Takhi-Post

ITG INTERNATIONAL TAKHI-GROUP

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Wildlife conservation: let's keep going!

In early April the first foal of the year was born in the Great Gobi B sanctuary. This year 77 mares are supposed to be pregnant – a new record!

Photo: ©Cyril Ruoso

Protect the primordial Wild Horse and its habitat.

Dear friends of the Wild Horse

Friends of nature need not be told that hundreds of thousands of life forms are in decline. The loss and overuse of habitat, pollution and degradation of the environment, invasive species, persecution and hybridization are but a few of the threats to which these species are exposed continually. Meanwhile the networks of nature are under so much pressure in many places that they seem on the verge of gradually disintegrating into their components under the steady assault of the most invasive species of this planet: man.

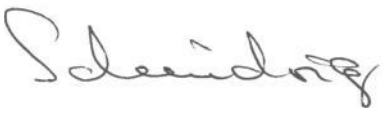
A mirror image of this plight is the pandemic which is currently worrying us all, throwing a garish spotlight onto the fragility of our densely populated, internationally entangled and technology-dependent world. It started at a Chinese fish market, which also displayed "bush meat". "Bush meat", that's wild animals, in this case trapped, jammed into cages alive and put up for sale as fancy foods. Apparently, corona viruses from bats and from highly endangered pangolins – species that normally wouldn't meet much – exchanged some genes. The result was a zoonosis which is highly contagious for humans. The consequences are truly devastating – this time for us.

The tearing apart of the networks of nature favours the development of novel microbe strains and hence infectious diseases which pose a constant threat not only to us, but also to the conservation of rare life forms. In a super-abundant species such as man, the risk of extinction is small. However, compared to the number of humans, a great many species of animals (and many plants) are extremely rare today.

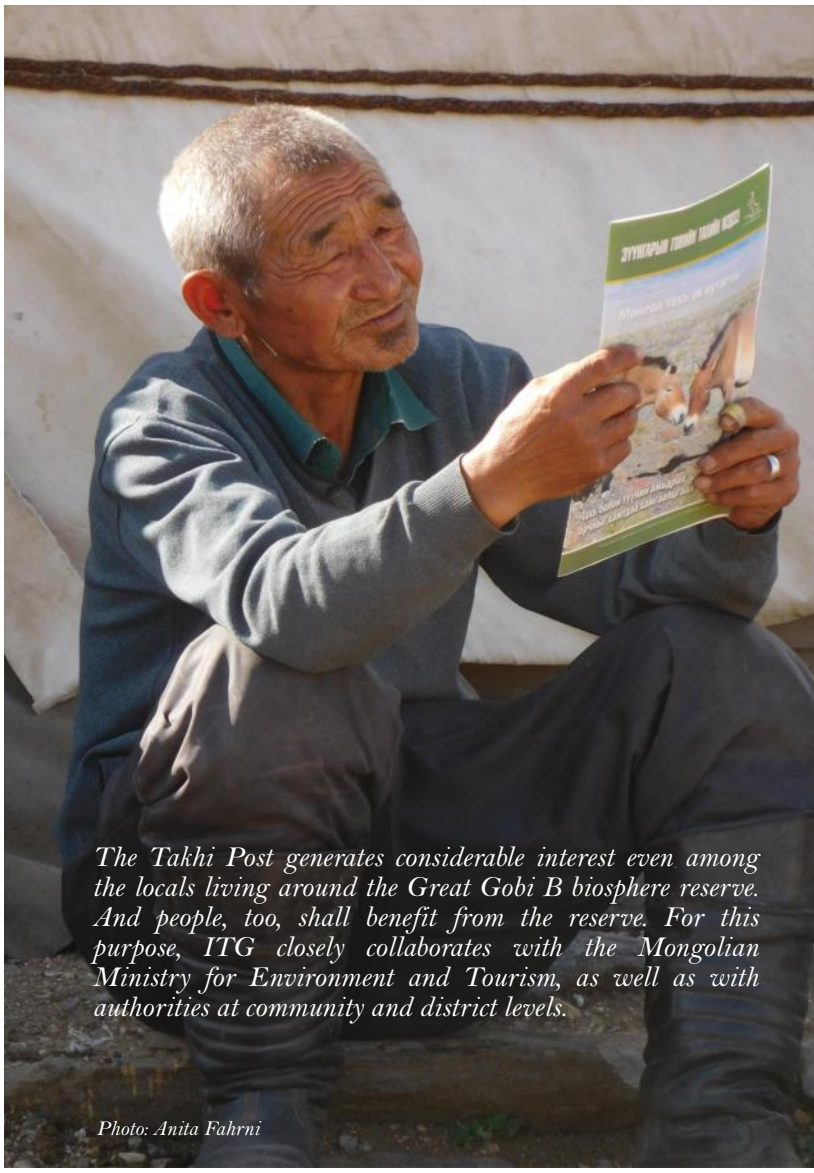
Epidemics are a particular threat for highly endangered species, including takhi Wild Horses and almost all other equids. Imagine if pathogens were transmitted through springs, for instance, in an ecosystem shaped by aridity. The odds of an epidemic with massive losses amongst wildlife would be high. That's one reason, among others, why we are investigating the Great Gobi B sanctuary's water bodies in a new study.

