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THE AFRICAN VELDT ADVENTURE AT JACKSONVILLE ZOO

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In 1971, ten unused acres of the Jacksonville Zoo began to be transformed from an uncleared wooded area into what is now the African Veldt Adventure. This transformation was a slow one and took a total of nine years for its completion. The Veldt is now one of our best exhibits, utilizing the concept of free roaming animals set in a natural environment.

After the perimeter fence was erected, the first occupants were established and included fallow deer (<u>Dama dama</u>) both black and white, mouflon (<u>Ovis musimmon</u>), acudad (<u>Ammotragus lervia</u>), nilgai (<u>Boselaphus tragocamelus</u>), rhea (<u>Rhea americana</u>), emu (<u>Dromaius novaehollandiae</u>), East African crowned cranes (<u>Balearica regulorum gibbericeps</u>), and various ducks and geese. This area was still very much overgrown and could only be viewed from the road leading into the park and a small area at the end of the sidewalk that ran in front of the rhino enclosure. This latter area could accommodate only a limited number of viewers, and was separated from the exhibit by a low brick wall and a pool of water which kept the animals and viewers from getting too close to each other.

1972 brought many changes for this new type of exhibit. A low swampy area in the northern section was made into an island 51m wide by 110m in length, with depths ranging from 0.1m to 3m. A concrete waterfall was built on the east end of the island but did not meet with very much succes and is not in use at the present time. A better way of viewing the exhibit was tried when the train tracks of the touring tain extended out enabling it to be toured as part of the train ride. This was stopped by the U.S.D.A. because of the viewers ability to come in contact with the animal population.

The year 1975 was another time for change, when the theme was changed to an African one and new animals were established to go along with this. Viewing the Veldt, as it was now called, was done from a converted school bus that was painted with black and white stripes. The "Zoofari" bus was driven onto the Veldt and provided viewers with a close up look without the animal/human contact problem. The bus required an additional fare, resulting in frequent complaints from visitors. It was tried on a free basis, but frequent break-downs, poor visitor utilization, and staffing considerations resulted in discontinuation of the bus in 1980.

1981 saw one of the best additions to the Veldt in the form of a boardwalk to better facilitate public viewing. This boardwalk stretches out onto the Veldt and terminates in a square patio viewing area complete with concession facilities. The walkway out to the patio is 1.7m wide; the floor is 2.0m above the ground with an

additional .8m of guardrail that extends from the floor to the top of the handrail. The walkway is connected to the main street of the zoo and is one of the first attractions encountered by visitors as they enter the zoo. The construction of the boardwalk was an in-house project and took a total of four months for its completion. During this time, a temporary fence was erected to prevent relocation of the Veldt animals. With this final addition, the African Veldt Adventure was officially opened in June of 1981.

MANAGEMENT

Daily care begins first thing in the morning with a headcount of all inhabitants, especially pregnant females as it is often difficult to locate a newborn on ten acres. Currently the Veldt has a population of 0.2 dromedary camels (Camelus dromidarius), 3.9 eland (Taurotragus oryx), 6.4 sitatunga (Tragelapahus spekei), 0.2 Grant's zebra (Equus burcheli bohmi), 0.1 brindled gnu (Connachaetes taurinus), 1.0 greater kudu (Tragelaphus strepsiceros), 1.2 Thomson's gazelle (Gazelle thomsonii), 2.2 Egyptian goose (Alopchen aegtpiacus), 2.1 whooper swan (Cygnus c. cygus), 1.1 sarus cranes (Grus antigone), and 1.3 Masai ostrich (Struthio samelus massaicus). In addition to these permanent residents, from three to five southern rhinoceros (Ceratotherium s. simum) are introduced onto the Veldt on a regular basis during daylight hours. After everyone is counted and is in good standing, the 28 shallow feed tubs are picked up from the previous night's feeding. The electric wire that runs along the perimeter fences and under the boardwalk is checked and repaired as needed. As white rhinos are specific defecators, the usual spots are checked and any feces is picked up and loaded onto the Veldt truck. Coastal Bermuda hay is offered in various locations for the rhinos and other Veldt grazers. The amount of hay varies seasonally, as the grasses growing on the Veldt are eaten by the inhabitants during the warmer months. The rhinos are released onto the Veldt, their yards are cleaned and other responsibilities are tended to for the rest of the morning and afternoon.

