Takhi-Post

ITG INTERNATIONAL TAKHI-GROUP

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A kingdom for a horse?

Vast, relatively intact steppe ecosystems of temperate zones can no longer be found anywhere but in Central Asia. They form a "kingdom" – better: a last refuge – for two endangered wild horse species: the takhi and the khulan.

Photo: © S. Natsagdorj

Let's Protect the Primordial Wild Horse and its Habitat.

Dear friends of the Wild Horse

Anyone who – like you – cares about conserving the biodiversity of our planet has a huge choice. More than 32'000 species are listed on the IUCN's Red List as threatened with extinction. That's 27% of all 120'000 species analyzed so far – or 41% of amphibians, 26% of mammals, 34% of conifers, 14% of birds, 30% of sharks and rays, 33% of reef corals, 28% of certain types of crustaceans… One can really get dizzy from such numbers.

But that doesn't help. So what does? Which of the countless endangered life forms should we – in practice – try to rescue? The Big Leaf Mahogany or rather the Ethiopian Wolf? The Solomon Island Palm Frog or the Mekong Giant Catfish? The Sunda Pangolin or the European Eel? The Tristan Albatross, the Madagascar Big-Headed Turtle, the Giant Rafflesia or the Snow Leopard?

That's not a trivial question because not every species is equally old or meaningful in evolutionary terms. And not all play an equal role ecologically: keystone species hold together entire food chains. That's why it is advisable to base species conservation on ecological aspects and not – at least not only – on the cuteness or exotic nature of a given species. We are almost too familiar with horses, which are known to have played a crucial role in the history of mankind, to perceive them as a threatened life form. But that is deceiving. Of these offspring of an age-old genealogy only 7 wild forms survive today: three species of donkeys, three of zebras and the Primordial Wild Horse (takhi). With the exception of the Plains Zebra and the Tibetan Wild Ass they are all threatened with extinction. Without conservation measures this age-old group of wildlife could cease to exist.

That's what happened to the ancestor of the domestic horse – and by a hairbreadth also to the Primordial Wild Horse. To prevent this is one reason for ITG to fight for the survival of the takhi. But we also want to conserve the steppe ecosystems of the temperate zones which today only remain in Central Asia. They form a „kingdom" – better: a last refuge – for two threatened wild horse species: the takhi and the khulan.

So if you wonder where to place your commitment to wild nature, you're perfect right here. For securing the survival of an extremely rare species which belongs to a singular, threatened ecosystem to which the age-old Mongolian nomadic culture clings – that seems a really meaningful commitment to me. Wouldn't you agree?

Dr. Reinhard Schnidrig, President ITG

Photo: Dalaitseren Sukhbaatar

„We are fighting for an extremely rare species which belongs to a unique, threatened ecosystem to which the age-old Mongolian nomadic culture clings."

An old family in trouble

Wild equids are the last heirs of an evolution spanning more than 55 million years. Just 5 million years ago this family still had more than a dozen genera. Today a single one remains, and it counts only 7 species: three of zebra, three of wild ass and – as last True (so-called caballine) Wild Horse – the Primordial Wild Horse (also called Przewalski Horse or takhi). All are large, highly mobile herbivores living in steppes (horses), savannas (zebras) and semi-deserts (asses). They undertake partly large-scale seasonal, regional and local migrations in search of optimal conditions. In today's world their need for space is an enormous problem.