It begs no explanation that the pandemic cuts our societies to the quick. Less obvious is the fact that it also presses endangered species even harder. For species conservation is, even in normal times, a topic that has a hard standing in our thinking focused on humans.

In times like this, all eyes being on ourselves, our quest is almost hopeless. Initiatives like ours, which dwell entirely on the far-sightedness and generosity of donors, can dry out under these conditions almost as quickly as a puddle in the Gobi. Yet we, too, can get our work done only if we receive the necessary financial resources. After all, the need for conserving unique ecosystems persists even in extreme times – for nature suffers, so to speak, from a permanent pandemic. However, I am convinced that precisely in times of need there are always people who know how decisive their engagement for conservation is. Like right now. That's why I keep holding out. You too?



Dr. Reinhard Schnidrig, President, ITG



The Takhi Post generates considerable interest even among the locals living around the Great Gobi B biosphere reserve. And people, too, shall benefit from the reserve. For this purpose, ITG closely collaborates with the Mongolian Ministry for Environment and Tourism, as well as with authorities at community and district levels.

Photo: Anita Fahrni

"The need for conserving unique ecosystems persists even in extreme times."

Desert water: how to use it?

Many lives depend on the precious water of the Great Gobi B biosphere: the vegetation of the small oases which form in the environs of springs and are focal points of life; wildlife feeding on it and whose lives, ever at the limit, sense any competition. The species-rich sanctuary is an important refuge of several endangered animal species (takhi, khulan, goitered gazelle, argali wild sheep, snow leopard), home of many endemic plants and a very important resting place for passing water birds. Moreover, it is an important winter pasture for the herds of small livestock on which the semi-nomadic herders depend. And our rangers, their families and hence our conservation work, too, ultimately depend on desert water.

Photo: Petra Kaczensky

The entire Great Gobi B biosphere reserve depends on desert water – including the semi-nomadic herders for whom it represents an important winter pasture. Right: Derstei am water hole.

However, water holes are also focal points for unwanted exchange between species and individuals. Here the genes of Wild Horses meet those of domestic ones, and infectious pathogens can all too easily move from one throat or nostril to another and from one species onto the next.

Add to this that climate change doesn't stop at the Mongolian border. That Great Gobi B will get hotter is becoming apparent; whether it will turn greener or more desert-like remains unclear. Extreme weather events are likely to become more frequent. Although water bodies in Mongolia are being increasingly studied, the hydrology of very arid regions, especially in protected areas, is little known and not being monitored hitherto. However, whoever wants to conserve this scraggy ecosystem must care about desert water, first of all.

That's why ITG is planning a project, financed by the Mongolian Office of the Swiss Development Corporation, to improve water management in the Great Gobi B reserve. Coordinated by Batsukh Jamiyandorj, Head of ITG Mongolia, the sanctuary's ranger team (Director: O. Ganbaatar), Khovd University (Research Head: Ass. Prof. S. Burmaa) and the Research Institute of Wildlife Ecology of the University of Veterinary Medicine, Vienna (Dr. P. Kaczensky) will cooperate on the project. It will address aspects of wildlife, herder activity, hydrology, tourism potential, land use and park infrastructure.

