

Page

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IN THIS ISSUE

	1 GBC
Animalsmotivating forces in education	4
The Return of the Unicorn	6
A Salute to Dr. Schroeder	11
The Tasmanian Devil of Sinister Repute	14
Intensive Care for Baby Rhinos	16
On the Botanical Side	
The Chinese Flame Tree	18

Front

Luzon Bleeding Heart Pigeon Gallicolumba luzonica Philippines The many legends about this medium-sized

ground pigeon's curious marking include one concerning Christ's crucifixion. Supposedly, this pigeon flew out of the Heavens to brush against the spear-wound, and ever since the species has carried a few blood-red feathers on the breast.

Inside front *

Round-tailed Manakin Pipra chloromerus chloromeros Northeastern Peru from Amazonas south to northern Bolivia.

Inside back

Chinese Flame Tree Koelreuteria henryi China

Back

Silver Pheasant Lophura nycthemera nycthemera NW Yunnan and NE Burma south to central Thailand and east to Tonkin and Hainan; north to NW Fukien and Chekiang and south to Vietnam, Laos and SW Cambodia.

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Uhtandi and her week-old male calf born October 11, 1972.



THE PRIMARY REASON for the translocation of the White Rhinoceroses from South Africa to the San Diego Wild Animal Park is reproduction of the species—to bolster their numbers which not too many years ago were dwindling to a critical point. Ever since they arrived on February 18, 1971, the efforts of Dr. Lester Nelson and his staff have been directed toward this end. Almost two years later, the Park's animal department is keeping busy with newborn from this herd, sometimes around the clock.

The first youngster was born on October 11, 1972, to Uhtandi. Other than searching for a suitable name, Dr. Nelson had little trouble with this 125pound male calf. The keepers found him in the South African shelter in the morning. Later in the forenoon the mother moved him out into the open. He was in all respects a good strong, active baby as he followed his mother several hundred yards the first day. At three months of age, he chews on the feed pellets given the adults at mealtime. His name "Zibulo" means "the first fruits of man or beast." His sire is Mandhla, as is the case with the two calves that followed; "but that is where all similarity ends," emphasizes Dr. Nelson.

"The second calf, a female, did not arrive until two months later, December 11, when the temperature was much lower, and to add to her problems, she was born about sunset. One of the train tour-guides reported her approaching birth. Mfolozi, the mother, chose a spot on the moat line where she could protect her offspring from curious rhino uncles and aunts and other animals that might molest the baby. It was a posterior presentation, the baby was born back feet first instead of the head and front feet. We also were concerned that she might not get the unusually thick membrane off her nose to start breathing. However, within three or four minutes, we saw her ears wiggle, her nose move-we knew it was a live birth. Unfortunately, the moat line space was narrow-when the youngster tried to get up, she started falling off the edge. We saw she was able to get up on only the front feet; she did not have use of the hind legs. In a period of 35 to 40 minutes she stumbled, crawled and rolled down to the bottom of the hill, a distance of about 300 feet. By then, darkness had set in. There, the mother had to protect her from the other animals on only one side and that was where we left her that night.

"By the following morning Mfolozi, the mother rhino, had moved her baby a hundred yards, to the side of the road. The youngster was lying in an erosion ditch, about 18 inches deep, the back legs still extended posteriorly. The only sign of life was an occasional movement of the ears. Because of the cold and the youngster's inability to get up on her feet, it was decided to take the calf away from the mother. The dump truck was backed over the erosion ditch and four other vehicles were winged around the truck to enable the men to get out and pick up the baby, estimated to weigh 125 pounds.

"At the Animal Care Center, we put the baby rhino into a bath tub and ran warm water (105°F.) over her for about 2½ hours, gave her a good rub down with a towel, and then put her in a straw-bedded stall. A butane heater was brought in for heat. By seven that evening the rhino's temperature was approaching normal (99.6° to 100.9°F. for baby rhinos). During the afternoon, we tried to give her a bottle with formula and also attempted intravenous feeding, but periphery circulation was too poor to raise a vein. However, she started taking a bottle that night. The formula she now receives is diluted cows milk with Karo syrup added to give a 1.0% fat, 3.2% protein, and 6.5% sugar content.

"We expected some complications due

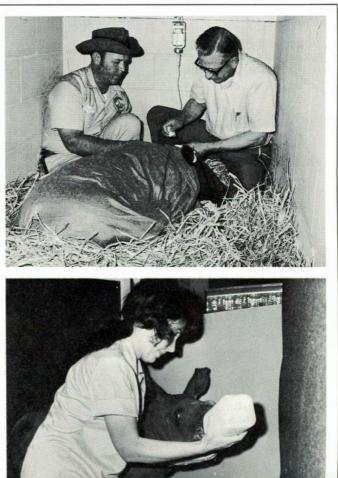
to the exposure and we put her on antibiotics immediately. Her initial inability to use the legs has caused ulcerated areas on the rear legs and feet. Those on the left foot required daily dressing at first and protection with a plastic bandage. Presently she is standing, using all her legs, and moving about more each day.