Returning in mid-afternoon, the Veldt keeper is assisted by the hoofstock keeper in the feeding and closing up of the Veldt. Any rhino left in for the day is now fed and the others are brought in from their day on the Veldt. This is done by driving out onto the Veldt with the truck and herding them back towards their night quarters. They are usually waiting at the gate but sometimes in the warmer months or when there has been breeding activity there are problems getting them to go inside. After returning to their yards, each animal is fed five gallons of bran/oat mixture and Coastal Bermuda hay, with the amount depending on weather conditions. This is supplemented with trace mineral salt and vitamin E/Selenium powder.

area complete with concession facilities. The walkway out to the

Feeding of the rest of the Veldt inhabitants proceeds. 100 lbs of a 50/50 mix of Carnation Rabbit Ration: Carnation Sweet 16 Dairy feed is distributed among 25 shallow feed tubs and supplemented with vitamin E/Selenium powder. The ostrich and crane diets use up the remaining 3 tubs and additional diets are distributed for the swans and geese. After the grain has been consumed, alfalfa hay is then distributed in several different locations. A final headcount is made and the Veldt is then ready to settle down for the night.

Random fecal samples are taken from the veldt animals on a monthly basis. Results vary but we have found strongyle-type nematodes and Coccidea to be problem parasites. Ivermectin solution and Panacur suspension are used in the treatment of Strongyles while Coccidea is treated with Amprolium powder. The appropriate de-wormer is mixed with the grain. It has been practiced to skip a days grain and then apply the de-wormer to ensure consumption.

BREEDING

Particularly gratifying has been our success in breeding the white rhinoceros. In 1967, the zoo acquired a wild-caught pair that by 1975 had exhibited no serious breeding activity. At that time it was decided that the acquisition of an additional male and two females would enhance the potential for breeding. Varying combinations of the five were tried for the next year in the rhino enclosure, and in 1977 the group was introduced to the Veldt, a process that took about three months to achieve complete conditioning to the routine.

About two years after the Veldt introduction was begun, our first rhino birth was recorded in January of 1979. This calf, a male born to the female "Wrinkles", did not survive and was thought to have been stepped on by one of the adults. A second female, "Edith", was also thought to be pregnant, and accordingly was separated from the group. In March of 1979, a female calf was born to "Edith", and this offspring, "Gloria", is now of breeding age herself.

The identity of the sire of the first two calves is uncertain, as both males were observed breeding the females who gave birth. In mid 1979, the original male was sent to another zoo on loan, and the remaining male, "Archie", has sired all subsequent young.

In November 1981, "Edith" gave birth to a female calf that survived for two days. Necropsy of the animal revealed a ruptured spleen, believed to have resulted from trauma inflicted by one of the adults in the enclosure.

January of 1983 marked the reacquisition of our original male and an additional female, bringing the group number to 2.5. in July of 1983 "Edith" again gave birth to a calf, a male found dead when the staff arrived. Results of the necropsy indicated that trauma, probabaly inflicted by one of the adults in the enclosure, had ruptured the liver.

This latest death prompted us to reduce the size of the group to what we felt was the working capacity of our holding enclosure, and by October of 1984, we had relocated the original pair of white rhinos.

In January of 1985 the female "Edith" showed signs of impending parturition, and she was isolated into one-half of the holding facility. On January 15 she gave birth to a female calf, that less than a week later survived the record low temperature of seven degrees farenheit with only minimal added heat protection.

The zoo's experience with white rhinos indicates that our group size is adequate for reproduction in an enclosure the size of our Veldt. The male "Archie" has been observed breeding all of the females, but for the past 5 years, "Edith" has been the only one to give birth. Our increasing experience in breeding this species will hopefully give us insight into what, if anything, needs to be done to promote reproduction in the other females.

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