Elixier water

Both Primordial Wild Horses (takhi) and Asiatic Wild Asses (khulan) are well adapted to the dry continental climate of their Central Asian living environment. However, they must drink daily. And their food – grasses for the takhi; grasses, herbs and small shrubs for the khulan – depend on sufficient soil humidity drawn from both subterraneous water courses and precipitation. However, here, in the region globally most distant from the sea, seasonal precipitation totals a puny 100 mm per year, mostly accruing in summer. That's between one-fifth and one-fifteenth as much as in Switzerland. Even where water makes it to the surface, sprouting green pasture, it's available for a short time only and soon dries up.
Scattered all over the Great Gobi B reserve are numerous natural and a few artificial water holes, mainly at the foothills of the mountain range forming the southern border to China. Of particular importance are two oases in the park's interior which offer pasture and water year-round: Khonin us (sheep fountain) in the east and Takhi us (Wild Horse fountain) in the west. In the park's new management plan they have been singled out, due to their high importance and biodiversity, as ecosystems within the semi-desert worthy of particular protection.

Photo: Dalaitseren Sukhbaatar

Photo: Dalaitseren Sukhbaatar

The project shall generate an inventory and a hydrological database for the water bodies of the Great Gobi B and the Alagkhairkhan mountains, including comprehensive chemical and microbiological analysis. The data shall be made available in the next publication of the series "Environment of Mongolia" for use by other institutions and the public. Critical water bodies, especially springs, shall be marked and protected based on the data. From the results, recommendations shall be provided to the sanctuary's administration. The necessary analytical tools shall be donated to Khovd University. This project will satisfy the high protection status (IUCN Category I) of the Great Gobi B reserve. It supports the conservation efforts in favour of IUCN red list species.

To optimize water management, ITG is planning an inventory and a comprehensive hydrological analysis of the reserve's water bodies.

Faces of conservation: Dr. Petra Kaczensky

In early fall of this year the third steppe ungulate count shall take place in the Great Gobi B sanctuary. ITG is looking for donations for this challenging undertaking, of which conservation and wild animals expert Dr. Petra Kaczensky is in charge. The biologist, well-known in professional circles, also functions as Research Head of ITG.

ITG: A steppe ungulate count in a region almost half as large as Switzerland – that sounds like a fairly crazy endeavor. Yet you have proven twice already that it works. But what exactly does the count serve for?

Dr. Kaczensky: It's our way to examine whether we achieve our working goals in the sanctuary. Hence: how do the numbers of endangered species develop? Mostly, there is no easy answer to this question so elementary in conservation. The rangers of the Great Gobi B reserve are capable of recognizing individual takhi Wild Horses and thus to reliably count the entire, fairly stationary population. Neither is feasible with the much larger and widely roaming populations of Asiatic Wild Asses (khulan) and goitered gazelles. For this you need a laborious, systematic assessment of numbers.

ITG: How can you ascertain the numbers of such highly mobile species in this huge sanctuary with any reliability of some degree?

Dr. Kaczensky: For this we developed a methodology used in 2010 for the first time and refined since. From 50 systematically chosen, elevated observation points we were conducting a simultaneous count at the time, scanning the eastern and western portion of the reserve on two consecutive days. At each observation point there were 2 persons who spent the night there and counted all visible ungulates in the observation point's perimeter at 6 pre-defined time points. In the vast, treeless plains of the Dzungarian Gobi this allows observing large areas simultaneously. This resulted in the probably first robust population estimate for khulan and goitered gazelle in the sanctuary. Back then we recommended repeating the point count every 5 years in the same way in order to recognize population trends. In 2015 we increased the number of observation points to 80 by manning each observation point with only one observer.

ITG: And what trends did you find?

