



Konik stallions fighting during breeding season at Oostervaardersplassen in the Netherlands. Photo by Mark Hamblin/Wild Wonders of Europe. Image courtesy Rewilding Europe.

Return To The Wild

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More than a century ago, the last wild Tarpan was lost. *Equus ferus ferus* or the Eurasian wild horse, commonly known as the Tarpan, once roamed in great herds across Europe but, by the end of the 19th Century, they had become extinct. After centuries of hunting, the last wild mare died in an attempt to evade capture. Some years later, the last captive Tarpan passed away and the species passed into history.

Yet today, the name Tarpan is more commonly heard than might be expected of a long-extinct horse. After decades of obscurity, the identity of the Tarpan was reclaimed by one group after another as attempts were made to resurrect this ancient species. Can these attempts to 'breed back' the wild horse be rightfully called Tarpan? Can the Tarpan really be reborn from extinction?

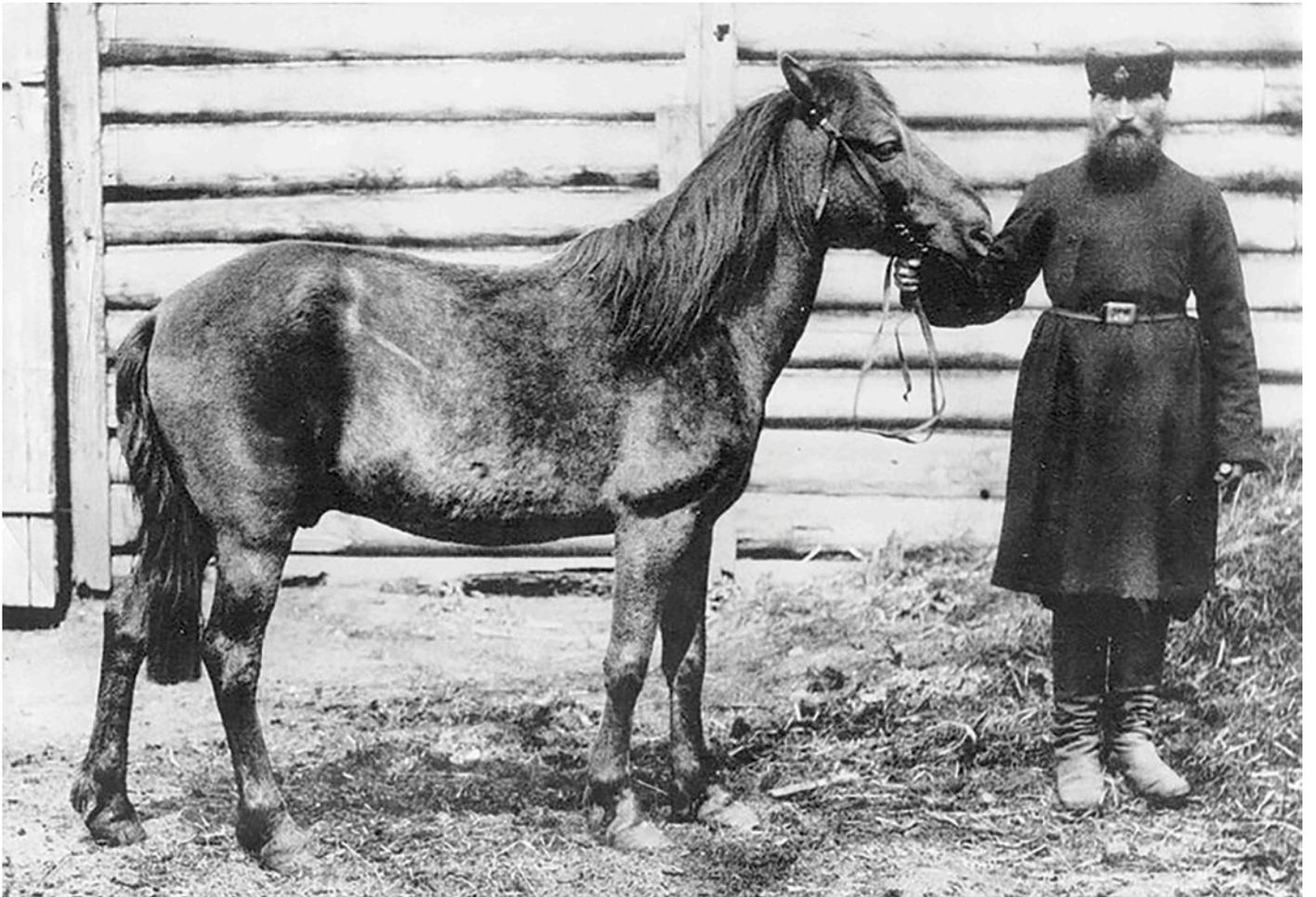
What was the Tarpan?