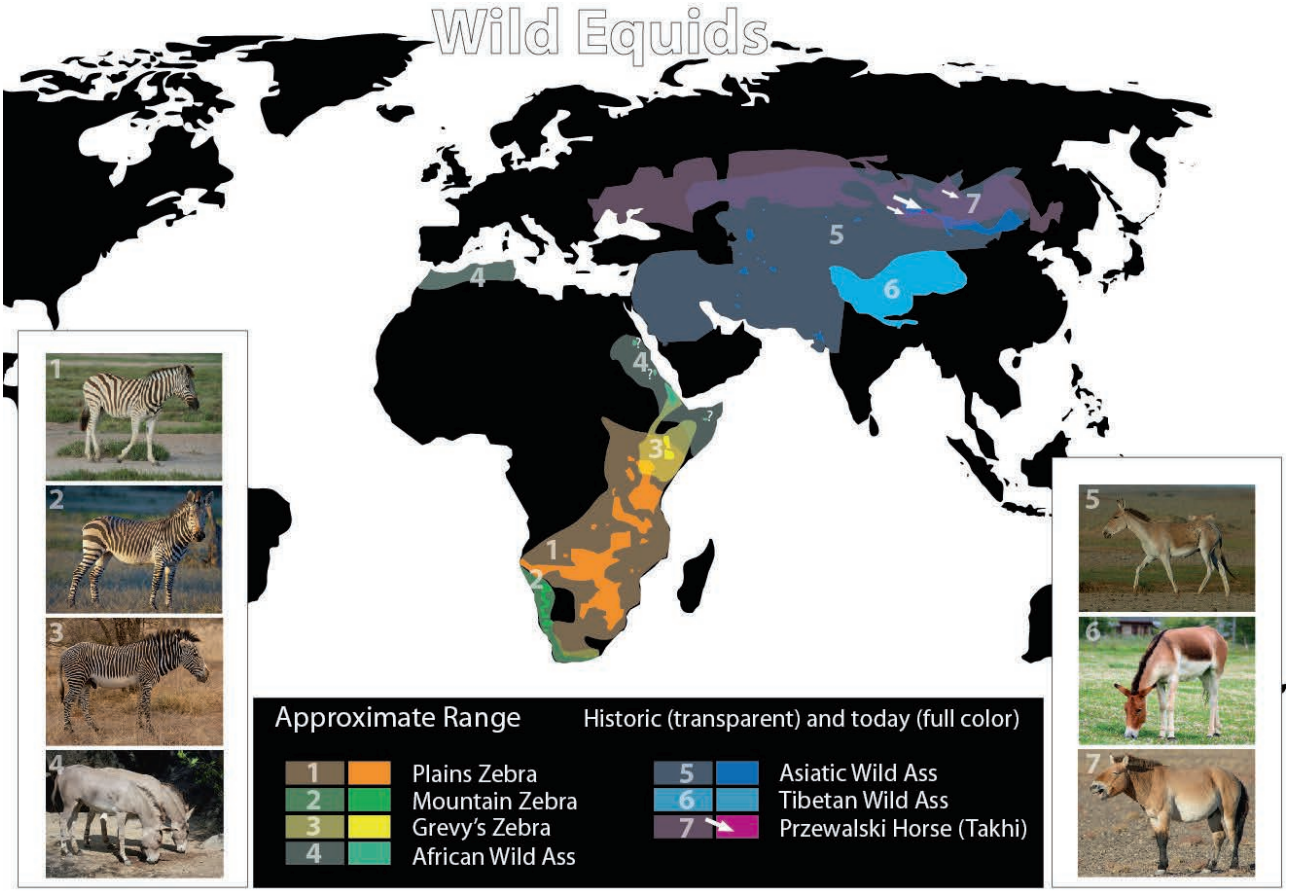
The explosion of the number of humans (and their claims) beyond any measure has fragmented and altered the habitat of equids so drastically that only the Tibetan Wild Ass (kiang) can be considered not threatened (least concern according to IUCN[1]). The Plains Zebra and the Asiatic Wild Ass (khulan) are potentially at risk („near-threatened" according to IUCN), the Mountain Zebra is vulnerable, the Grevy's Zebra and the takhi (each with fewer than 2000 individuals) are threatened, and the African Wild Ass with only 20-200 individuals left is critically endangered.

