

Facility Focus - Columbus Zoo**By: Adam Felts**

The Columbus Zoo houses 2.1 Eastern Black Rhinos, Kijito (born at Brookfield Zoo in 1993), Kulinda (born at The Cincinnati Zoo in 1988) and their calf Klyde (Born here at the Columbus Zoo in 2002). Klyde is named after the Columbus Zoo's first black rhino Clyde, who holds the record for longevity for black rhinos in captivity, 49years.

In 1999 the "Pachyderm" building at the Columbus Zoo was renovated to hold black rhinos and Asian Elephants. Prior to our renovation we held both white and black rhinos. Eventually, several years from now, our black rhinos will move into the new African Savannah area of the zoo and we will again renovate the existing rhino space to hold either Greater One Horned Rhinos or devote the space to hold more elephants.

**Kulinda****Kijito****Klyde**

OUTDOOR ENCLOSURES

With the existing rhino area there are two yards for the rhinos, with the larger yard being about $\frac{3}{4}$ of an acre, while the smaller yard is connected to a rather spacious 2200 sq ft indoor viewing area. The substrate of both yards is a mixture of sand and topsoil. In these yards there are also strategically placed barriers, which are important for visual and physical barriers during introductions, and when keeping a pair of rhinos together for long periods of time. Since mud is such a critical aspect in skin care there are also concrete mud wallows in each yard, making it easier for cleaning and maintaining the all important mud wallows. To allow us to hang enrichment items in the large yard we have modified one of our tree holders with an aluminum rod that we can adjust up and down to hang items from.



Large Yard



Small Yard

INDOOR ENCLOSURES

During our renovation in 1999 we also constructed a spacious 2200 square foot indoor viewing room which is wonderful for the public to view the rhinos not only in the summer, but in the winter months as well. There are sky lights in this area, allowing the sun to brighten up the room, as well as a shallow pool that we fill with water in the summer (using a programmable shower), and mud in the winter. Along with the shower and pool there is a pulley system which allows us to hang enrichment items more easily and in a safer manner.

Our off exhibit holding areas consists of 3 stalls varying in size connected to one another and one modified elephant stall to accommodate Klyde during the winter. Both of these areas are also equipped with programmable showers, and a pulley system to hang enrichment items.



Indoor Viewing



Klyde taking a shower

DIET

The rhinos' primary diet is ADF-16, along with a 50/50 alfalfa/timothy mixture of hay. Each rhino is fed twice a day, once in the morning and then in later afternoon, and we will give browse when available. We also give each rhino 2 ounces of Su-PER Phosphorus supplement, and 6cc of a liquid Vitamin E Supplement, Emcelle Tocopherol.

TRAINING

All of the rhinos at the Columbus Zoo are target trained, which has allowed us to perform many medical procedures, including weekly blood draws, X-rays and an endoscope procedure. We decided when we began our training program to use the verbal bridge "good" when working with Klyde and Kulinda and a clicker for the bridge with Kijito. This decision was based upon their personalities and our preferences. For the target it is a simple nerf ball on the end of a stick, and the reward we use is a mixture of produce (apples and/or carrots). The behaviors that we have trained are simple husbandry behaviors for inspecting their condition, and other behaviors for specific issues such as the blood draws and the endoscope procedure. Kulinda was trained for the endoscope procedure because she was developing a bloody nose on a pretty consistent basis a couple of winters ago and we were attempting to determine the cause. Once her training was complete we were able to insert the endoscope into her nose, past her epiglottis and into her lungs (77cm total) with no anesthesia. Although we never did determine the cause we still consider it a training success.



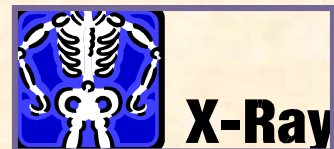
Target



Open



Over



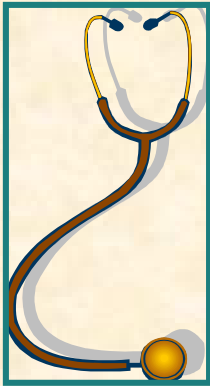
We prefer to use the front leg vein for blood draws, and draw blood weekly from each rhino. The rhinos have been trained to place the foot closest to the trainer, on a block, allowing access to the vein on the opposite leg. This behavior does two things. It keeps the animal's weight on the leg we are drawing from while also giving us better access to the vein.



