

Facility Focus - The Caldwell Zoo : by Jade Tuttle

The Caldwell Zoo has been involved in eastern black rhino husbandry since an old elephant barn was renovated in (1980's). The barn holds five stalls arranged in a horseshoe pattern that connect to two adjoining yards. Within the middle of the ring of stalls is a raised viewing platform that remains open to the public during zoo hours. The center stall is equipped with a headgate where we are able to perform blood draws, foot care, dental checks and painting, which enables these sessions to be easily demonstrated to the public for education programs and special events. Between the two southern stalls and the exhibit yard is an elevated pad. It has two outside stalls connected by a chute with a built-in headgate where we give the rhinos their scrub-baths, collect milk, crate train, and have the potential to desensitize for ultrasonography - although we are not there yet. Last year each stall was fitted with elevated hay feeders that encourage a more natural browsing posture for the animals. Feeders were also added to the large thatch umbrellas that provide shade in each exhibit yard. As an added benefit, we've found the elevated feeders have also reduced wasted hay and saved the keepers time in cleaning. Apart from a few dents and scrapes where the rhinos "tested" the new apparatus, the animals seem pretty pleased with them as well.



Jumbe painting in head gate



Cornelius



Corny and Christa

The zoo's collection of rhinos started with 2.2 animals. Despite early trials and health issues which left just one breeding pair, our current female (Christa, 23) has had seven pregnancies and produced four healthy calves, the latest born just months ago on September 27th. Phineus was born at 3:30 in the afternoon and marked the end of a long, nervously-watched pregnancy after last year's miscarriage. He is a rambunctious 110 lb conglomeration of feet and head that keeps his mother, and us, rather tired-out. Although she was a willing participant in milk collection and blood draws just days before the new arrival, Christa's exceptional maternal instincts have kicked in and therefore she's been somewhat hesitant to resume training. We're getting her back, though, day by day and have collected blood for a post partum analysis. Aside from Christa and the calf we have two other males in our collection; Cornelius, who sired the calf at 29 years old, and Jumbe, who is the product of our last breeding five years ago. Caldwell is also excited about a second nine year old female named Kizuri who will be arriving from Brookfield in the coming weeks.



With two breeding pairs, there is a need to be conscientious about space. Although all our animals are brought inside and housed individually overnight they are usually in pairs during the day, either for breeding or as mother and calf. Due to space constraint we are cautious about introducing the male into the yard with our mother and calf. An attempt to imitate the mechanics of calf-dispersal in the wild is being discussed to ease this overcrowding some. Ideally, a calf would be introduced to the second (presumably bred) dam during weaning while the mother is reintroduced to the bull. However, it is still only a theory and in need of much more investigation. (If anyone has experiences or contacts, please be in touch!)

Inevitably there is still a rhino inside on most days. We take this opportunity to work with the animals on training, as time allows, and to educate the public with up-close and personal demonstrations. While there are some enrichment items on the yards (like tires, browse and boomer balls) our attention focuses on the time spent indoors where there are plenty of enrichment items, novel browse and food treats, and tactile interaction with the keepers. The rhinos are currently conditioned for most husbandry concerns, including the aforementioned phlebotomy, nail care, weighing, bathing and hand-vaccinations. With the addition of an extra position to our department this fall, we are hoping the extra hands and time will allow us to pursue a more formal training regiment. Future goals include preparing both females for palpation and sonographic imaging, an open mouth for dental exams, and foot presentations.



Yard and feeders



Indoor stall and feeder



Head gate



Public presentations

Work has just begun conditioning our month old calf to the chute, a scale platform, and tactile stimulation from keepers in preparation to give something back to those rhinos in the wild. Information on the weight, age and spoor size is being collected from our calf, Phineus as part of a collaborative research project with the Zambezi Society, Zimbabwe. The aim of the project is to develop a field tool in the form of a 'spoor ruler' that can then be used to estimate an individual's age and weight in the field, using only the spoor, or foot print. The 'spoor ruler' will be a valuable *in situ* tool for two very important areas of management. Firstly it can be used to assist with the determination of population recruitment and surveys without having to disturb the rhinoceros in the field, especially when dealing with a mother and calf, and secondly it can be used by an APU to inform a veterinarian of the probable age and weight of a rhino, when determining the drug dosage during a field immobilization exercise. This collaboration builds on preliminary results collected from seven black rhinoceros from an *in situ* environment and can only be strengthened by additional data. If any facility has questions or the opportunity to assist feel free to be intouch or contact the Zambezi Society home page.



Chute training