Globally wild horses are under enormous pressure. If left without determined conservation measures they are unlikely to have a future. Surely there are millions of domesticated horses and asses whose original species we have wiped out wholly or almost entirely, respectively. However, they cannot compensate for the ecological consequences of losing their wild ancestors and cousins. These are keystone species for the biodiversity of their habitats. As hind-gut fermenters they get along on poor food. They turn it into high-quality manure, which they spread over vast areas, including the undigested seeds within. In this way they maintain the ecological quality of their home range.

Wiping out keystone species – among which there are many megafauna species – probably represents the gravest influence of humankind on nature[2]. The devastating consequences unfortunately appear with delay and stealthily, and are therefore mostly overlooked. As has now been demonstrated experimentally for various ecosystems, the absence of keystone species changes ecological interactions in such a way that entire areas can be destroyed through cascading effects.

To conserve a threatened species or, as in the case of the takhi, to reintroduce it into an ecosystem can thus yield much more benefit than one imagines. In any case, we just can't allow ourselves to lose this irretrievable species with such pivotal importance in the history of mankind!

[1] IUCN: International Union for the Conservation of Nature
[2] Estes JA et al.: Trophic Downgrading of Planet Earth. Science 2011, Vol. 333: 301-306



All species of wild equids except the Tibetan Wild Ass have lost most of their former range. Five of the seven species are at risk of extinction. The African Wild Ass is critically endangered, the Primordial Wild Horse (takhi) was even extinct in the wild; today it only lives in the wild in minuscule populations in Mongolia and China.
A few thousand years ago the range of the African and Asiatic Wild Ass comprised the semi-deserts of all North Africa and Asia, respectively, whereas the Primordial Wild Horse ranged through the entire Eurasian steppe belt (purple area).

Wild equids turn poor vegetation into high-quality manure which they spread over vast areas, including the seeds within.

Deserving protection: a very special ecosystem

Indeed, the umbrella species of our program is the Primordial Wild Horse. However, along with this species threatened with extinction we also preserve its ecosystem – which is one of the last relatively intact steppe habitats of the temperate zone. It is also home to several migrating ungulate species, including the world's largest remaining population of Asiatic Wild Ass (khulan) – a species which makes especially wide-ranging migrations rendering it correspondingly vulnerable. Other globally threatened mammal species of this ecosystem include the Goitered Gazelle, Argali wild sheep and the snow leopard. In total 410 plant species, 49 species of mammals, 15 of reptiles and amphibians and over 150 bird species have been identified there[3]. Traditionally the Great Gobi B preserve also serves as winter pasture for around 140 families herding up to 75'000 goats and sheep.

It isn't a sandy desert, but is characterized by steppes with interspersed hill ranges amidst high mountains, forming a semi-arid extension of the Dzungarian Gobi, a vast plane wedged between Altai and Tian Shan. In this region, planet-wide the most distant from any ocean, climate is extremely continental. In the short summers the temperature can rise to 40°C and can drop to -40°C in winter, with annual precipitation totaling just 100mm. Fauna and flora are most diverse along the few large springs, two of which extend over several kilometers.

A brook, which is dammed to water small fields, flows only seasonally. Key plant families include sweet grass, bismuth, pea legumes and goose foot species such as the endangered saxaul bush which is found only in Central Asia.
Rodents are the dominant animal group with 25 species recorded, including gerbils, jerboas, and hamsters. Other fauna include the Tolai Hare, Mongolian Pika, Toad-headed Agama, wolf, red fox, Corsac fox, lynx, Pallas' cat, snow leopard and Siberian Ibex. However, birds are easiest to observe, of which almost 100 species have been identified in the west of the preserve alone, most of which occurring at low densities. The more conspicuous species include Pallas' sandgrouse and some of the park's 12 raptor species, such as the Golden Eagle, the Steppe Eagle and the Black Vulture.

In contrast to many massively altered steppe habitats in the temperate zones of North America and Eurasia, this fragile ecosystem is still relatively healthy today. However, there are substantial risks, notably climate change, competition for pasture through small livestock (especially cashmere goats) as well as legal and illegal mining in the park's buffer zone. We are addressing these threats within the framework of our 2019-2023 management plan, working closely with the Mongolian Ministry of Environment and Tourism.