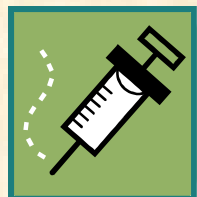
Down



Foot



Blood Draw



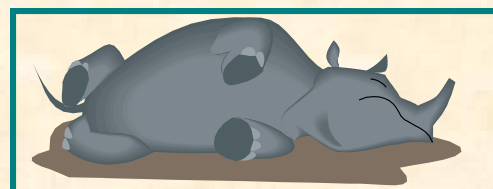
ENRICHMENT

Along with a training program each rhino also has a monthly enrichment schedule which increases the variability of the enrichment, while decreasing the frequency of the enrichment items. The enrichment items that seem to be the favorites are the tactile toys such as the bamboo chimes, and street brushes.

Month	February			
	Kijito		Kulinda	Klyde
Date	Enrichment	Day	Enrichment	Enrichment
1	PVC pipe	Tues	waterbath	spool w/pb
2	water bath	Weds	boomer ball	hanging barrel
3	boomer ball	Thurs	PVC pipe	moose stool
4	spool	Fri	keg	boomerball w/produce
5	street brush	Sat	spool	Spinna
6	keg	Sun	street brush	bamboo contraption
7	boomer ball	Mon	Spinna	spool w/ab
8	hanging boomer ball	Tues	top soil	smashed barrel
9	street brush	Weds	water bath	pronghorn stool
10	barrel	Thurs	keg	hanging barrel
11	bamboo contraption	Fri	barrel	pvc pipe
12	PVC pipe	Sat	street brush	bamboo contraption
13	waterbath	Sun	spool	keg
14	Spinna	Mon	boomer ball	spool w/pb
15	boomer ball	Tues	hanging barrel	hanging barrel
16	water bath	Weds	PVC pipe	moose stool
17	logs	Thurs	boomer ball	spool w/honey
18	boomer ball	Fri	hanging logs	Spinna
19	keg	Sat	hanging boomer ball	off
20	street brush	Sun	spool	bamboo contraption
21	spool	Mon	hanging boomer ball	smashed barrel
22	barrel	Tues	water bath	bison stool
23	water bath	Weds	boomer ball	hanging barrel
24	top soil	Thurs	bamboo contraption	pvc pipe
25	keg	Fri	hanging barrel	boomerball
26	bamboo contraption	Sat	street brush	keg
27	PVC pipe	Sun	off	off
28	spool	Mon	Spool	spinna
29				
30				
31				

ab=apple butter

peanut=peanut butter



SPECIAL ACCOMPLISHMENTS

Over the years the Columbus Zoo has taken pride in our involvement in rhino conservation and rhino care. It takes dedication and input from everyone to accomplish the things we have accomplished. One of those accomplishments was apparent with the success of having the oldest black rhino in captivity. Clyde was 49 when he died, but the ideas and knowledge the rhino community gained from Clyde's life was immeasurable. Whether it was simply learning that we need to chop his food up allowing him to eat easier, or the king size mattress he used to help the pressure sores he developed in his later years, it was all to learn more about how to care for all rhinos in captivity. He was also the first rhino trained for semen collections.

The Columbus Zoo and Aquarium also took the lead with protecting the Northern White Rhinos Garamba National Park, via IRF. These efforts took the population from around 15 in 1993 to 32 in 1996. Columbus's support began in 1993, when we helped fund a vehicle that was to be utilized by the park guards while on patrol. Shortly afterwards we began supporting the guards, who were risking their lives to protect the rhino population, by giving a monthly bonus at a time when the government was unable to pay their salaries. The following years were filled with constant political turmoil, yet the rhinos managed to survive until 2005 when the forces involved with the genocide in the Darfur region of the Sudan began poaching rhinos and elephants in Garamba National Park, depleting the population to less than 5 today. At that point the guards were unable to stand up to the sophisticated techniques and superior weaponry of these poachers. Despite the ultimately unfortunate turn of events in Garamba, the Columbus Zoo has continued to be a powerful partner in rhino conservation through our continuing involvement with IRF.

To end on a happier note, the Columbus Zoo has had recent success in breeding black rhinos, with two calves born in the last seven years and a third one (hopefully) on the way!