Have We Thought of Everything?

Staff and Volunteers Prepare for Emi's Long-Awaited Delivery

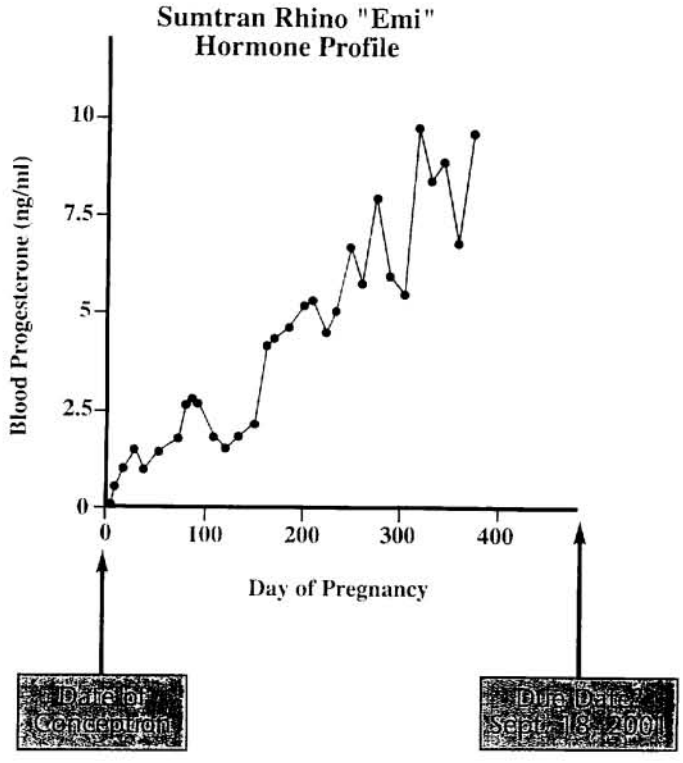
by Dr. Terri Roth, Director of CREW

Just as doctors take every precaution with human pregnancies to ensure that all goes well when the big day arrives, so too is the Cincinnati Zoo and Botanical Garden staff meticulously considering each detail in preparation for the birth of the Sumatran rhino calf. However, preparing for "Emi's" delivery day is rather challenging considering the event is so rare that no one really even knows how long gestation is in this rhino species. Therefore, with pregnancy expected to last somewhere between 14 and 17 months, the estimated due date ranges over a 3 month period. To make things even more difficult, first-time animal mothers often show relatively little outward change prior to delivering their first offspring. Regardless of the challenges, the Cincinnati Zoo staff and volunteers are committed to doing everything possible to ensure that a healthy calf is safely delivered and subsequently cared for.

In the CREW public exhibit area, numerous TV monitors project live feed from the two stalls of the Sumatran rhino barn where Emi often hangs out. During the day, the

Greg Hanson

(above) In the CREW public exhibit area, numerous TV monitors project live feed from the two stalls of the Sumatran rhino barn while Zoo volunteers keep a vigilant watch.



(right) CREW scientists are monitoring Emi's pregnancy by measuring progesterone, a hormone in Emi's blood.

public who visits CREW can enjoy watching the rhinos behind the scenes, but these monitors were installed to serve a greater purpose. Zoo Volunteer Observers carefully watch Emi on the monitors throughout the night and have the critical job of notifying the veterinary and animal staff if she goes into labor on their shift. These same volunteers record Emi's behavior during the night, information that will be an important part of the scientific data CREW researchers are gathering on this monumental event.

Within many departments, additional efforts are in progress. At CREW, Emi's hormone levels are monitored closely to evaluate the progress of the pregnancy and to look for any hints of pending parturition. In addition to collecting blood samples, the veterinary staff has collected and stored rhino plasma just in case an emergency occurs and it is needed to supplement the calf. The nursery staff is ready for the remote possibility that Emi does not produce enough milk. Because milk from each species differs, data on rhino milk have been collected and will be used as a basis for matching any supplemental milk that may be needed for the calf. Also, to make sure the stalls and rhino enclosure are "calf-proof" several modifications have been made by our maintenance staff.

However, the most important people on the scene as Emi's due date draws near are those who know her best – her keepers. Ultimately, they are the individuals responsible for alerting veterinary and research staff about any changes in Emi that might suggest labor is nigh. Every day, Emi is inspected for changes in mammary development and milk production, her temperature is taken and weight recorded. Even her appetite and behavior throughout the day is noted.

Indeed, the Cincinnati Zoo and Botanical Garden is ready for this wondrous event, but we are hopeful that many of our "just-in-case" preparations will not be necessary. An uncomplicated labor resulting in the birth of a healthy calf that is cared for by a doting mother would be just what the doctor ordered!

Emi Update

Many of us complain about the heat as the Cincinnati summer wears on, but can you imagine what it is like for our Sumatran rhino, Emi, who is 15 months pregnant?! Actually, the weather in Emi's native country (Indonesia) is like our summer all year long, so Emi is well adapted to the heat. In fact, Emi can often be seen outside cooling off in her pool and trying to get comfortable despite her ever-expanding waistline. Month 15 is an important one for all of us because the supplemental hormone that Emi has been fed since day 16 of pregnancy will be reduced and then discontinued in anticipation of her pending parturition.