[3] Kaczensky P, Walzer C, Steinhauer-Burkart B: Great Gobi B Strictly Protected Area, a wild horse refuge. ECO Nature Edition, Nature Guide No. 3, Mongolia 2017. ISBN 3-935803-21-4

Photos: © Otgonbayar Baatargal (Long-eared jerboa, Altai snowcock, steppe polecat, Demoiselle crane)
© Petra Kaczensky (flora),
© Erdenepurev Sh. (Gobi B-Reserve with Alagkhairkhan mountain)

The Great Gobi biosphere reserve is one of the last relatively intact steppe habitats of the temperate zone.

Conserving an age-old cultural heritage

The Dzungarian Gobi is not a wilderness; from time immemorial it has been used by herders as pasture. For their age-old, traditional way of live, too, the biosphere reserve shall remain home. A typical herder family owns several hundred sheep and goats, on whose meat, milk, wool and leather it subsists; in addition, a few dozen horses and several camels, cows, and sometimes yaks. Their traditional way of life is sustainable: their nutrients cycle is closed. This changes once the family needs to generate cash, e.g. for vehicles, solar panels, refrigerators, fuel or education. For this purpose it sells wares, notably cashmere, wool, dairy and meat products, with cashmere generating the largest benefit by far. It can triple the income. This creates a strong incentive to produce more than would be sustainable. Today Mongolia is, after China, the second-largest producer of cashmere, with a world market share of around ¼; and Mongolia's cashmere center is the Gobi. Per goat about 300 g of cashmere wool can be combed out from the under-wool of the winter coat each year. This yielded about USD 14 in 2018.

If the number and headcount of livestock herds increases too much, the nomadic use of pastures turns into a risk. The desertification around urban centers of Mongolia raises a red flag; it is a result of the rapid population growth and the resulting overuse of vast areas of Mongolia. The high demand for cashmere aggravates the problem, since today an increasing number of cashmere goats is kept. Meanwhile the biomass of the nomadic small livestock exceeds that of wild ungulates by almost the twenty-fold[4]. Such exaggerated numbers degrade the food resources and thus reduce the chances of survival of various species of wild animals.

However, the precious ecosystem shall not be conserved against the will of the local population but together with it. Indeed, both the ecosystem and the nomadic culture can continue to exist only on the basis of sustainability. That's why ITG funds research that helps to define an optimal pasture management. Studies include vegetation, biomass consumption and production of the herds, their movement patterns and the interests of herder families. These people would like to be more involved into park management, welcome information events and have hopes for an additional income from gentle tourism.

[4] Berger J, Bayarbaatar B, Charudutt M: Globalization of the Cashmere Market and the Decline of Large Mammals in Central Asia. Conservation Biology 2013

Photo: ©Uli Rutz

Both the ecosystem and the nomadic culture
can continue to exist only on the basis of sustainability.

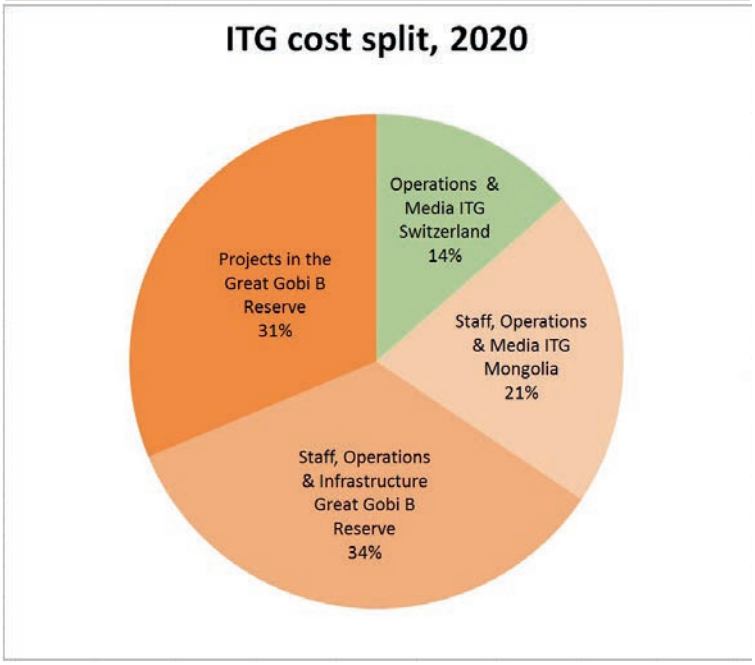
Themes that have been keeping us busy in 2020

