PREPARATION TO BREED THE SUMATRAN RHINOCEROS IN ENGLAND

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1.0 INTRODUCTION

There are five species of rhino extant in the world today. They are :

1. Black rhinoceros *(Diceros bicornis)*
2. White rhinoceros *(Ceratotherium simum)*
3. Indian rhinoceros *(Rhinoceros unicornis)*
4. Javan rhinoceros *(Rhinoceros sondaicus)*
5. Sumatran rhinoceros *(Dicerorhinus sumatrensis)*

1 & 2 are confined to Africa, while 3, 4 & 5 are found in Asia (Groves 1967).

Breeding in captivity of the two African species and the Indian rhino is a relatively recent achievement, consequently, very little information is available as a guide to breeding the animals (Bucchner & Mackler 1978). Until 1959, there were 55 Sumatran rhinos in captivity (Groves & Kurt 1972) but no birth was recorded.

"Torgamba" is the name given to the Sumatran rhino that was caught in Torgamba production forest in Riau province, Sumatra on February 1986. After a long journey lasting six days, it arrived in England in April 1986.

2.0 PRELIMINARY ARRANGEMENTS

Asian rhinos have always been successfully kept in captivity. Even in relatively poor cages, they live for many years (Groves 1982). "Torgamba" is kept in an enclosure in the open (20 x 15 m) surrounded by cylindrical iron fence, with access to four stalls (15 x 4 m, 6 x 3 m, 4 x 2 m, and 4 x 2 m). Bathing pools are available in the two largest stalls (4 x 2.5 m and 3 x 2 m). The temperature inside these stalls is about 20 C. The floor of the enclosure and stalls were covered with wood shavings to prevent injury to

the feet. A part of the open enclosure was covered with sand, while two trees were planted to simulate its natural habitat !

3.0 ADVANCED PREPARATION

Close to Port Lympne Zoo Park, about 3 ha of grass paddocks and woodland at a height of 500 m above sea level on a hill was prepared to accommodate two pairs of Sumatran rhinos. It was felt that the Asian rhinos might be affected in unexpected ways in captivity (Groves 1982). It become evident that more attention ought to be given to how best to simulate the animal's natural habitat in captivity. The size of the enclosure must be large enough to allow for movement and exercise, which seem necessary for a successful breeding. If this is done, perhaps Sumatran rhino will have a brigh future, after all !

4. 0 REFERENCES

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Groves, C.P. 1967. On the Rhinoceroses of Southeast Asia *Saugetierkundliche Mitteilungen.*, 15 : 221 - 237

Groves, C.P. & Kurt, F. 1972. *Dicerorhinus sumatrensis Mamm. Sp.* 21 : 1 - 6

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DISCUSSION

WIDODO : commenting on Dr. Buntaran's observation that the male Sumatran rhino 'cares for the family' pointed out that it was indeed strange that an animal that seldom lives in a family unit (as it is basically a solitary animal) should 'care for the family'? He also made a reference to the fact that pre-oestrus fighting was known to cause injury in the case of the Great Indian rhinoceros and so wanted to know if a similar phenomenon occurred in the case of the Sumatran rhino as well? If it did, then it would be essential to determine the onset of the oestrus.

BUNTARAN : pointed out that most of the information available came from studies carried out on the African and Indian rhinos. Such information, she added, as far as the Sumatran rhino was concerned, was likely to come from studies that were being carried out in the Howletts and Port Lympne Zoo Park and in the Ragunan Zoo in Jakarta.

RUBINI : noted that artificial insemination had been successfully carried out in cattle and wanted to know if such a technique could in fact be applied in the case of the rhinos too ?

BUNTARAN : replied that in theory artificial insemination ought to be applicable in the case of the rhino too. However she added that the technique was complex and therefore required expertise and expensive equipment.