The Tarpan was not a breed in the sense of the Arabian or the Thoroughbred, but a distinct subspecies of horse. *Equus ferus caballus*, the domesticated horse, is a subspecies of *Equus ferus*, the wild horse. The Tarpan, scientific name *Equus ferus ferus*, was another subspecies, along with the extant *Equus ferus przewalskii*, the Przewalski's horse. The common name 'Tarpan' has its roots in a Turkic language, simply meaning 'wild horse' or, occasionally, indicating a feral horse.

In 440BC, Herodotus reported herds of wild white horses grazing around the shores of a lake roughly in the region of modern Ukraine. Even before this ancient record was created, cave paintings depicted dun horses as far back as 17,300 years ago, when the paintings at Lascaux in France are believed to have been made.

Johann Friedrich Gmelin, the German naturalist, was the first to give a detailed description of the Tarpan in his 1774 book 'Travels through Russia'. He described a small, fast, mouse-coloured horse. In 1841, an engraving was made of the Tarpan by an artist called Borisov. The image is believed to depict a young colt and is the only known illustration of the species.

At one point in history, the Tarpan could be found grazing the fields and meadows of southern France and Spain at one extreme, or thundering across the steppe through to central Russia at the other. However, centuries of interbreeding with domestic and feral horses, combined with the popularity of hunting it for its meat, led to Tarpan numbers dwindling until only a few remained. On the cusp of the 20th Century, the last wild Tarpan was killed. Within years the last living Tarpan, captive in a Russian zoo, followed.



What did the Tarpan look like?

There is only one existing photo of a Tarpan, taken at the Moscow Zoo in 1884. However, there is much debate about whether this horse was a true Tarpan, part-bred or just a feral horse. It depicts an 18-year-old gelding captured on the Zagradovsk steppe many years earlier. The long mane is not believed to be characteristic of the Tarpan type, but indicative of a domesticated horse's influence in this individual's breeding.

Most accounts agree the Tarpan was a small, stocky horse with a short mane, small ears and a dorsal stripe. The most common coat colours were bay, dun, grullo and brown. Some sources describe striped legs, while others say the Tarpan had a light-coloured belly. Their hooves were dark and very tough.

The resurrection of the Tarpan

Strangely enough, extinction was not the end for the Tarpan. It is a mistake that humanity seems to have been determined to rectify, one way or another.

'Breeding back' is the principle of recreating extinct animals by means of artificial selection; either by breeding the descendants of a species to attempt to recreate it genetically or by breeding similar species to create a physical resemblance to the extinct animal. It seemed the Tarpan's genes had vanished, although the Polish Konik may be the exception, so breeders attempted to recreate the Tarpan by breeding for its appearance and character as they had been historically recorded.

Several notable attempts over the decades have led to the creation of entirely new breeds which, although they may not be the Tarpan itself, share many of its characteristic toughness and primitive beauty.

The Heck Horse

Perhaps the most famous attempt to breed-back the Tarpan was undertaken by German brothers Heinz and Lutz Heck. Directors of two of Germany's largest zoos. The brothers took a particular interest in breeding-back, attempting to recreate the aurochs (Europe's extinct wild ox), as well as the Tarpan. Their efforts produced Heck Cattle and the Heck Horse, both of which survive to this day. As the Nazi regime came to power, the work of the Heck brothers was favoured as it aligned with the Nazi ideology of eugenics; Heck Cattle are sometimes referred to as Aryan Cattle.

When the Heck brothers took it upon themselves to resurrect Europe's wild horse, they selected horses with a physical resemblance to the few accounts and visual records of the Tarpan. Their 'new Tarpans' were created from a mix of Icelandic horses, Przewalski's horses, Dülmen ponies, Gotland ponies and Polish Koniks. The horses they created are often a light shade of black dun with the characteristic dorsal stripe and no white markings. Proportionally, they are roughly 12.2-13.2hh; some have upright manes, others falling manes.