Besides and despite SARS-CoV-2, ITG was dealing with the implementation of the current management plan, notably with the following themes:

- Training of 14 additional rangers
- Demarcation of the new park border with numerous information panels and poles
- Investigation of the park's waterbodies with the goal of optimizing water management, in cooperation with Khovd University
- Study on the tourism potential and other added value for the local population
- Project work on the new national park administration center in Altai (Khovd province)
- Renewal of the contract between ITG and the Mongolian Ministry of Environment and Tourism
- Common management of takhi populations living in 3 reserves in Mongolia (Great Gobi B, Khomiin tal, Hustain Nuruu)

What we used your 2020 donations for

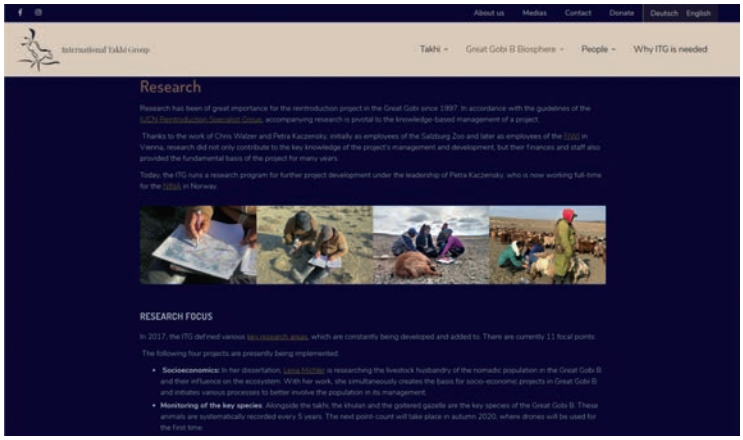
86% of donations directly served to conserve the Great Gobi B ecosystems and the Primordial Wild Horses living there. 14% of donations were used for the operational cost of the ITG teams in Switzerland (working in an honorary capacity) and for information services, notably the new website and the Takhi Post.



New web platform

Visit our new website www.savethewildhorse.org
We have edited the contents and illustrated them with many pictures to give you a better idea of our conservation program. And you will learn a lot about the takhi, the Dzungarian Gobi ecosystem, the nomadic culture and the goals and activities of ITG. For further information just visit our media center where you can find reports, protocols, scientific publications, media content and the digital versions of the Takhi Post, which you can also order as newsletter. Have fun!

PS: Donations are now also possible online via PayPal and credit card.



Species portrait: Snow leopard[5]

Mountains surround the Great Gobi B reserve: in the north the Altai, with a length of 2000km; in the south the Yellow Takhi Mountains (Takhin Shar Nuruu); in the East the Alagkhairkhan. Since the 2019 doubling of the reserve size additional mountain ecosystems are under protection. Here thrives a species community that is adapted to life in the mountains. It includes the Siberian Ibex and the Argali wild sheep, but also the snow leopard (Panthera uncia). With its dense, silver-grey fur, its mighty paws, long bushy tail and the expressive face, this species is an icon of the Central Asian mountain ranges. In addition, as an apex predator it plays a pivotal role in their ecosystems.

