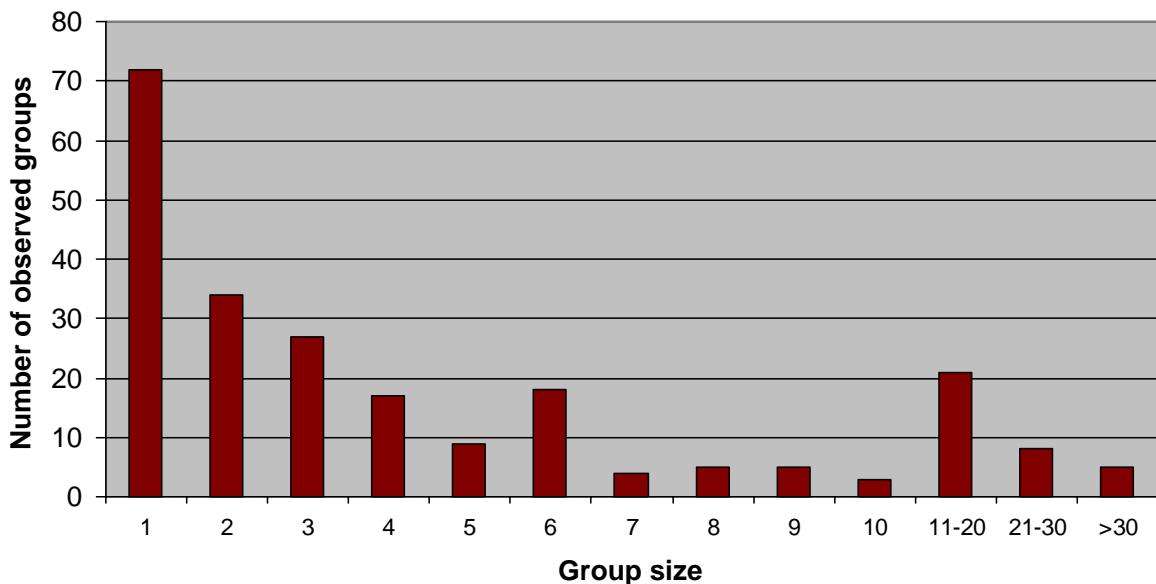


Fig. 4: Group sizes of the wild asses during the whole observation period.

5. Other wildlife and human activities

The second most common species visiting the water point were black-tailed gazelles. In total we counted 129 gazelles. Except for one wolf no other wildlife was seen. Other wildlife was just observed during the day time.

No livestock came to drink at any time during the observation period in *Toodog us*.

Human activity was also low at *Toodog us* and mainly due to visits from the Takhi camp, for bringing food or picking us up at the observation ger (Fig. 5). Very seldom other people passed by. During the whole period, we observed 12 times a car and 5 times a motorbike.



Photo: Daniela Vetter

Fig. 5: Observation ger at *Toodog us* water point.