

2002 Barrows Conservation Lecture Series



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Dr. Terri Roth presents:

A Spark of Hope for an Imperiled Species:

The Sumatran Rhino Story

May 23, 7:30 p.m. at Rockdale Temple,
Amberley Village



Dave Jenike

“A lot of science and some luck,” is how Dr. Terri Roth, Vice President of Animal Sciences at the Cincinnati Zoo and Botanical Garden, describes the process that led to the monumental arrival of Andalus, the Sumatran rhino calf born last September.

The arrival of the healthy male calf is cause for celebration for conservationists around the world as Sumatran rhinos are one of the most endangered mammals on earth. Over the last 10 years, more than 60% of the Sumatran rhino population has been lost and there are now only about 300 rhinos remaining in Malaysia and Indonesia. Sixteen more can be found in zoos and other protected reserves. The birth of Andalus represents the first time in 112 years that a calf was conceived and born in captivity. The animals are on the brink of extinction, and one birth will not save an entire species. However, this

birth does provide a spark of hope for the recovery of this species.

Emi, the mother, and the Zoo's male rhino, Ipuh, are both on loan to the United States from the Indonesian government as part of an international captive breeding program that began in 1984. Four U.S. zoos were initially involved (Bronx Zoo, Cincinnati Zoo, Los Angeles Zoo and the San Diego Zoo) in cooperation with Indonesia. Of the four Sumatran rhinos in the United States, Emi and Ipuh are the only breeding pair.

Arriving at the Cincinnati Zoo and Botanical Garden in 1996, Dr. Terri

Roth came armed with a large, multi-institutional research grant from the International Rhino Foundation to study rhino reproduction. She immediately incorporated Sumatran rhinos into the study. Using ultrasonography and endocrinology, she unraveled the secrets of Emi's reproductive cycle.

Achieving the birth of Andalas was challenging, with many discoveries and many setbacks involved. After finally succeeding in mating Emi and Ipuh, the resulting pregnancies (five in total) were lost before the third month of gestation. Once it was determined that Emi was

pregnant for the sixth time, Dr. Roth decided to supplement Emi with progesterone, a hormone that plays an important role in sustaining pregnancy.

"We're not sure if progesterone made the difference," explains Dr. Roth. "No information exists about pregnant Sumatran rhino hormone levels, but we decided to try this approach to solve the problem."

Habitat destruction and poaching are the two biggest reasons for the dwindling population of the Sumatran rhino. The horns of the animals are thought to have medicinal qualities and are highly prized on the black market.

Although Sumatran rhino numbers are dangerously low, Dr. Roth feels that it is possible to bring the animals back from the edge of extinction. "There are examples of animals being brought back from populations that were as low as 20 animals."

With this in mind, Dr. Roth's hope is to continue monitoring Emi's reproductive cycle and to breed her again as soon as possible.

Meanwhile, she is serving as an international consultant to the Malaysian and Indonesian rhino reserves where efforts are underway to establish captive breeding programs. ❁



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You can hear more of the story of Dr. Terri Roth's trials and successes in working with the Sumatran rhino at her lecture entitled "A Spark of Hope for an Imperiled Species: The Sumatran Rhino Story" as part of the 2002 Barrows Conservation Lecture Series. Ticket order form can be found on the insert. Call (513) 559-7767 for more information.