Arid deserts and semi-deserts with rough climate, sparse vegetation and therefore widely dispersed prey do not appear to be an inviting habitat for a large cat. But snow leopards thrive not only in mountain forests and pastures, but also on barren, steep, jagged slopes and desert-like highlands. In Mongolia they have even colonized isolated ranges which can be reached only across 20-65 km of open plains. They also demonstrate high adaptability in terms of their prey, whose body weight may triple their own. Wild sheep and goat species form their key prey, but in some parts of their range they may also feed on wild asses, wild boars or Muntjac deer. Especially in summer, marmots, pikas, hares, voles and pheasants also form part of the spectrum.

A captive adult snow leopard needs around 1.5 kg of meat per day. Thus, a wild sheep will meet its food requirements for several days; a female with cubs needs up to three times as much. In summer snow leopards pursue their prey above the tree-line at 2500-6000 m of altitude, whereas in winter they follow it to lower elevations. As excellent leapers they often attack prey from a vantage point and then chase it down slopes, sometimes over several hundred meters.

As an apex predator the snow leopard plays a key role in the ecosystems of the Central Asian mountain ranges.

Profile:

Leopard-sized, tail as long as the body, weight 22-52 kg. Active by day and night, but mostly crepuscular, between 8:00 p.m. and 04:00 a.m.; mostly rests during the afternoon.

Solitary (except females leading cubs). Range size about 20 km² in good habitats, in Mongolia in areas with low prey density 60 to almost 600 km². Territory is marked with olfactory signals in scratch marks, urine and scats.

Birth in caves or crevices, within a narrow time range, about 100 days after the mating season which takes place in the first three months of the year. On average 2.2 cubs.

Birth weight 300 to 600 g, increasing weekly by 300 to 500 g; weighs approximately 4kg at 2 months, and about 6 kg by the time of weaning (10 weeks). Cubs follow their mother from 2-4 months of age and are lead for about 1.5 years. Sexual maturity at 2-3 years, first mating at about 4 years of age.

The roughly 3000 snow leopards world-wide inhabit an enormous area ranging from the Altai through the Tian Shan to the Himalayas and the Tibetan high plateau. This species is listed as vulnerable, its numbers dwindling. It suffers from several concurrent threats. Its key prey species diminish because they are hunted unsustainably, while their habitat is over-used by livestock. If snow leopards then switch to livestock, they are killed in retaliation. Moreover, poachers supply pelts and other body parts to the animal trade mafia, mainly through China, Mongolia, Pakistan, India and Tadjikistan. New risks arise from both climate change and the continued proliferation of human populations and activities such as mining, streets or railroads.

For conserving snow leopards local farmers and herders need to be able to improve the protection of their herds, better understand the ecological importance of this keystone species and obtain social and economic support. Most importantly, additional snow leopard habitat needs to be put under protection, as just happened in the Great Gobi B reserve.

[5] Sunquist ME & Sunquist FC, in: Wilson DE & Mittermeier RA eds. (2009): Handbook of the Mammals of the World, Vol. 1, Lynx Edicions, Barcelona

Snow leopards suffer from multiple threats. For their conservation it is essential to protect additional habitat.

Let's secure the future of the Primordial Wild Horse together

„The Great Gobi biosphere reserve is home not only to a unique flora and fauna, but also to the millennia-old tradition of the nomadic Mongolian horsemen. Let's preserve this heritage for future generations!"
Oyunsaikhan Ganbaatar, biologist and takhi expert, Director, Great Gobi B

ITG works in an honorary capacity.
Each donation is used directly for protecting the Primordial Wild Horse.

