Status of Ungulates in Numrug Strictly Protected Area

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Numrug Strictly Protected Area (SPA) is a unique part of Mongolia's protected areas system. Located in Dornod Aimag at the easternmost edge of Mongolia, bordering China, it is considered to be part of the Eastern Steppe region. However, Nomrog SPA is quite different from the rest of the Eastern Steppe in topography, soils, vegetation, and wildlife. Nomrog SPA is the southern- and westernmost reach of the Great Khinghan Mountains (most of this range occurs in China), and it is also the only part of this mountain range that receives Protected Area status. Nomrog is one of the few places in Mongolia where one can find Manchurian moose (Alces alces cameloides) (Jia et al. 1994), and it is also suspected of harboring brown bear (Ursus arctos), lynx (Felis lynx), otter (Lutra lutra) and other Palearctic species normally associated with the northern taiga of Siberia. The area also has an unusual mix of Manchurian species, including a variety of birds such as the reed parrotbill (Paradoxornis heudei) and Mandarin duck (Aix galericulata), some of which reach their western limits here and are found nowhere else in Mongolia (Shardarsuren 1997).

From 11 September until 18 September, 2002 we performed a survey of Nomrog SPA. The purpose of the survey was to collect baseline information on the habitat, conditions and populations of moose, red deer (*Cervus elaphus*), and roe deer (*Capreolus pygargus*) in the Strictly Protected Area. The status of these ungulates is relevant to the proposed de-gazetting of the northern part of the park and the possible construction of a road from Arxan, China through the Eastern Steppe region (TERA 2002, The Economist 2004).

We drove by jeep from Sumber to the Nomrog border post the afternoon of 11 September 2002 and camped (Camp 1; see Map) inside the Strictly Protected Area within 5 km of the post headquarters (47°00' N, 119°22' E). On 12 September we moved to Camp 2 at Khanchandamm uul (46°59' N, 119°37' E), where we were to wait for horses to continue up the Nomrog River. The horses did not arrive as scheduled and we continued east offroad by jeep to Camp 3 northwest of Zaraa uul (46°54 N, 119°44' E) on 14 September. On 16 September we moved to Camp 4 west of Temee uul (46°48 N, 119°45' E). We left the park on 18 September, 2002.

There is surprisingly little wildlife in the region. The small forest patches, sheltered valleys, and wooded riparian zones are ideal edge habitat for the three large resident grazers and browsers in the park (moose, red deer and roe deer). Observations of old browsed tree and shrub tips, as well as the abundance of game trails, indicate that in recent years the populations of these animals were likely much higher than they are now. Despite the destruction of many birch forests by the fires in the fall of 1998, 1999, and 2000, there is an abundance of browse available. While wolves were seen and heard in the park, it is unlikely that the level of predation is high enough to have heavily impacted the populations of all three ungulates in the park. Therefore the probable cause for the lack of wildlife in the park is poaching by both Chinese and Mongolians.

Roe deer were the most abundant ungulate seen in the park. We observed a total of 27 of these animals (Olson *et al.* 2004). We also saw 11 moose (2 male, 4 female, 1 yearling, and 5 unidentified). Only 3 red deer were observed (3 males) and another was heard bugling near our Camp 4 during the night. Four wolves were observed feeding on a recent roe deer kill, and wolves also howled during the night near our Camp 3. We did not see any wild pig (*Sus scrofa*), although there was evidence of old rootings.



On 17 September we discovered an old poacher's camp, apparently built by the Chinese, on the edge of Boriin gol (46°49' N, 119°40' E). The skull of a male red deer was near that camp. At the base of one antler was the healing scar of a bullet wound with the bullet still lodged inside; it was identified as the type used by Mongolian border guards. All the animals that were seen were extremely shy, further indicating that there is heavy poaching in the area.

Despite the beautiful landscape and peaceful setting in Nomrog and the Strictly Protected status of the park, wildlife was surprisingly scarce. Evidence of poaching, lack of a permanent presence of a park warden inside the reserve, the poorly patrolled border with China, and anecdotal evidence that border guards promote hunting and fishing within the protected area indicate that there is a lack of a serious commitment to preserve the area and that wildlife will continue to remain scarce and some species, such as red deer, may even become locally extinct in the near future.

Nomrog Special Protected Area has global importance because of its pristine beauty and unique mix of Palearctic and Manchurian wildlife. Much of the Great Khingan Mountain Range in China has been heavily degraded and wildlife has become rare or disappeared across much of the range. The small section that is protected in the Nomrog SPA in Mongolia may be one of the few parts of this mountain range that still has a functional ecosystem and can support viable populations of large wildlife. Nomrog SPA also has great tourism potential. Tourists want to see and photograph wildlife, but this potential attraction is becoming scarce, and this will certainly negatively affect the economic potential of the region.

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References

- Anonymous. 2004. Bridge to nowhere. *The Economist*, January 29: 42.
- Jia, J., Nygren, K. and Yu, X. 1994. Biological features of Manchurian moose (*Alces alces cameloides*) with special reference to comparative research. *Alces*, 30: 137-152.
- Olson, Zahler, P. and Odonkhuu, D. 2004. Connectivity, Corridors, and Stepping Stones: Conservation Implications of Roe Deer Distribution on the Eastern Steppe. *Mongolian Journal of Biological Sciences*, 1(3): XX-XX.
- Shardarsuren, O. 1997. Section on animals. In: Mongolian Red Book. Ts. Shiirevdamba (ed). Ministry for Nature and the Environment of Mongolia. Ulaanbaatar, Mongolia.
- TERA. 2002. Pre-feasibility Report on Nomrog River Bridge and Associated Structures. Unpublished Report to the Government of the People's Republic of China, the Government of Mongolia, and the Asian Development Bank. Transportation and Economic Research Associates, Inc., Sterling, VA, USA.

Хураангуй

Бид 2002 оны 9 сарын 11-ээс 18-ны хооронд Нөмрөгийн Дархан Цаазат газарт судалгаа явуулж хар мөрний хандгай (Alces alces), буга (Cervus elaphus), бор гөрөөсний (Capreolus pygargus) популяци, амьдрах орчины нөхцөл байдлын талаар мэдээлэл цуглуулав. Эдгээр туруутан амьтдын төлөв байдал нь Дархан Цаазат газарт төлөвлөж буй нутгийн хойд хэсгийг тусгай хамгаалалтаас хасах, Дорнод Монголын нутагт тавигдах гэж буй хар замын асуудалд ихээр хамаарах юм. Нийт 27 бор гөрөөс, 11 хандгай, 3 буга ажиглагдлаа. Харин зэрлэг гахай ажиглагдаагүй боловч тэдгээрийн ул мөр илэрч байв. Зэрлэг амьтдын тоо толгой маш цөөхөн байсан бөгөөд зарим газраар хууль бус агналт хийж байсан хүмүүсийн шинэхэн отог, ул мөр илэрч байлаа. Хууль бус ангийн ул мөр, Дархан цаазат газрын байгаль орчны байцаагч нарын байнгын бус хяналт, хил хамгаалалтын ядмаг байдал, хил хамгаалагч нарын загасчлал, агнуурын тухай аман мэдээ зэрэг нь зэрлэг амьтдын хомс байгаа байдал болон тус нутагт байгаль хамгаалал бүрэн хэрэгжихгүй байгааг харуулж байна.