World’s First Successfully Cloned Endangered Przewalski’s Horse Now Learning the Language of Wild Horses

San Diego (Sept. 27, 2022) – Kurt— the world’s first successfully cloned Przewalski’s horse—is thriving at his home at the San Diego Zoo Safari Park and learning the language of being a wild horse from Holly, a young female of his own species. Kurt and Holly’s pairing is a step in a long process to bring back lost genetic diversity to this endangered species. Kurt is a clone of a male Przewalski’s stallion whose DNA was cryopreserved 42 years ago in San Diego Zoo Wildlife Alliance’s Wildlife Biodiversity Bank.

Kurt moved from his birthplace at ViaGen’s cloning facility in Texas to the San Diego Zoo Safari Park in March 2021. Kurt’s birth in August 2020 was only the first step in bringing his important genetics back to the Przewalski’s population. He was born to a surrogate mother, a domestic quarter horse, which means he had not had experience with other Przewalski’s horses. San Diego Zoo Safari Park wildlife care experts embarked on an effort to ensure the young male gained the behavioral language he will need to interact and thrive among his own species.

“Przewalski’s horses normally live in groups where a youngster secures their place in the herd from their mother,” said Kristi Burtis, DM, director of wildlife care, San Diego Zoo Safari Park. “Because
Kurt was not born into a herd, he didn’t know the behavioral language that is unique to Przewalski’s horses. Our first step to socialize him was introducing him to Holly."

Holly arrived at the San Diego Zoo Safari Park in May 2021. Just a few months older than Kurt, Holly was raised in a Przewalski’s horse herd and had the full repertoire of wild horse language to share. Wildlife care specialists at the Safari Park introduced the two, hoping that Holly could serve as a mentor and teacher to Kurt. After some behavioral sparring, the two have settled into an affectionate pairing. They enjoy being together, running around and playing. Kurt and Holly have been in a secluded, private habitat since their arrival at the Safari Park and were recently introduced to the Safari Park’s Central Asia field habitat, where they are now viewable by guests. This move will further prepare them to soon join the larger herd of Przewalski’s horses, and the plan is for Kurt to be the breeder stallion when he reaches maturity at 3 to 4 years of age.

“Kurt is significant to his species because he offers the hope of bringing back lost genetic diversity to the population,” said Nadine Lamberski, DVM, Dipl. ACZM, Dipl. ECZM (ZHM), chief conservation and wildlife health officer, San Diego Zoo Wildlife Alliance. “It is imperative to do everything we can to save this genetic diversity before it disappears.”

Formerly extinct in the wild, the Przewalski’s horse has survived for the past 40 years almost entirely in zoos around the world, and all of the surviving horses are related to 12 Przewalski’s horses born in the wild. By reviving genetic diversity that was stored in San Diego Zoo Wildlife Alliance’s Biodiversity Bank, conservationists hope to expand the strength of the species’ population.

While ongoing reintroductions of Przewalski’s horses since the 1990s have established several wild herds on grasslands in China and Mongolia, maintaining genetic variation is a vital part of ensuring the species’ survival in the future. Advanced reproductive technologies are relatively standard for domestic horses and cattle. However, there have been few attempts to work with endangered species. The successful birth of this foal demonstrates how these techniques can be used for conservation efforts, today and into the future.

“Kurt’s birth was a major milestone for Przewalski’s horse conservation,” said Oliver Ryder, Ph.D., Kleberg endowed director of conservation genetics, San Diego Zoo Wildlife Alliance. “His success will serve as a model for saving endangered wildlife through the use of cloning, using DNA stored in the Wildlife Biodiversity Bank at San Diego Zoo Wildlife Alliance.”

Kurt is the culmination of an important partnership between nonprofit Revive & Restore, the animal cloning company ViaGen Pets & Equine and San Diego Zoo Wildlife Alliance to bring back genetic diversity to the endangered Przewalski’s horse species.
“Our goal to clone a Przewalski’s horse was to see future generations of this species benefit,” said Ryan Phelan, co-founder and executive director, Revive & Restore. “This relationship between Kurt and Holly is an important part of Kurt's maturation, and bodes well for the genetic rescue of other endangered species around the world.”

The colt was named “Kurt” in honor of Kurt Benirschke, M.D., who joined the Zoo's research committee in 1970, and worked as the Zoo's director of research from 1974 to 1986, when he became a member of the organization's Board of Trustees. He was instrumental in founding the conservation research program at San Diego Zoo Wildlife Alliance, including the Frozen Zoo, a critical component of San Diego Zoo Wildlife Alliance’s Wildlife Biodiversity Banking efforts. Dr. Benirschke died in 2018 at the age of 94.

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**About Revive & Restore**

Revive & Restore ([reviverestore.org](http://reviverestore.org)) is the leading wildlife conservation organization promoting the incorporation of biotechnologies into standard conservation practice. The Sausalito, California nonprofit was formed in 2012 with the idea that 21st century biotechnology can and should be used to enhance genetic diversity, build disease resistance, facilitate adaptation and more. Its mission is to enhance biodiversity through the genetic rescue of endangered and extinct species.

**About San Diego Zoo Wildlife Alliance**

San Diego Zoo Wildlife Alliance is a nonprofit international conservation leader, committed to inspiring a passion for nature and working toward a world where all life thrives. The Alliance empowers people from around the globe to support their mission to conserve wildlife through innovation and partnerships. San Diego Zoo Wildlife Alliance supports cutting-edge conservation and brings the stories of their work back to the San Diego Zoo and San Diego Zoo Safari Park—giving millions of guests, in person and virtually, the opportunity to experience conservation in action. The work of San Diego Zoo Wildlife Alliance extends from San Diego to eco-regional conservation “hubs” across the globe, where their expertise and assets—including the renowned Wildlife Biodiversity Bank—are able to effectively align with hundreds of regional partners to improve outcomes for wildlife in more coordinated efforts. By leveraging these skills in wildlife care and conservation science, and through collaboration with hundreds of partners, San Diego Zoo Wildlife Alliance has reintroduced more than 44 endangered species to native habitats. Each year, San Diego Zoo Wildlife Alliance's work reaches over 1 billion people in 150 countries via news media, social media, their websites, educational resources and the San Diego Zoo Wildlife Explorers television programming, which is in children's hospitals in 13 countries. Success is made possible by the support of members, donors and guests to the San Diego Zoo and San Diego Zoo Safari Park, who are Wildlife Allies committed to ensuring all life thrives.

**Link includes:**
- Video of Kurt and Holly in their field habitat the San Diego Zoo Safari Park
  *Note: Kurt is the male horse, and also identifiable with the longer tail of the two horses*
- Photos of Kurt and Holly at the San Diego Zoo Safari Park
- Archival photos and video of Kurt, the Przewalski horse
- Video of Przewalski horse herd at the San Diego Zoo Safari Park
- Photos credit: Ken Bohn, Sept. 15, 2022, San Diego Zoo Wildlife Alliance
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