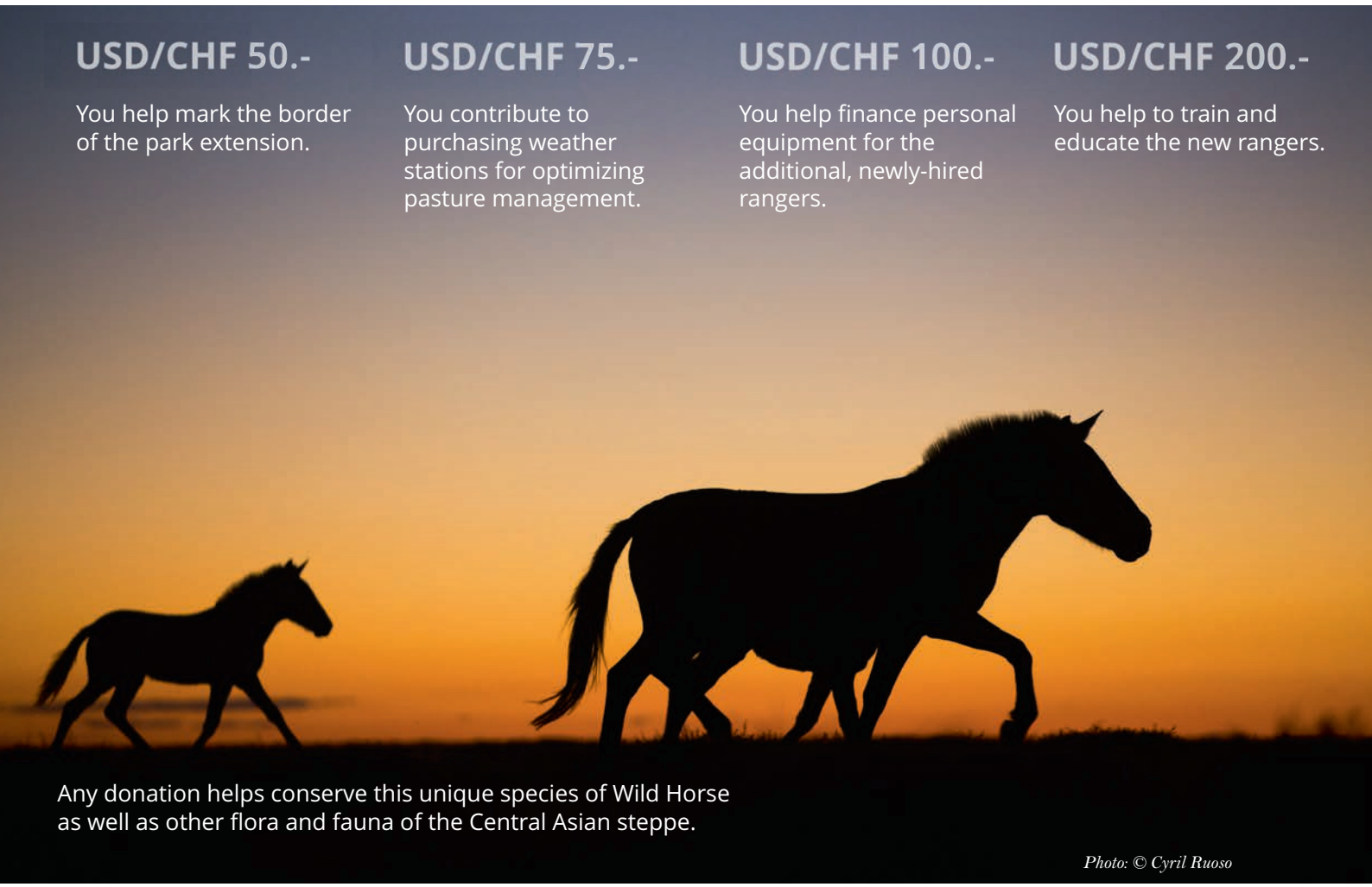
How your donation helps us – many thanks!

USD/CHF 50.-
You help mark the border of the park extension.

USD/CHF 75.-
You contribute to purchasing weather stations for optimizing pasture management.

USD/CHF 100.-
You help finance personal equipment for the additional, newly-hired rangers.

USD/CHF 200.-
You help to train and educate the new rangers.



Any donation helps conserve this unique species of Wild Horse as well as other flora and fauna of the Central Asian steppe.

Photo: © Cyril Ruoso

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

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