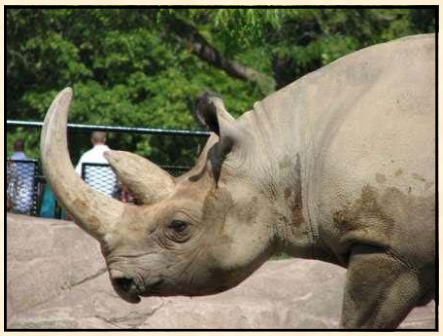
Facility Focus— Milwaukee County Zoo

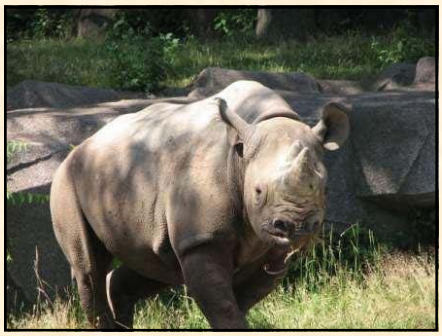
By: Ray Hren

In 1989 the Milwaukee County Zoo received two wild caught Southern Black Rhinos from the government of Zimbabwe. The move was costly and paid for by employees of the Miller Brewing Company. For this generous donation, the employees were able to name the 1.1 rhinos "Barley" and "Brewster". (good beer names) Brewster and Barley made a fine pair and successfully bred and produced 3.1 calves. Sadly, Barley died in 2005 from iron storage related issues. Recently, we received a new female named Mimi in December of 2006 from Peace River Refuge in Florida in hopes of breeding again. We thought she would be a good match for Brewster having had a calf at San Diego Zoo. Just like Brewster and Barley she is wild caught from Zimbabwe and close to Brewsters age at around 21. The initial introductions have been going very well and I am happy to report that Brewster and Mimi were observed breeding a couple nights ago. Keep your fingers crossed!

Barley and Calf



Brewster



Mimi

Diet

Each rhino is fed twice a day am/pm. Their primary diet consists of a 2:1 ratio of timothy hay to alfalfa, ADF -16 or ADF -25 for our male, and 6 lbs each of White Oak browser diet. As a supplement they both receive 12 cc of liquid Vitamin E, Emcelle Tocopherol. Of course, browse when available.

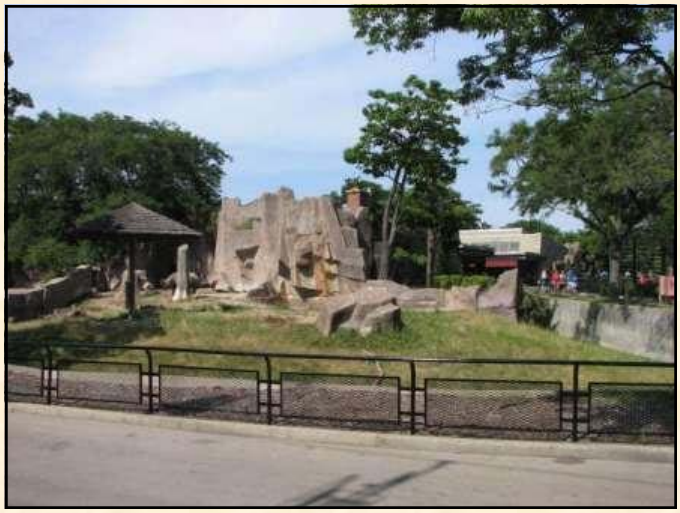
Outdoor enclosure

We have two outside yards that are connected by a outside gate to make one larger yard if need be. Our large yard is about a 1/3 acre while the smaller one is a 1/4 acre. The smaller yard is great for rhino introductions and breeding because it has a nice central pool that acts as a run-around. Both yards have wallows, pools and hanging bamboo chime toys for enrichment.

