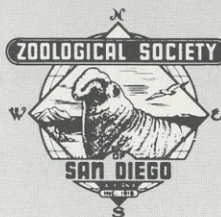


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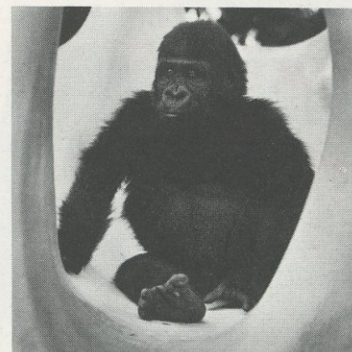
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RON GARRISON
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Alvila, a Lowland Gorilla, often holds an audience from the Children's Zoo Great Ape Grotto, framed by the arches of her play structure.



SAFEGUARDING THE INDIAN RHINO

Ernst M. Lang, D.V.M.

DIRECTOR, ZOOLOGICAL GARDENS BASEL

*One month after the arrival of Lasai, a male Indian Rhinoceros, *Rhinoceros unicornis*, at the San Diego Zoo on 12 October 1963, Dr. Lang in a letter to Dr. George H. Pournelle said: "We are delighted to know he has settled down happily with you and I am looking forward to seeing him as a handsome fully grown bull on my future visits to your beautiful garden." The following article tells about Lasai's family background—Ed.*

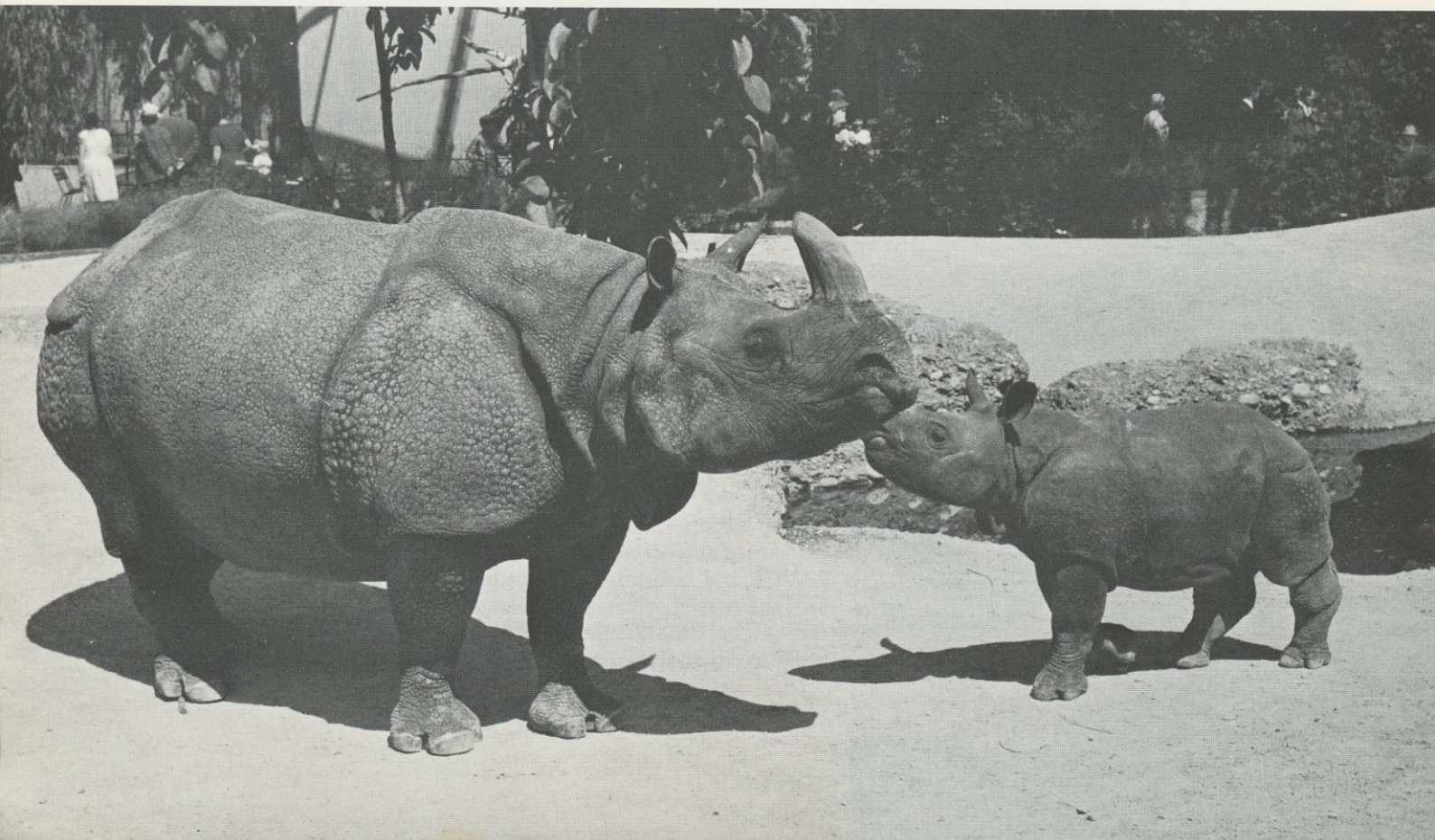
THE GREAT Indian Rhino is one of the rarest animals on earth. According to recent surveys by E. P. Gee, there are in Assam and Nepal together only about 450 specimens. Poaching is a serious threat for, even today, pulverized rhino horn still fetches fabulous prices on the Chinese market, owing to an erroneous belief concerning its aphrodisiac value. It is sincerely to be hoped that the Asiatic governments will take adequate measures to protect the reserves inhabited by the last of these armored giants in order to en-