Dr. Kaczensky: An ecouraging increase in khulan numbers by 13-14% per year and in goitered gazelle numbers by 18-19% per year. The number of estimated Wild Asses – we calculate the density from the numbers spotted, then extrapolate to the entire area, so we don't really count each individual – increased within 5 years from about 5'700 to 9'300; the number of gazelles from about 6'000 to around 13'500 individuals in the observation area measuring 11'000 km².

ITG: So the ranger team's conservation efforts are very successful for these two species!

Dr. Kaczensky: Absolutely. Though you need to take into account that the winter 2009/2010 was characterized by extreme cold and lots of snow, claiming the lives of millions of sheep and goats, certainly many khulan and goitered gazelles, too, and almost two-thirds of the re-introduced takhi Wild Horses. The population increase between 2010 and 2015 may have been influenced by this. All the more thrilling will it be to study the development over the past 5 years.

Reputed wildlife biologist Dr. Petra Kaczensky is active for the Norwegian Institute for Nature Research in Trondheim and the Research Institute of Wildlife Ecology of the University of Veterinary Medicine, Vienna. Investigations on lynx and brown bears concluded her studies in Regensburg, Boulder (CO) and Munich. She is author of numerous publications on the ecology of equids, large carnivores and on wildlife migration as well as topics relating to feeding ecology and conservation.

ITG: Last year the area of the sanctuary was almost doubled through a long-awaited parliamentary resolution. Are you accounting for this in the new point count?

Dr. Kaczensky: Certainly. Already during the past ungulate count in Great Gobi B we had also defined observation points outside the reserve. We knew that khulan and gazelles were leaving it regularly to use important habitats outside its boundaries. These posts we will man again, of course. But on top of this we will install another 40 observation points in the newly protected areas in the west and east. This will require the count to be extended from 4 to 6 days. Through this we hope to gain an improved understanding of the gazelles' range as well as new insights into important new or additional grazing grounds for the khulan.

ITG: Are you planning further changes to the protocol?

Dr. Kaczensky: For reasons of comparability we will use the same method, but we will amend it with a count from the air to collect even more accurate numbers. For this purpose we have already tested drones with which we counted khulan and gazelle populations in Kasakhstan.

ITG: How are you going to go about this?

Dr. Kaczensky: We want to fly the original sanctuary along west-eastern transects spaced at 5 km intervals during 7-10 days. Using two parallel cameras, each transect will cover a width of 400 m. The length of a transect will average 150 km. The data will be accrued in collaboration with the Association for the Conservation of Biodiversity of Kazakhstan (ACBK) and will be analyzed there.

Hard to count; the shy and highly mobile goitered gazelles.

The 2015 steppe ungulate count showed an encouraging increase in the populations of khulan and goitered gazelle.

The area to fly over we can adjust depending on the results of the previous count from the ground. Drones allow for more precise and probably more cost-efficient counts. However, professional drones are needed which carry high-resolution cameras and can fly pre-programmed paths for hours. This way the study area can be covered more homogenously while also scanning inaccessible areas or those without suitable observation places. Moreover, the images can be re-analyzed later, and they provide a database of high-resolution pictures showing the condition of the habitat.

ITG: How does one have to imagine the logistics of this endeavour?

Dr. Kaczensky: Substantial! We need 44 counting observers for the observation posts, 2 international researchers, 5 drivers/cooks, 10 vehicles and 2 drone pilots.

ITG: The whole project has a budget in excess of CHF/USD 80'000.- for which we are still looking for donors. Actually, how confident are you that the steppe ungulate count can take place as planned – despite the corona pandemic?

Dr. Kaczensky: That's hard to tell. If travel restrictions last longer than until end June, we will have to postpone the count, planned for August and early September, by one year, as the steppe climate will get too rough in late fall to conduct such a point count.

ITG: Sincere thanks for the informative interview!

1000 Takhi in Great Gobi B?

Our vision of 1000 takhi in the Great Gobi B reserve made it right to the cover of the in-flight magazine of MIAT. Mongolia's national airline conducted an interview with ITG president Dr. Reinhard Schnidrig.

Photo: Dalaitseren Sukhbaatar

Starting the foaling season – at 21 years of age!

