

While most young people are taking off for relaxing, sunny destinations this time of year, I chose to spend my March '09 Spring Break visiting other facilities as part of the Rhino Keeper Exchange program. I took a break from my daily routine at The Maryland Zoo, caring for two white rhinos, zebras, leopards, and a variety of African birds to experience how other facilities manage their collections. Instead of packing sunscreen and a bathing suit, I piled old work clothes and boots into my car and headed from Baltimore to Cincinnati, Columbus, and The Wilds, to learn first hand how the care for their rhinos.

Cincinnati :

First stop, the Cincinnati Zoo and Botanical Gardens where I met Randy at 7:00 am to spend the day as a keeper in the African Veldt. We toured the barn that houses, Nikki and Chitwan the female Indian rhinos, and a variety of hoof stock: Grevy's zebras, okapi, yellow-backed duiker, and red river hogs. Then off to the Sumatran rhino building where Paul put me to work setting up the exhibit and cleaning the holding areas. The Sumatran rhinos, Emi, Ipuh, and Suci were amazing! I was thrilled to have the chance to see them in person. They were very vocal and inquisitive; such calm, forest creatures. Paul showed me some of the routines, which includes each rhino walking through the chute for a daily weigh



in. Weights are recorded daily to maintain consistency. Ficus browse; the mainstay of their diet is weighed and fed to them throughout the day.

The Sumatran rhinos are very sunlight sensitive, so their outdoor exhibit area is almost completely covered and their activity is monitored very carefully to ensure their health. It was still cold out, so they had access to the exhibit and yards at varying times depending on the weather. This aspect of the routine sounded pretty familiar when compared to The Maryland Zoo's winter temperature guidelines for their two white rhinos.

After finishing up part of the morning Sumatran rhino routine, it was time to watch a blood collection attempt on Nikki, the female Indian rhino. The vet staff and keepers immediately explained the process and what they hoped to accomplish in this session. Nikki walked into the squeeze chute and was secured so that one keeper was directly in front of her with a bucket of treats; another keeper was at the left side of her head. Next to her at the front left foot was the vet, and a vet tech was on the other side of her to observe. What a set up! They explained that the Indian rhinos are not as easy to manipulate on their legs; they seem to be much more sensitive than black or white rhinos. The keepers were hard at work keeping Nikki's attention with food rewards, while the vet team observed and touched Nikki's front leg. It was so great to see how another facility manages their medical procedures. They explained the significance of having two keepers present; one can continuously feed, while the other can communicate with the vet and watch other behaviors. They also mentioned that if the rhino was not responding to one keeper, then they would switch roles until they got the right combination – working around the animals' needs for that day – I liked that method.



Nikki moved around, mostly in response to the venipuncture, but regained position to eat some food. Wendy, one of the rhino keepers, explained that Nikki picked up on the word "ready," so staff have to communicate using other topics, like the weather, or the holidays, so Nikki doesn't cue in to it. It was interesting to observe this session, and I learned that just using a chute, doesn't ensure successful vet procedures; it is a resource, and a combination of efforts are involved. After several attempts, no blood was collected, but I was thankful to have watched. After the procedure, it was time to clean. Wendy set me up cleaning and hosing

stalls and explaining more about the daily routine. I am often responsible for volunteers in the section where I work at The Maryland Zoo, so I understand the demands of having to explain things or teach someone how to do something. The Cincinnati staff was so welcoming and made me feel like part of the team for the day. That hospitality continued throughout my visit, and enhanced my experience there.

The remainder of the day included touring behind the scenes of most of the zoo. The keepers in various areas were generous enough to show me around and explain some of the programs. The elephant manager showed me the new giraffe barn and we discussed methods of integrating a Giraffe Restraining Device into the daily routine, as I had previous experience with that type of training and animal management. The giraffe area also had a new feeding station and I shared some insight from previous experience. I really enjoyed the tours and appreciated the different perspectives on animal management.



On day two, Wendy handed my some tools and made me feel right at home! I jumped right into the morning routine. I helped

her clean the Indian rhino exhibits, and the okapi, duiker, and rhino holdings. While cleaning, Wendy opportunistically collected urine samples from the rhinos similar to my own attempts to collect from the Maryland Zoo's rhino. I completely understood the challenge of this process: as soon as she would start to clean holding areas, Nikki would start to urinate, and Wendy would have to run over to her and try to collect mid-stream.

