

Emi's highlyanticipated delivery provides hope for the future of the Sumatran rhino

BY CHAD YELTON, **PUBLIC RELATIONS**

The Cincinnati Zoo and Botanical Garden is proud to be the first zoo in 112 years to announce the birth of a healthy male Sumatran rhinoceros calf. At 11:23 a.m. on September 13, Emi, the 11-year female Sumatran rhino on loan from the Los Angeles Zoo, delivered her calf in the privacy of her stall at the Cincinnati Zoo. Emi became restless at 4:00 p.m. on Wednesday, September 12. The next morning, Emi started active labor and at 11:23 a.m., she gave birth to her calf. Within the first five minutes, Emi began licking the calf and soon after, the calf attempted to stand.

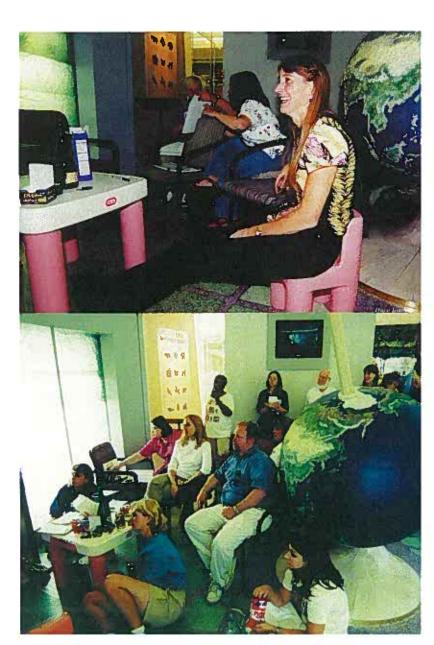
"The birth of this Sumatran rhino at the Cincinnati Zoo and Botanical Garden is nothing less than an epochal event for the conservation of this most ancient of all surviving rhino species," said Dr. Thomas J. Foose, Program Director of the International Rhino Foundation (IRF).

Emi is the first Sumatran rhino to breed and carry a calf to term in captivity in 112 years. This achievement required years of research. Dr. Terri Roth, director of the Zoo's Center for Conservation and Research of Endangered Wildlife (CREW), used ultrasound technology and hormone analysis to understand the estrous cycle of the Sumatran rhino and to discover that these



Above: A very pregnant Emi shortly before her due date in September.

Below: Dr. Terri Roth (top photo) and several of the Zoo's staff (bottom photo) watch the birth unfold on video monitors at the public exhibit in CREW.



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rhinos are induced ovulators (meaning eggs are released from the ovary only after mating with a male). This critical finding helped solve the mystery of breeding this species in captivity. In addition, another challenge had to be overcome. Emi seemed incapable of carrying a pregnancy to term, losing five pregnancies within the first three months of gestation.

Since no information existed about pregnant Sumatran rhino hormone levels, it was not known if Emi's hormone levels were adequate for sustaining a pregnancy. Therefore, it was decided to put Emi on a hormone supplement (progesterone) to see if this would solve the problem. Blood samples were analyzed for hormone levels and regular ultrasound exams were conducted to monitor and evaluate the progress of Emi's pregnancy. Emi had been taken off the supplemental hormone and was carrying the pregnancy by herself 10 days before delivery.

This is a species on the brink of extinction and the birth of this long-awaited calf is monumental to all conservationists who have been working so hard to save the Sumatran rhino. Emi and the Cincinnati Zoo's male rhino, Ipuh, are both on loan from the Indonesian government as part of a captive breeding program established in 1984 as a cooperative effort among Malaysians, Indonesians and Americans with four U.S. zoos becoming involved (Bronx Zoo, Cincinnati Zoo, Los Angeles Zoo and the San Diego Zoo). Emi and Ipuh are the only Sumatran rhino breeding pair in the United States. A fourth rhino, an older female, resides at the Bronx Zoo.

The Sumatran rhinoceros is considered the most endangered of all rhino species, and one of the most endangered mammalian species on earth. At the present time, there are thought to be about 300 Sumatran rhinos left in the





Top - Emi watches over the new calf shortly after birth. Above - Head rhino keeper, Paul Reinhart, examines the new calf.



Zoo veterinarian, Dr. Ken Cameron, gives the calf a check-up shortly after birth.

wild and only 16 in captivity. There has not been a successful breeding in captivity resulting in the birth of a live calf since 1889 at the Calcutta Zoo in India.

The world-renowned Cincinnati Zoo and Botanical Garden is dedicated to saving endangered species and the ecosystems on which they depend. As part of an international rhinoceros conservation team, the effort to save the Sumatran rhino is highlighted by a combination of research, habitat protection and conservation education. Today, it is the breakthrough research conducted at the Zoo's Center for Conservation and Research Endangered Wildlife (CREW), resulting in the birth of a healthy Sumatran rhino calf, that provides a glimmer of hope for the imperiled Sumatran rhino.

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SCIENTIFIC NAME - Dicerorhinus sumatrensis

COMMON NAMES - Sumatran rhinoceros, Asian two-horned rhinoceros, Hairy rhinoceros (other species have very little hair).

DISTRIBUTION - Historically from the foothills of the Himalayas in Bhutan throughout southeast Asia to Sumatra and Borneo. Currently, only known to survive in small populations in Sumatra, Malaysia and Sabah (northern Borneo).

HABITAT - Tropical rainforest and mountain moss forest.

CHARACTERISTICS - Smallest, hairiest and one of the rarest of the rhino species; reddish-brown coat, sparsely covered with long hair; two short horns (the only two-horned rhino in the Asian region) and fringed ears. (Hair is only long in captivity. In the wild, it's only short bristles).

DIET - Leaves, twigs and lianas, occasionally supplemented with fallen fruits.

SOCIAL ORGANIZATION - Solitary with the exception of females with calves; males are solitary except to mate.

GESTATION - Estimated 15 to 17 months.

SIZE - 1,300 to 1,800 lbs., 3.5 to 4.5 ft. tall.

LIFE SPAN - 30 to 40 years.

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CONSERVATION - Fewer than 300 survive in their native habitat. Only 16 survive in captivity; two of the only three adults in the United States reside at the Cincinnati Zoo. The Sumatran rhino is probably the most endangered of all rhinoceros species. Numbers have declined by 60% due to poaching over the last 10 years. All five species are on the verge of extinction due to poaching. The horns are sold for medicinal/ ornamental purposes in Asia and the Middle East.

Efforts to protect this venerable species in the last remnants of its home range (Indonesia and Malaysia) have been underway since the late 1970s. However, the continued loss of animals in the wild led to the decision in 1984 to initiate a captive breeding program. Four U.S. zoos (Cincinnati, Los Angeles, Bronx and San Diego) have participated in this collaborative effort among Malaysians, Indonesians and Americans. The Asian Rhino Specialist Group (ARSG), International Rhino Foundation (IRF) and the Indonesian Department of Forest Protection and Nature Conservation (PHKA) are coordinating the continuing conservation programs in both the wild and captivity.

BORN IN CAPTIVITY - Only one other Sumatran rhino was reportedly born and bred in captivity. This was at the Calcute Zoo in India in 1889.