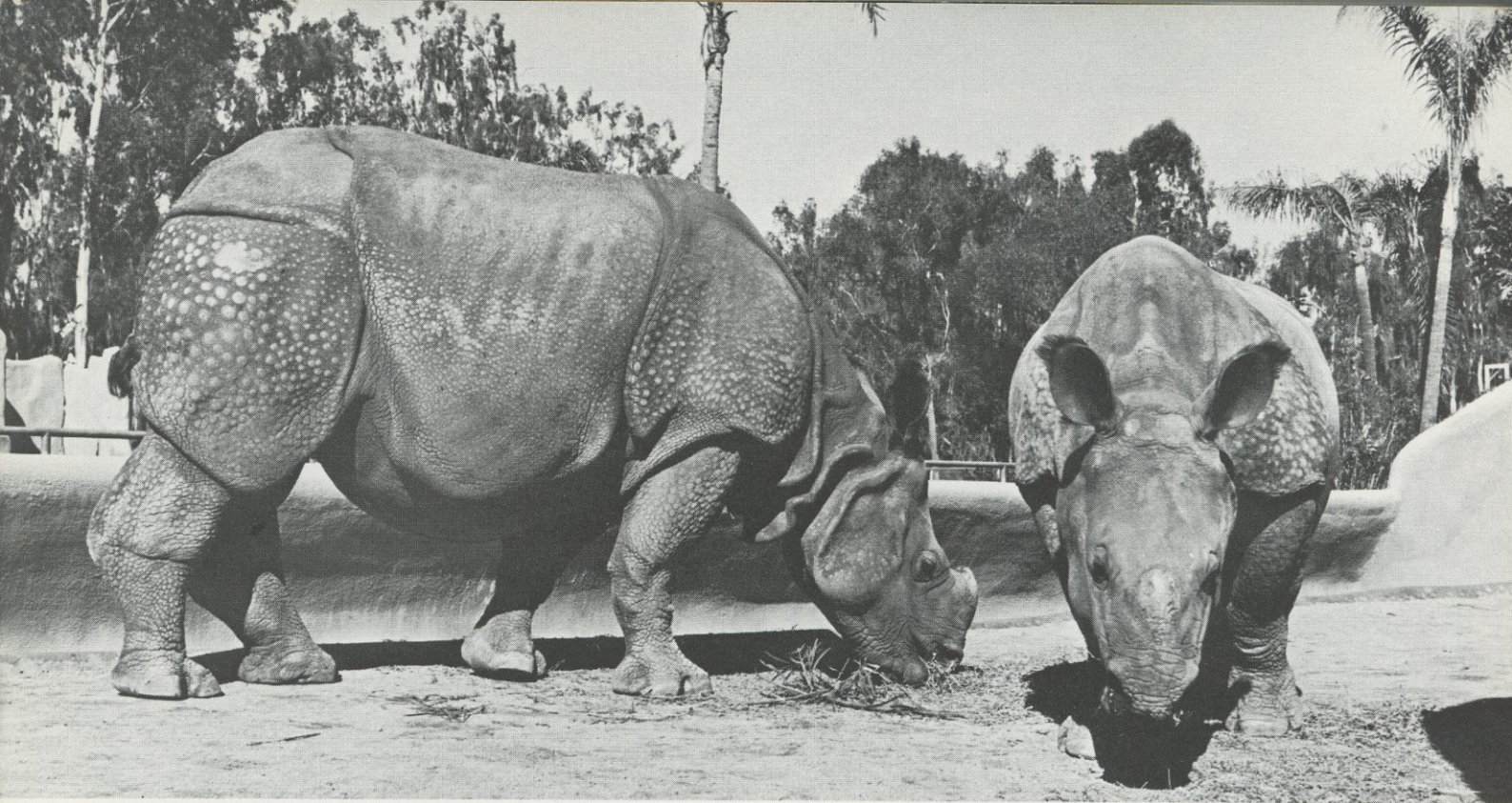
sure their survival.