The Hecks' breeding program was effectively brought to an end by the Second World War, but it was not the end for the Heck Horse. A herd was returned to the Białowieża Forest, from which some of the Koniks had been taken and survive there still. From the 1950's onwards, Heck Horses were exported to the United States, where the North American Tarpan Association was eventually set up, although it is unclear if it is still active. The Tarpan studbook was created by Ellen Thrall in 1975 and the breed standard dictates:

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- Mouse dun or grulla colouration, no white markings are allowed,
- Black dorsal stripe,
- Black markings on the lower leg, inside the knee and on the lower hock,
- Dark hooves,
- Two-toned mane - flaxen with darker hair in the centre, and
- Height of 12.2-13.2hh.

The Heck Horse may not be the Tarpan reborn in a genetic sense, but it is clear it has revived interest in the ancestor of the domestic horse and has gained much appreciation as a breed in its own right.

TOP: The last Tarpan to die in captivity. Photo courtesy Moscow Zoo, Russia, 1884.

FAR LEFT: Painting of a horse at Lascaux, France, believed to be 17,300 years old, with the typical dun colouring of primitive horse types, like the Tarpan.

TOP LEFT: Professor Vetulani (centre) with stablehand K. Kozak on his left and veterinarian Dr Władysław Demiaszkiewicz on his right. Photo by Prof. Vetulani. Image courtesy Zygmunt Vetulani.

BOTTOM LEFT: A group of Konik colts eating willow branches in Białowieża. Photo by Prof. Vetulani's assistant, Dr Witold Folejewski. Image courtesy Zygmunt Vetulani.



Hegardt's Horse or Stroebel's Horse

Perhaps the most unusual attempt to breed-back the Tarpan was begun by Harry Hegardt of Oregon, United States of America, in the 1960's. Hegardt drew from the horses available to him to create his herd of new Tarpans: feral mustangs, descended from the first horses brought to the Americas by the Spanish Conquistadors centuries before. Believing these horses must have descended from Tarpans at some point in their history, Hegardt bred for the appearance of the Tarpan, selecting horses for their grullo coats, primitive markings, round bellies and thick heads, all of which combined to create his new Tarpan - Hegardt's Horse.

When Hegardt passed away in 1990, his herd was taken over by Lenette and Gordon Stroebel, who had been driving past his unique herd for years. They managed the herd for many years from their ranch, Genesis Equines. More than two decades later, considering the difficulties facing the horses when he became too infirm to look after them, Gordon Stroebel decided the time had come to find them a new caretaker. So, with the help of a rescue organisation, Equine Outreach, more than 50 horses were re-homed together to Sue Ramsay of Oregon.



LEFT: Konik horses on the grass plains of Oostervaardersplassen in the Netherlands. Photo by Mark Hamblin/Wild Wonders of Europe. Image courtesy Rewilding Europe.

FAR LEFT: Young people performing an acrobatic show at the Sierakow State Stud as part of their European tour. Photo by Patrycja Wojciechowska.

BELOW: Trap (Sire: Palasz, Dam: Trzmielina), a stallion from the National Park in Zwierzyniec. Photo by Patrycja Wojciechowska.



Hegardt's or Stroebel's Horse is a unique, sturdy horse with many of the characteristics that we have come to associate with the tarpan, although we will never know what it truly looked like. It is not a recreated Tarpan, but that does not diminish its value as a breed in its own right or as a fascinating look into the mechanics of de-extinction.

The Polish Konik

The Konik is not an example of breeding-back in the same sense as the Heck Horse, but the breed has deep historical ties to the Tarpan. According to the Konik Polski studbook, the "Konik Polski horse is a small, native, primitive breed descending directly from the extinct wild Tarpan horse, which inhabited the steppe and forest-steppe zones of Eastern and Middle-Eastern Europe". One story, perhaps legend, tells of Poland's last wild Tarpans being given to farmers in the Biłgoraj region, which then mixed with their domestic stock and created what was then known as the Panje Horse.

During the First World War, the hardiness of the Panje Horses recommended them for use as transport by the German and Russian militaries. Some years after the war, these horses attracted the interest of the biologist Tadeusz Vetulani, who is credited with coining the name Konik for the breed, from the Polish word 'koń', meaning horse. Thanks to Vetulani, public interest in this small horse began to grow and a number of studs were set up to preserve the type. Vetulani conducted research into the Tarpan and he put forward the theory of their being two types - the forest Tarpan and the steppe Tarpan.

