

Anonymous, 2001. Cincinnati Zoo. *International Zoo News* 48 (2): 129-130

Cincinnati Zoo and Botanical Garden, Ohio, U.S.A.

The zoo is proud to announce that its female Sumatran rhinoceros, Emi, has completed her eighth month of gestation. In the next six to eight months, Emi is expected to produce her calf, an event that would be the most outstanding conservation achievement in the history of Cincinnati Zoo. The only record of a Sumatran rhino successfully breeding and producing a calf in captivity dates back 112 years to 1889 in Calcutta Zoo.

The potential significance of the coming event for a species on the very brink of extinction is profound. The Sumatran rhinoceros is considered the most endangered of all rhino species, and one of the most endangered mammalian species on earth. In the last ten years, more than 60% of the species' population has been lost; today, an estimated 300 animals are thought to exist in isolated pockets of Malaysia and Indonesia. To date, a captive-breeding program initiated in 1984 has unfortunately failed to produce any offspring, and the captive population has dwindled from 40 to just 16 animals. With so few left in the wild, it is absolutely essential to this species' survival that the captive-breeding program achieve success.

The challenges faced by animal managers trying to breed the Sumatran rhino in captivity have been numerous. Initial struggles included determining appropriate diets for maintaining health. Furthermore, when pairs were introduced for breeding, aggressive interactions often resulted, placing both animals at risk of serious injury. Eventually, there was just one male remaining in the U.S. This animal, Ipuh, is on loan from the Indonesian government to Cincinnati Zoo. Following the recommendations of the SSP, Los Angeles and Bronx Zoos moved their female rhinos to Cincinnati, where one final all-out effort to breed the species was launched.

Dr Terri Roth, Director of Cincinnati's Center for Research of Endangered Wildlife (CREW), used ultrasound and hormone monitoring technology to learn about the reproductive cycle of the female Sumatran rhino. This knowledge and technology were then incorporated into the breeding program. This program has resulted in 23 matings between Ipuh and Emi with no injuries to either animal. Following the second successful mating in 1997, Emi became pregnant, and the zoo announced this pregnancy when the embryo was 29 days old. Unfortunately, this pregnancy was lost less than two weeks later. Emi has experienced pregnancy loss four more times, with all losses occurring within the first three months of gestation.

After much consultation at two international workshops attended by scientists and animal managers concerned about breeding this species, it was decided that the time had come to intervene. When Emi became pregnant for the sixth time, Dr Roth prescribed a daily dose of oral progesterone starting on the 16th day of pregnancy. This sixth pregnancy has now progressed to the eighth month, and the fetus appears to be healthy and growing. Although not much is known about gestation in this species, it is believed Emi has about eight months to go, and conservationists worldwide are becoming hopeful that, this time, she will carry the pregnancy to term. If successful, the event will become known among zoos as the most significant birth in more than a century and, hopefully, will be the turning point for the Sumatran rhino captive-breeding program.

Cincinnati Zoo is also involved in in situ work for this species. The zoo's Conservation Fund has helped the International Rhino Foundation support the Sungai Dusun Sumatran Rhino Conservation Center in Malaysia. Additionally, the zoo has provided keeper assistance to the reserve and has shared all its scientific knowledge regarding health and reproduction with animal managers in Malaysia and Indonesia. Says Roth, 'We realize that this single birth will not save the species from extinction and that global conservation efforts are absolutely essential for preserving the Sumatran rhinoceros, but if successful, this birth will be the spark of hope that we all so desperately need.'

Abridged from a Cincinnati Zoo press release, 30 January 2001