Wendy explained the urine collection process for establishing estrogen baselines and determining estrous cycles. Currently, they use the females' urine as olfactory stimulation for the other. Keepers collect from Nikki, and then transfer it to Chitwan's holding to instigate urination. They also use male urine samples from The Wilds. This process seems to instigate urination, and then the keeper can collect using a sterile collection cup. Once they evaluate estrous cycles, they can plan for future breeding opportunities. The keeper work is very important to the research aspect of rhino reproductive management.



Wendy explained the small window of opportunity they have with breeding and artificial insemination attempts. The whole team works together to maintain management over this process: the keepers observe the rhinos for behavioral estrous, then they use urine and blood collection for analysis, and finally the veterinary and research staff are integrated to track the estrous cycles and try to get the animals inseminated. Not having any experience with a rhino breeding program, I enjoyed this aspect of their work. It was great to see how well they all collaborated to achieve such an enormous undertaking.

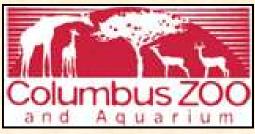
For the remainder of the day, I explored other aspects of the zoo. I learned about their enrichment programs; which include a variety of novel toys and scents for the animals. I toured the Conservation and Research of Endangered Wildlife facilities and talked with some of the research staff. I was so impressed by the amount of resources for and the focus on research. The researchers are enthusiastic about their work and it was obvious that everyone involved is passionate about supporting rhino conservation. I also toured the hospital and sat in on a meeting with the nutritionist, something that I am not exposed to on a regular basis. It was enlightening to hear about the various perspectives considered involved in a simple diet change. I spent the last hour walking around the zoo, observing the animals, and talking with keepers about their responsibilities. I wasn't ready to leave, but it was time for the next leg of my trip, so I said goodbye, and thanked everyone for a wonderful experience.



Columbus:

I drove on to Columbus and met up with Adam for a quick tour of the pachyderm building. They were expecting an elephant calf any day, so keepers were busy and anxious for the arrival.

I met the three black rhinos, saw their holding and exhibit facilities, and learned about their training programs. The Columbus Zoo has a successful train-



ing program, and I inquired as to how I could translate this to white rhino training. It seems that they have been fortunate enough to have very food motivated individuals. Anyone who has worked with white rhinos can relate to the obstacle of having to find different forms of motivation.

The rest of the zoo had intricately designed exhibits complete with indoor viewing areas – great news since it was in the 30's and windy that day. It was a nice, yet short visit to the zoo, but it was time to move on to my next destination, The Wilds.





The Wilds:

I was ready to spend my last two days of the trip at The Wilds. The Wilds is a 10,000-acre property that is home to a variety of animals in a semi-free ranging environment. In addition to rhinos, there are: giraffe, takin, onagers, scimitar horned oryx, cheetahs, African wild dogs, and a variety of other hoof stock. I was familiar with The Wilds' mission and purpose, but I still had no idea what to expect. As I drove into what seemed like the middle of nowhere at a very dark 6:30 in the morning, I wondered what I was getting myself into. The GPS in my car went blank and refused to recognize my location and my phone service gave up!

Where was I going?

I met with Dave at the front entrance and followed him down a very long road to the rhino barn area. We entered one of the two barns, I put my things away, and we went to meet the rhinos. There were a total of eight white rhinos and eight Indian rhinos, each species separated into two family groups. They were very inquisitive and accustomed to having people around, and in general were extremely calm.

After initial introductions, Dave explained the typical routine, how it varies from winter, when they are kept inside and in smaller, yet huge (compared to zoos) holding yards, to the summer when they are put out to pasture, out of sight from this barn. When the weather warms up for the summer, the animals are guided through gates to their respective pastures where they stay until the



fall. It sounded like an elaborate process that happens that happens twice a year, but well worth it for the animals.

Then, we jumped right into cleaning. It was typical stall cleaning, hosing and moving animals around, giving them access to yards, and allowing them inside or out on this cold day. This process took three of us: Dave, an intern, and me all morning. Around 9:00, we attended a daily animal management staff meeting and everyone was very welcoming. Each animal manager described any important responsibilities they had that day, including some animal observations, preparing to transfer African Wild Dogs to another facility, winter tours available to the public, and upcoming behind the scenes tours.

After the meeting, we completed the morning cleaning routine and then met the rest of the animal management staff for lunch. I met a keeper who worked with The Maryland Zoo's female white rhino 20 years ago when she lived at King's Island. He had some pictures of her and told me some stories about working at King's Island. It was pretty cool to catch up with someone about her past!