Further to his research, Vetulani introduced a number of Koniks to the Białowieża Forest, in the hope these surroundings would draw out their inherent wild characteristics. However, his experiment was effectively brought to an end in February 1940 when the Heck brothers stole 33 of the best Konik specimens in the Białowieża reserve and took them to Germany to contribute to their own breeding-back project. When the war ended, Vetulani was able to return only a handful of horses to the forest, and after an intensive restoration program, the herd was re-established.

Vetulani died in 1952, but for the Konik breed it was only the beginning. The studbook recognises Konik Horses of both a stockier, more primitive type, and a finer type with a smaller head and more defined withers; most Konik Polski will fall between the two. The desired height is between 130-140cm, with an abundant mane and tail. Today, the Konik is used for pleasure riding, farming and light transport, and has also found less conventional uses in equine-assisted therapy and, perhaps most interestingly, rewilding.

Return to the wild

Rewilding Europe is an organisation dedicated to repopulating Europe with wild animals and is responsible for the return to the wild of numerous herds of horses across the continent. The Konik is one of the breeds considered 'rewildable', most suited to "Free ranging... In the lowland areas of Northern [and] Central Europe". Their rewilding plan recognises "These new wild horses are not necessarily identical to the extinct European wild horse, but are very capable of surviving without help and regaining their lost role in Europe's ecosystems".



The Tarpan is not the only extinct species that scientists and interested parties have attempted to bring back from the dead... What these stories have in common is these species were driven to extinction by humans, just like the Tarpan.

Once horses have been rewilded, "Breed standards are of no further use... The new wild horses should not be considered as belonging to a certain breed". The Konik has been reintroduced in Bulgaria's Rhodope Mountains, Oostvaardersplassen in the Netherlands and the Fens of Cambridgeshire, England, among other places.

Wouter Helmer of Rewilding Europe explained the reasoning behind their actions. "With currently millions of hectares of abandoned landscapes in Europe - abandoned by both people and their livestock - there is a unique opportunity to rewild those landscapes, to start wildlife based economies, but also to explore the rewilding of large herbivores as key species in these large ecosystems... The fact the Konik, by many people, is seen as the descendant of the Tarpan makes it easier to rewild this breed". In fact, the Konik has "Proven to be very well adapted to natural conditions with high survival rates under difficult circumstances".

History, then, has come full circle on the Konik: from ancient wild ancestors flying across the steppe and winding through the primeval forests of Europe, to domestication at the hand of humankind and millennia of cooperation, they are returned to the wild once more. They may not be the Tarpan reborn, but they are its descendants; spiritually, if not genetically.

FAR LEFT: Konik foal. Photo by Patrycja Wojciechowska.

TOP LEFT: A demonstration of how Koniks can be used; in this case, pulling logs. Photo by Patrycja Wojciechowska.

BOTTOM LEFT: Heck Horses, or North American Tarpans, at Dixie Meadows Farm. Photo by Linda L. Martin.

LEFT: Uhlans or Polish light cavalry who ride with lances at the Sierakow State Stud. Photo by Patrycja Wojciechowska.

Why can't we let the Tarpan lie?

The Tarpan is not the only extinct species that scientists and interested parties have attempted to bring back from the dead. The aurochs, the lost wild cattle of Europe, were the subject of another Heck brothers' restoration attempt, and the quagga, a subspecies of zebra, was bred back by a group in South Africa in order to fill the gap in the ecosystem that it left behind.

What these stories have in common is these species were driven to extinction by humans, just like the Tarpan. By narrowing their range and hunting them to the edge of existence, human expansion made it impossible for these creatures to survive. While other species, such as Przewalski's horse, have been caught at the crucial moment and brought back from the brink, in the case of the aurochs, the quagga and the Tarpan, we were too late.

Attempts to return the dinosaurs, the mammoth and the dire wolf from extinction appear to stem more from curiosity but, in the case of these recently-lost mammals, guilt is perhaps the driving force. It is the fear that certain animals will never be seen by our descendants and leave a critical hole in their ecosystems that prompts conservation efforts today, and it is that same sense of something missing which we feel in regard to extinct animals, which instigates rewilding and breeding-back projects.

We will never know what the Tarpan truly looked like, how it behaved, where it liked to roam, or how it interacted with people and domestic horses. However, in the attempt to recreate it, we have at the very least stumbled upon some of the hardiest, most well-rounded and adaptable horses in the world. These horses have a vital role to play in the rewilding of our planet.

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