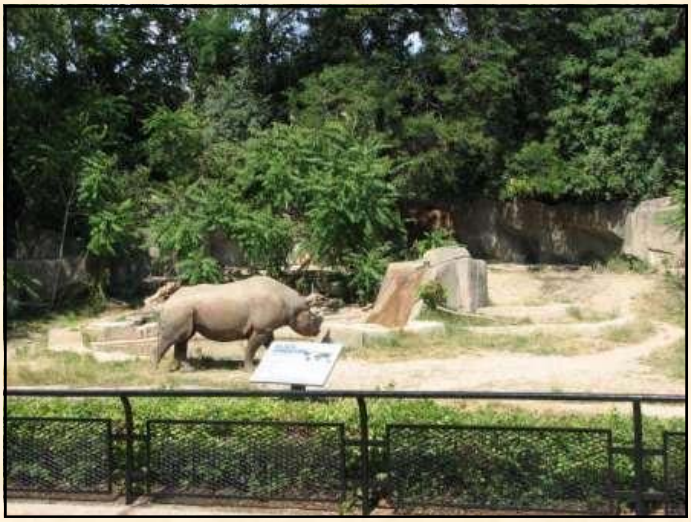
Indoor Enclosure

Our largest indoor stall measures 1030 sq. feet and divided in two by a run-around gate. The other two main stalls each measure around 570 sq. feet. Also, we have a shift stall with a restraint chute that can be raised on a winch to create more space. This stall measures 280 sq. feet with chute raised up. We have three head chutes in our stalls for blood draws. Most of the stalls are equipped with showers (warm for winter) which the rhinos enjoy a lot.

Facility Focus— Milwaukee County Zoo continued



Large yard



Small Yard

Outdoor Enclosures

Enrichment

Our rhinos enjoy logs, stumps, and boomer balls to push around their exhibit. Chime toys made out of branches or bamboo are popular to spar with. Also, they both enjoy warm showers and their mud wallows. Keeper interaction like scrub/sponge baths, mud baths and training are also very popular especially in the winter when our rhinos are stuck inside for up to four months. In the near future I hope to start rhino painting and an exercise regimen.

Scrub bath

Rhino Introduction

Facility Focus— Milwaukee County Zoo continued

Training

Both our rhinos are conditioned to enter head chutes for routine blood draws, which is usually monthly unless we're collecting blood for research projects. The head chute has proven to be a very effective and safe design for keepers to perform blood draws. We have found the cephalic vein located on the inside of the front legs provides the best output for blood draws. Most of our other husbandry training is done with the rhino presenting their side to the keeper or in our chute if need be. Through our training we've accomplished the following:

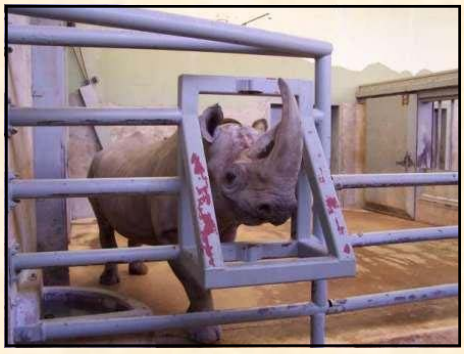
-Collect milk samples from our dam for research study.

-Manually collected viable semen samples from our male.

-Trained a lame rhino to allow us to x-ray her rear leg and hip area.

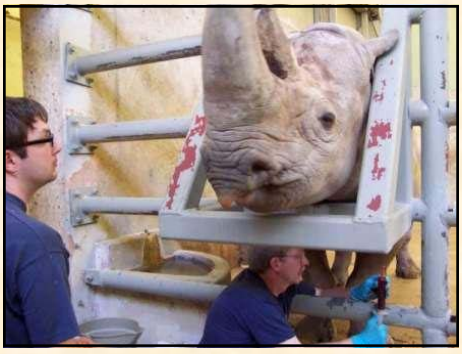
-Able to obtain sizable skin punch biopsy on rhino with skin related issues.

-Were able to collect over 2 liters of blood from our male rhino a few times for therapeutic phlebotomy project.



Brewster with head in chute

Phlebotemy close-up



Phlebotemy

Therapeutic Protocols and Techniques

Therapeutic phlebotomy is the theory that Don Paglia from UCLA ,now retired,came up with to control iron storage issues in black rhinos. The theory is that one gram of iron is taken out for every liter of blood withdrawn.

We were able to effectively develop and practice low tech methods to obtain larger volumes of blood. Our best sessions involved using an 18 g. needle with a 60 cc syringe. The best flexible tubing that worked for us was an older Abbot 30 inch extension set. Most of the newer infusion products seem to have thinner walls which produced pressure issues while applying suction. These products were never intended to be used in this manner.