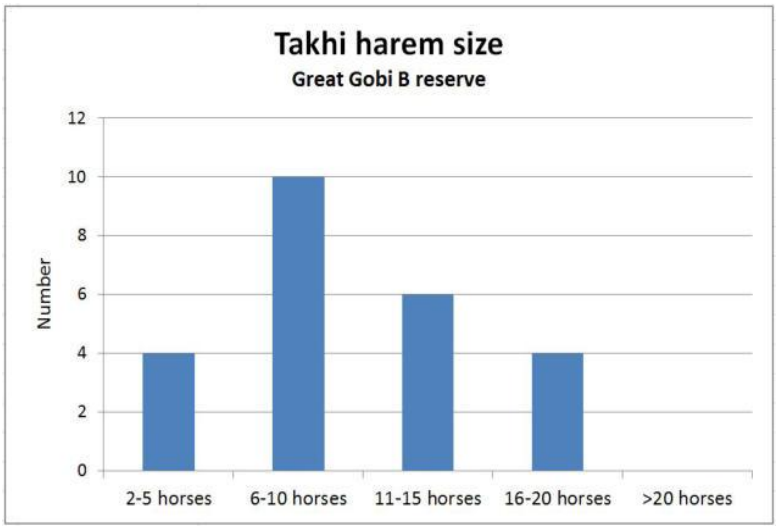
The mare Zur, member of the Ajnai harem totaling 11 individuals, is arguably the most-photographed free-roaming takhi. Born on 6 June 1999 in Cologne, she is still half-tame and allows people to approach closely. Despite her considerable age, in early April she again gave birth to a foal, this year's first. According to park director O. Ganbaatar, another 77 mares (70%) are likely to be pregnant. For the second time in the last two years the start into the foaling season happened to be a birthday present to Christian Stauffer, ITG Vice President and a primary rock of wild animal conservation. For his sake we'll keep the exact date confidential… To Zur, her filly and Christian we wish good luck and plentiful rain.

Tzuut steals a harem

Wild Horse societies are no petting zoos. It can get really rough there. A key reason is harem dynamics. As a stallion you can breed only if you manage to snatch mares from an established harem owner. That's no walk in the park: Wild Horses are very fierce. Against competitors they will violently defend their mares and foals. For he who loses his whole harem actually loses the core of his existence, the dissemination of his genes in the maelstrom of evolution. Since a harem stallion keeps being challenged by youngsters, his life resembles a continuous battle. Of the 10 harem stallions of 2015, only 7 continue to lead a group, for the most part clearly a smaller one. A few new harem owners of 2019 have already lost their status again. And it can get even worse. End February, the 12-years-old stallion Chimbaa lost his herd counting 7 horses to the youngster Tzuut. He chased off both Chimbaa and one of his yearling stallions, who then joined a bachelor group. Chimbaa, however, died less than three weeks later from an unknown cause. Possibly he had already been ill or weakened, and Tzuut had recognized his opportunity. Wild animals don't speak, but they communicate in subtle ways through body language, vocalizations and smells. Weaknesses don't go unrecognized for long and will be exploited unscrupulously.

Young mare Elushka (right) and takhi boy Alpha found the sanctuary too crammed. They cleared out and were hanging out for weeks in the east, far outside the specially protected area – but luckily in the proximity of a herd of domestic horses belonging to a ranger. In fall, the takhi followed the herd back to the edge of the reserve, where they temporarily joined a harem in an accommodation enclosure.

The life of a harem stallion resembles a continuous battle. By now there are 24 harems, of which only 7 are still controlled by stallions that already had a harem in 2015.



Species portrait: Saker falcon

A master aviator is crashing. Still, this mighty steppe falcon can be met in Mauretania, Austria, in the Balkans, Arabia, North India or in China – and of course in Mongolia. But you need to be really lucky. For it is one of the most endangered raptors world-wide[1]. Its numbers have been dropping since the eighties, when falconry in the Near East generated a high demand for this species. Today, globally an estimated 10'000 breeding pairs of this fast hunter remain – trend quickly decreasing further. Between 1993 and 2012 the population has decreased by 50-80%, and this over just three generations!

