

appeared fatigued. After cleaning the calf she lay down and rested for a prolonged period. The calf struggled to her feet and seemed to be searching for the udder. Finally after some anxious hours, the calf was seen nursing. Radha subsequently has proven to be an excellent mother, solicitous of her baby, and these early months of Meetha's life have been free of problems.

The second birth was recorded on August 9, 1982 when Randa delivered her calf. Unfortunately, it was found dead. It would appear that she too may have had a breech birth and the calf probably breathed at least once but never had a chance. The difference in the two females is that Randha showed all the classical signs of imminent, impending birth, but Randa showed absolutely none of these thus taking us slightly by surprise.

The characteristics of our Indian rhinoceros are fairly typical. They have a tendency to become quite docile and our animal keepers can safely go in with them at times. There have been incidences that due to their docility and our ability to work closely with them that it has been advantageous to all. For example, it was possible for the keeper to take samples of milk by actually milking Radha. Several years ago when Herman developed a badly infected foot, it was possible to treat him without chemical or physical restraint, including extensive flushing of the abscess and fistulous track.

Presently the Indian rhinoceros' prospects in captivity are the best they have ever been. There are more Indian rhinoceros in captivity than ever before and most of them are in potentially good breeding situations. Even though the San Diego Zoo and the Los Angeles Zoo are the only zoos in the United States actually breeding these animals, the prognosis for the future is very promising.

Cooperation between zoos, the free exchange of information and assistance, and the fact that rhinos are now managed on a captive population basis rather than a zoo-by-zoo basis means that perhaps these magnificent survivors from another time in the world's evolutionary history may yet have more time with us in the world of the living. Future generations will have the unique opportunity to see these huge beasts, hear their short, powerful snorts and marvel at the crude beauty of these unusual creatures.

Rhino Keepers

By Lora LaMarca

The three men were typical expectant fathers. They paced up and down the hall; peeked into the maternity ward; took color video footage and still photographs of the birth; and quietly encouraged the mother by telling her to "push harder," "bear down," and "stay calm." The scene, however, was not taking place in the maternity section of a hospital. Instead it was at the Los Angeles Zoo in the night quarters and specially constructed maternity stall for Radha, the Zoo's 15 year old Indian rhinoceros, who was in labor. The three keepers had not-so-patiently been awaiting the birth for 495 days.

Mike Dee, senior keeper; Gene Noda, lead keeper; and Dave Smith, relief keeper, have a total of 38 years as keepers at the Zoo, 26 spent caring for and working with the Indian rhinos. They all know the personality traits of the Zoo's three Indian rhinos—Herman, Radha and Randa. Smith recalls that Herman who allowed his keepers and the veterinarians to treat his chronic foot problems twice a day for a year without ever having to be physically restrained. However, that is the same Herman who attacked Nepali, a female rhino, so viciously and brutally while attempting to breed her that it resulted in her death. Noda explains how Randa alerts everyone, including Herman, that she is in heat by urinating on the gates to her enclosure giving minute by minute updates on her condition.

The unsuccessful rhino breeding attempts described in "*The Rhinoceros in Captivity—The Los Angeles Zoo Story*" article were frustrating for the three rhino lovers. "Our fear and concern was natural because of the rough preliminaries that are a part of rhino's breeding," explained Smith. "There's a lot of pushing, shoving and chasing not to mention the damage that can be done by biting and horn jabbing. I remember once, after the lights were installed and we put Radha and Herman together, that he went after her so hard that she got beat up pretty bad before we could get them separated. It was frightening."

"Herman, and Mike Dee along with him, were the big joke of the Zoo for years," explained Noda. "He kept insisting that the next time was going to be a successful breeding. And I kept believing him. Finally, after all those years Mike and I were sure Radha was pregnant . . . but no one would believe us. We swore she was getting fatter but everyone would just look at us and say "come on you guys." After about 100 days and once Radha stopped cycling the skeptics became believers." Noda concluded.

Then began the waiting. "We were worried and with good reason," explained Dee who is the Indian rhino species coordinator for the American Association of Zoological Parks and Aquariums (AAZPA), Species Survival Program. "The Milwaukee Zoo had a stillborn. The National Zoo had the first live birth of an Indian rhino in the United States in 1974. The San Diego Wild Animal Park lost their first two babies. There wasn't a good track record for Indian rhino births in the United States let alone for a first birth. By the time Radha went into labor only two zoos in the states had ever successfully bred Indian rhinos. San Diego had two living kids by then."

Three weeks prior to Radha's due date a pregnancy watch began with keepers volunteering for the 24 hour watch. Valuable data was recorded and many cups of coffee consumed during the next weeks. On Monday, February 15 Radha began to show unusually aggressive behavior. She became very vocal and tried to bite. Already at work, Dee and Smith called Noda who was off work because his wife had a baby a few days before—he came to the Zoo immediately. Dr. Mike Loomis, zoo veterinarian, was on hand. Radha's water broke at 7:30 p.m. And the long vigil began.

Comments picked up from the video taping during delivery: "She seems calm and oblivious to what's happening. I can't believe she stands or lays with her head against the wall all the time. Come on, Radha, you can do it. Look, there's the membrane. Listen to how she grinds her teeth between contractions. Yeah, but she sure tenses up and opens her mouth when she's having one. My God, the baby's a third of the way out!"

At 5:39 a.m. on February 16, 1982 Meetha, a female, entered the world with a thud, hitting the floor hard. The waiting wasn't over yet. According to the keepers the next few seconds seemed like hours as they watched Radha sniff the still baby. Finally they saw the baby move, but it was another 7 hours before Mike, Gene and Dave could go home confident that Radha was properly caring for her newborn.

A few months later they suffered the heartbreak of Randa's baby not surviving. However, they look on the positive side. Herman bred both females, they both conceived and one live birth resulted in less than two years. Things are definitely looking up.



Randa, one of our female Indian rhinos, recognizes her keepers. Gene Noda (left) and Dave Smith.