



MALI MAKES HISTORY: Gives Birth to Surviving ELEPHANT TWINNINGS!

When Asian elephant Mali went into labor in the early morning hours of October 24, the elephant barn was unusually quiet.

The rest of the herd watched but did not make a sound – an unusual occurrence among a species that normally vocalizes during a birth of one of their own.

Despite this abnormality, Mali swiftly gave birth to a healthy calf with little-to-no help from Collection Manager Ashley Sheppard and Zoo Curator Dan Meates. It was a boy.

What didn't come, however, was Mali's placenta, which was to be shipped immediately to a facility for Elephant Endotheliotropic Herpes Virus (EEHV) research. EEHV is a lethal strain of herpes that targets young Asian elephants and took the lives of Mali's previous two calves.

Ten hours later, Mali began to show signs of labor again.

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Members of our Elephant Care Team (Back L-R): Alinda Dygert, Keeper; Amanda Stabler, Vet Tech; Noha Abou-Madi DVM; Alana Auwae, Keeper; Micah LeClair, Keeper; Heather Jennings, Keeper; Seth Groesbeck, Collection Manager; Leisje Meates, Collection Manager; Tyler Mesick, Keeper; (Front L-R): Becky Eddy DVM; Dan Meates, General Curator; Ashley Sheppard, Collection Manager. Not pictured; Ted Fox, Zoo Executive Director; Samantha Gerraty, Vet Tech; John Moakler, Consultant; Nicole Zafarana, Keeper.

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The concerned team gathered, anticipating Mali to finally birth her placenta. The team was stunned to see a second elephant calf instead of the expected placenta – no one had known Mali was pregnant with twins.

Elephant twins make up less than 1% of all elephant births, and there are only a handful of cases where twins have survived. The fact that both Mali's twins were alive was nothing short of a miracle. "It was like seeing a unicorn," Meates recalled.

Despite their astonishment, the team immediately sprang into action, knowing the urgency of the situation. The second calf, Tukada, was weaker than the first, and the team needed to quickly give medical care to keep him alive.

As the team frantically provided medical care to the second calf, Mali birthed her two placentas. They shifted so care could continue for Tukada, while the placentas were quickly collected without contamination.

When the second calf was stabilized, the exhausted care team was finally able to process an unbelievable realization: Mali didn't just become a mother of two new elephant twins – she had made history.

Working for a Miracle

Due to the complexity of elephant ultrasounds and the sheer improbability of elephant twin births, the team never anticipated Mali was pregnant with twins. Elephant twin births are rare and dangerous for both the calves and the mother. Twins are often stillborn or are too weak to survive. Sometimes the mother elephant does not survive. Until now, there has never been a recorded case of surviving elephant twins in the United States. The few successful twin births have only taken place in elephant range countries in Asia and Africa.

With the odds against them, the elephant care team knew they would need to work harder than ever to keep Mali's second calf alive.

With more than 20 years of experience between them – the team knew what it took to nurture an elephant. But no one had ever experienced the birth of twins, and with two babies to care for simultaneously, they knew there were challenges ahead.

Mali's first calf, Yaad, weighing at 220 pounds, was born perfectly healthy and quickly began to nurse from Mali. Tukada weighed 237 pounds but was noticeably weaker than his brother. While the first calf happily nursed from Mali, the second struggled to figure out how.

Luckily, the zoo had received specialized milk replacer days before the delivery to prepare. They began to supplement with the formula, but knew this couldn't be a long-term solution. Elephant milk replacer is extremely difficult and expensive to obtain, as only two companies in the world produce it. Additionally, it is not as rich in proteins and nutrients as the mother's milk – sustenance that Tukada would require to remain healthy.

They needed to teach the little one how to nurse, a process they had accomplished successfully before. In the meantime, fellow Association of Zoos and Aquariums-accredited zoos started to send their own supply of the formula, eager to do anything they could to support.

Animal care staff worked around-the-clock to monitor the calves. At least two staff members were present 24/7 to make sure Tukada was well fed and thriving.

After two weeks of constant care, Mali's second calf began to nurse from her. It was an incredible achievement for the elephant care team and drastically improved Tukada's chances of survival. Our zoo is thrilled that both calves are currently doing well!

"I can't commend my team enough for all they have done these past few weeks to ensure the care and safety of Mali and her twins," said Zoo Director Ted Fox. "It has been incredible to watch them in action and witness the high level of expertise, professionalism and focus under pressure."

Mali's twins are an incredible achievement for both the zoo and Asian elephant conservation worldwide.

The twins are a part of the zoo's participation in the AZA's Asian Elephant Species Survival Plan, a gold-standard population management and conservation program designed to save critically endangered animals. Of the 238 zoos and aquariums accredited by the AZA, only eight are Asian elephant breeding facilities.

"It is clear that zoos are places where people connect to wildlife, but they are also where the extraordinary conservation and research achievements occur," said AZA President and CEO Dan Ashe. "Breakthroughs in sustaining endangered animals stem from the people whose hearts and minds are fastened to our conservation mission."

Ashe gave his congratulations to our zoo for our "remarkable" achievement. "Saving species is why we do what we do," he added.

A Story of Resilience

When the news of the twins was first shared to zoo staff, they cheered, applauded and shed tears in joy and celebration. Mali had done it – everybody knew she could.

It was emotional but welcome news, given that two years ago, Mali lost two of her calves to EEHV within days of each other. Batu was five years old, and Ajay was only days from his first birthday.

Batu and Ajay had brought so much joy to our zoo, keepers and community, and their deaths were a devastating loss to everyone.

"It took a while for our herd to recover after the loss of Batu and Ajay," Sheppard said. "Just as humans mourn after a loss, our elephants did, too. We all did."

Now, two years later, Mali welcomed two more calves in an event celebrated around the world.

Both her placentas were successfully collected and transferred to an out of state facility for research. The placentas are rich with stem cells that will help researchers to create a treatment and vaccine for EEHV.

Additionally, the Batu and Ajay Memorial Fund, (created by Friends of the Zoo in 2020), enabled our zoo to gain state-of-the-art technology that allows us to test for EEHV in-house. All the elephants in our herd are tested twice a week for EEHV.

A Growing Family

Mali is doing very well after her big delivery day and is tenderly caring for the twins. The trio is inseparable, and are frequently joined by Mali's mother Targa. Targa is a seasoned grandmother who has helped Mali with her three previous calves.

Yaad and Tukada bring our herd at the Helga Beck Asian Elephant Preserve to eight, and represent the third generation of their family – mirroring natural herd compositions in the wild.

As the twins grow, they will slowly meet the rest of the herd: matriarch Siri, Mali's half-sister Kirina, Romini and lastly, their father Doc. Doc was gentle with his calves Batu and Ajay, and has responded well to the twins in their first visual interactions.

During the winter months, the twins will be mostly indoors for their protection as they grow. Guests can see them through the viewing windows of the Pachyderm Pavilion at the Helga Beck Asian Elephant Preserve at 11-11:30 a.m. and 2-2:30 p.m., weather dependent.