What gets to this apex predator so dramatically? Availability of prey alone can't explain it. Sandgrouse and other birds up to duck size, ground squirrels and other small rodents are still around in steppe areas in sufficient density. Yet the steppes themselves are dwindling. Indeed, the fast decline of this species has many reasons. It seems to be associated with excessive offtake of eggs for falconry, degradation of steppes into agricultural wastelands short of prey, agro-chemicals and electrocution. While the small European populations have recovered somewhat, the decrease is particularly dramatic in the Central Asian breeding places of the Saker falcon, especially in Mongolia and Kazakhstan. The populations there have been halved and continue to drop. In Mongolia, where the Saker falcon was declared the national bird in 2012, electrocution from powerlines lacking insulation is killing thousands of juvenile falcons. Moreover, illegal egg theft, on top of legal contingents within the framework of CITES (Convention on International Trade in Endangered Species) did and does play a major role in the decline.

Falco cherrug is one of the largest and heaviest falcons and thus, like his sister species, the gyrfalcon, an especially popular hunting falcon in the Near East. The local falconries also breed hybrids, jeopardizing the species' gene pool. With a length of (for the much larger female) up to 60 cm and a wingspan of up to 120 cm, the Saker falcon is a most impressive being. Its epithet Saker is derived from the Arabic, meaning sparrowhawk – a hawk species not closely related with the falconidae and better suiting the role of prey for the high-velocity hunter.

As sedentary bird, the Saker inhabits the Balkans, Turkey and some areas of the Middle East and Central Asia. However, as a part-migratory or migratory bird – depending on prey density in winter – it can be found in an immense range spanning from West Sahara to the Yellow Sea and from Kenia into the Siberian Taiga. It hunts close to the ground in open landscapes – desert edge, semi-desert, steppes and arid montane areas; its flight accelerates very fast and is extremely maneuverable. This allows it to catch middle-sized diurnal rodents such as ground squirrels, but also very fast-flying birds such as sandgrouse. In Europe it recently switched from rodents to domestic pigeons. For nesting sites the Saker falcon uses old nests in copses or on cliffs. On average, the clutch contains 3-4 eggs, but breeding success heavily depends on prey density which varies a lot, especially in rodents.

[1] *https://www.iucnredlist.org/species/22696495/110525916*

Photo: Foto: © Michael Gäbler, https://de.m.wikipedia.org/

The future of this charismatic bird, which is red-listed as an endangered species, does not look good. Like many migratory birds (and generally all species migrating over wide distances), in its gigantic range across national borders it is exposed to manifold dangers and accordingly difficult to protect. But there are also rays of hope. A Saker falcon task force installed in 2011 and a global action plan for this species signed in 2014 shall help save this charismatic large falcon. Mongolia plays an important role in this quest. Here, supported by funds from Abu Dhabi, more than 5'000 artificial nests were erected, offering breeding sites for up to 500 breeding pairs. In 2013 this programme resulted in the hatching of 2'000 falcon chicks – a spark of hope for a hard-pressed species.

Photo: Petra Kaczensky

Even faster than Pallas' Sandgrouse (Syrrhaptes paradoxus) only few raptors manage to fly. The Saker falcon is one of them. For him, the sandgrouse forms part of its range of prey species, as do ground squirrels.

The decline of the Saker falcon is particularly dramatic in its Central Asian breeding places, especially in Mongolia and Kasakhstan.

What we need your help for

Conservation work is not always spectacular. However, routine jobs in the background make a project successful. Our examples show how much you can achieve with your contribution. Each donation is valuable and most welcome.

You pay a ranger his daily salary and for the use of his material.

You help to inform persons affected by the park extension decided by parliament in 2019.

You contribute to the maintenance and repair of heavily strained patrol vehicles.

You help finance research on the management of water holes in the reserve.

You enable the ranger patrols for one month.

You help to finance the ranger training for the steppe ungulate count in 2020.

Join the ‚Friends of the Wild Horse '!
Membership for private persons **CHF/USD 50.-**
Foal membership for teens, students and apprentices **CHF/USD 20.-**

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ITG works in an honorary capacity.
Each donation is used directly for protecting the primordial Wild Horse and its habitat.

Impressum

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