Our afternoon plans included touring the property, then some nail trimming on one of the older Indian males, Assam. When we checked on him, he was lying down, so Dave took the opportunity to work on him, and postponed the tour. I am accustomed to working with older animals, so I am extremely familiar with taking advantage of these kinds of opportunities. Assam needed some toenail work on his hind feet. I brushed him for about 15 minutes while Dave used a rasp to file away at his nails. He was calm for this process, and I was able to take a look at his feet. Dave explained the problems the Indian rhinos have with their toenails growing to a point where it makes their feet uncomfortable. This is quite different from my experience with the occasional toenail crack that can be filed fairly easily. Assam remained still for the entire process and hopefully we were able to relieve some potential discomfort.

After the lesson in Indian rhino foot care, we were off to check out the pastures. Initially, I was completely overwhelmed by The Wilds; it was incredibly immense and so different from a zoo. The vast open fields created a serene environment that contributed to the ambience of this experience.

During our pasture tour, I saw the path the rhinos walk in the spring to get to their designated field. The Indian rhinos walk about a mile and a half trek, through pastures and gates to get to their selected field that has trees, shrubs, and a pond. Sometimes it takes awhile to make the journey, and depending on the weather in the fall, it can take even longer to get them back in. Dave told me all kinds of stories about past adventures with getting the animals on and off pasture. The Indian rhinos will occasionally get into the ponds at the wrong spot and avoid the herding by swimming to a nice hiding place, and then the animal management team has to devise a new plan to get them into the right pasture. These stories really distinguished the management methods between The Wilds and a typical zoo. I should be more patient when waiting for the animals to come off exhibit; an extra 10 minutes is not a big deal compared to this mass migration!

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We discussed how this semi-free ranging environment seems to be conducive to successful breeding programs. They had two white rhinos born in the fall of 2008, and overall a very successful birth rate. We talked about the importance of natural family groups and how that management strategy could benefit the captive population. It was very interesting to see a completely different perspective from that to which I am accustomed.

I helped the intern, Dan, a local college student, construct and hang some logs for the Indian rhinos; a process I had spent weeks trying to perfect as enrichment for The Maryland Zoo's rhinos. He tried one method of hanging the logs from the stall bars, but by the following day, the females had gotten both the logs down. He was anxious to try to introduce other types of enrichment, so I gave him some tips I learned from my own experiments. We fed the rhinos one last time in the afternoon and said goodbye for the day. I was exhausted, yet exhilarated by this remarkable experience.

My next day at the Wilds began at 7:00 am. There was a college group coming through the barn on a tour, so we began cleaning immediately to make the barn ready for their visit.



The cleaning routine is fairly manageable considering there are 16 rhinos to care for! While cleaning, I spent some time getting to know the rhinos and watching their behavior. They are all quite inquisitive and seem to enjoy having people around. One of the white calves, Harry, wanted to follow anyone that walked by his pen; I couldn't help but give him attention anytime he showed interest! The Indian rhinos also looked up and around anytime I walked by, so I would stop and say hello. They move so much



more quickly than I am used to with the whites. The juvenile white rhinos demonstrated their ability to lie down; a keeper scratches them on the side until they lift both legs and then slump to the ground – I wish the Maryland Zoo rhinos did that; it would make some of the procedures much easier.

In the afternoon, we took a trip to the visitor center area that overlooks most of the pastures. There were many animals out in the pastures throughout the winter, so I got an idea of how The Wilds looked from a visitor's perspective. As big as The Wilds is, it is hard to fathom that they are currently only using about 1/3 of the land. They grow their own hay on part of it, and the rest is undeveloped and uninhabited, except by the natural ecology. We drove to the other side of the property to get hay, which entailed loading it from a barn into the truck. This felt much more like farm work than typical zoo work in which the commissary delivers hay to us. We unloaded the hay in the barn and gave the Indian rhi-

nos some browse that they worked on for awhile.

I ended my second day at The Wilds, touring the giraffe and hoof stock barns and learning a little more about their care. We fed the rhinos their pm diets, and it was time for me to head home. I will definitely be back in the summer to see the animals out on pasture!

The hosts of this trip were exceptional. Everyone I encountered did their best to make me feel welcome and ensure excellent learning opportunities. It was so inspiring to learn from others who are so passionate about working with rhinos. I would especially like to thank Randy and Wendy at Cincinnati, Adam at Columbus, and Dave at The Wilds. It was an amazing way to spend a week in March. Who needs to go to the beach for spring break when you can hang out with rhinos?