In Basel it had always been our wish to help safeguard these rare animals by inducing them to breed in captivity. During 1951 and 1952, we succeeded in establishing a young pair of Great Indian Rhinos at our zoo. The two animals were gradually brought into contact with each other and, after they had been moved to their new house with its large enclosure, various signs of receptivity in the female were noticed now and then. On the whole, they lived together peacefully. In the spring of 1955, they were even left outside overnight several times, as we felt that the mating ceremony might well extend into the evening with copulation taking place only after nightfall. The actual copulation was not observed. During the following spring, we gradually ascertained that our rhino cow, Joymothi, was pregnant for she showed no further signs of heat and her girth increased visibly. The urine

Lasai, born 31 August 1962, is shown with his mother, Joymothi, on 17 June 1963, in Basel, Switzerland. The successful breeding colony of Indian Rhinoceroses, *Rhinoceros unicornis*, began with the arrival of a male, Gadadhar, in 1951, and Joymothi in 1952.

Photo by Paul Steinemann Courtesy Zoologischer Garten Basel





Basel-born Lasai (age 3 years, 5 months, 1.) and two-year-old Jaypuri from a Kasaranga, Assam, game reserve (r.) are shown in their San Diego Zoo enclosure which they had shared for approximately a year on 3 February 1966. Lasai, whose name means "chubby" or "the fat one," arrived 12 October 1963, and Jaypuri (untidy girl) came 27 February 1965.

tests, on the other hand, revealed no hormones which indicated pregnancy.

On 14 September 1956, a calf (Rudra) was born. It weighed 60.5 kilograms (133.4 pounds). Apart from the shape of the head, it was a miniature image of its parents even to a complete suit of armor. Like all true precocious animals, the calf rose to its feet after half an hour. Except for a still birth registered in the Calcutta Zoo some years previously, this was the first Great Indian Rhino to be born and bred in captivity. The calf grew at a tremendous rate, gaining 2 kilograms (4.4 pounds) daily from which we estimated the mother's milk supply at some 25 liters (26.43 quarts) a day. Milk samples could be analyzed on several occasions—the fat content was 3.5–4%, while the sugar content fluctuated between 8.3 and 4.4%. We noticed that the shape of the calf's head which was oval at the beginning soon changed; the part which was to bear the horn became elevated whereas the whole forehead sank in. The young bull was sold at the age of one and a half years to the Milwaukee Zoo, Wisconsin, U.S.A. There, together with a female born in Whipnade about a year later, a new pair has been formed which we hope will produce another line of descendants.

Since then, on 17 August 1958, a female calf was born in Basel. She is still living here and

has already had her first calf. Furthermore, on 31 August 1962, the old pair produced a third offspring which, bearing the name Lasai, set out in October 1963, on the journey to San Diego.

At present, there are four Great Indian Rhinos living in the Zoological Gardens Basel: the old female, Joymothi, named after an Assamese princess of the 16th century; her daughter, Moola, born in 1958; Moola's daughter, Nanda, born 25 August 1965; and the bull, Arjun, who weighs about 2,000 kilograms (4,410 pounds).

Khunlai, Moola's first son born 9 March 1965, was the first rhino born in the second zoo generation. His mother, Moola, was in heat when barely three years old and was mated with her father. She calved at the age of four years, seven months. In the meantime, she has grown bigger than her mother who at the same age weighed 1,608 kilograms (3,546 pounds).

Breeding Great Indian Rhinos in the Basel Zoo has provided excellent opportunities for observing these rare animals and establishing many interesting biological data. For instance, a gestation period of 474-486 days could be registered. In their new house, opened in 1959, the animals have sufficient room to live as a family; and we hope this beautiful breeding trio will long continue to bring forth offspring to enhance many other zoological gardens.



Dr. Ernst M. Lang, director of the Basel Zoo, Switzerland, with Mrs. Lang visited Lasai on 30 April 1966. Dr. Lang participated in the recent Conservation Conference.