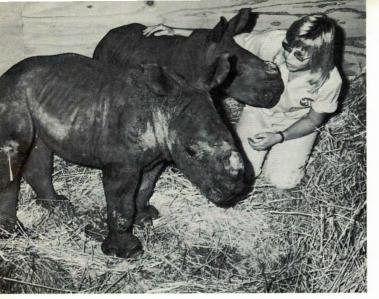
"Conditions at the Animal Care Center still had not returned to normal before Mpondo gave birth to a male on December 19.

"With the third baby rhino, we had exactly the reverse situation. He appeared strong and he was moving about within hours after birth. Unfortunately, Mpondo was not a good mother-she headed for an area beneath the trees where she had all the other rhinos around her. To give her credit, at first she did attempt to keep the animals away; only she gave up, moved out with the rest of the herd. and left him. We had a good strong baby there, but the mother was not too concerned about her offspring. At that point, the second mother, Mfolozi, adopted the third baby ... we gave a sigh of relief. Everything went well for about two days. The third morning the report came in that the youngest male was down, and cold, to the point where he couldn't get up. The keepers didn't



Above: Sharing the unusual experience of caring for the rhinos was the luck of young veterinary extern, Michael Schmidt (center) from the University of Minnesota, where he is a senior in the College of Veterinary Medicine. Seniors are granted an externship of one or two weeks. This is the second year the Park has participated in the extern program. John Fairfield, assistant principal keeper, holds the head of the third rhino calf as he is being warmed in a tub of water. *Upper right:* John Fairfield (I) and Dr. Lester Nelson, Zoo veterinarian, have just wrapped an electric blanket around the third rhino baby to bring up his body temperature. The intravenous feeding is a solution of electrolytes and dextrose. *Right:* Sue Schroeder, Park attendant, feeding the 6-day-old female rhino born December 14.





The male rhino baby is more symmetrical than the female, and also about 50 pounds heavier. They have made friends with the attendants. Petting the female is Susan Parker, attendant.

think he was even alive when they first approached him. Mfolozi had not deserted him, but was not able to feed him properly due to lack of milk.

"It took us until one o'clock that afternoon to revive him. He was in the tub for about 1½ hours warming up. Meanwhile, we collected the supplies used to nurse the female plus an electric blanket to wrap around the baby to bring up his temperature. In addition to being cold, he was severely dehydrated, but peripheral circulation permitted us to give fluids intravenously. It was essential that we get food into him. He was used to being with a mother rhino, not with people, and he didn't take to us very kindly. We fought with him about 36 hours before he finally accepted food. After another 48 hours, he recognized the source of his nutrition and the only problem since then has been filling him up. At three weeks of age, he is being fed 7 times a day, about three gallons of formula, or a total of over 8,000 calories.

"During the first week after the baby rhinos came to the Care Center, there was someone on duty practically around the clock. John Fairfield, assistant principal keeper at the Park, would come in at midnight, or 3:00 a.m., to relieve me or the student extern, Michael Schmidt. Also, Dr. Frank Lochner, Zoo veterinarian, spent one whole night caring for the rhinos. For a time it took two men to feed the male rhino, one to hold him and the other to give him his bottle. He has a mind of his own and we found there was no way to encourage him to eat. He was really a little bully-until he learned the source of his food."

Opposite: Bright yellow flowerets and showy papery seed pods adorn the Chinese Flame Tree together. In the background are the luxuriant bipinnate leaves with their smaller leaflets.

On the BOTANICAL side . . .

THE CHINESE FLAME TREE, Koelreuteria henryi, has gone through many name changes in recent years. As a result, a great confusion has developed concerning our "Golden Rain Tree" picnic area adjacent to the Otto Center. Many nurseries still sell the tree by its older scientific names: K. formosana and K. bipinnata; and the Golden Raintree Picnic Grove probably will be known as such as long as the trees are there. The truth, however, is that our trees, K. henryi, carry the common name of "Chinese Flame Tree," with "Golden Rain Tree" being preferred for K. paniculata. The latter is much more tolerant to the cold than our tree and can be grown in the north and east. The Chinese Flame Tree probably would die at temperatures much below 15°F. and be severely injured at any temperature below 22°F.

Outstanding differences are apparent in the seed pods and the leaves of the two trees. The capsules of K. paniculata are yellow-brown, changing to light brown when dry; K. henryi's are much more colorful and when young will be orange, red or salmon, or a mixture of the three. When mature, each lanternlike, papery pod will contain up to six black seeds. In the K. paniculata the leaves are pinnate, rarely bipinnate. On the K. henryi, they are always bipinnate—the main rib of the leaf is branched into smaller ribs and the leaflets are lined up along the smaller ribs.

Both trees produce yellow flowers and in the summer the "raining" of the blossoms as they fall from the trees will cover the ground with a carpet of gold. The flowerets are formed in large loose panicles at the ends of the branches; the seed capsules appear immediately. The flowers hold a great attraction for bees and during the blossoming period the grove hums with their music.

The Koelreuterias are deciduous, the leaves of K. henryi generally falling in December. One objection that can be found in the tree is the persistence of the dried seed pods to remain throughout the winter. They gradually are blown away or fall off and are all gone by spring. This Asiatic member of the Soapberry family, Sapindaceae, was named after a professor of natural history, Joseph G. Koelreuter (1733-1806) of Karlsruhe, Germany. It was introduced into the United States from China about 1900. The trees have no commercial value except as ornamentals for gardens or patios.

Ernest B. Chew, Horticulturist