

**SUMATRAN RHINO CONSERVATION CENTRE
DEPARTMENT OF WILDLIFE AND NATIONAL PARKS
SUNGAI DUSUN, SELANGOR
MALAYSIA**

MONTHLY REPORT

DECEMBER 2001

BY

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&

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INTRODUCTION

No breeding occurred during the month of December. Seputeh was supposed to be bred at the end of November but her progesterone level was high (3.53ng/ml) during the period until the first week of December. Mas Merah was supposed to come into estrus on 15/12/01 but her progesterone level was high and was suspected pregnant. As for Rima, she was expected to come into estrus on 4/12/01 but no breeding activities were observed when she was mixed with the male. However the progesterone results revealed that her level was high during the period. Panjang and Minah still had a low level of progesterone.

The bleeding procedure was carried out as usual, twice weekly. As for the bred females, blood will be collected once a week.

RHINO MANAGEMENT

A) Daily Management

i) Night stall

Daily work

Adam, Shariff and Umor managed the night stalls. Shariff and Umor will clean the night stalls while Adam and other rangers will mix Shah and the two females. Then, he will checked the food supply when it arrived around 9.30 a.m. The browse and fruits were weighed and cleaned before giving to the rhinos. About 40 to 50 kg of browses and 7kg of fruits including papaya, banana and sweet potatoes were given daily. The rhinos were also given horse pellet about 1.5kg every morning. On Monday and Thursday, Adam will help the veterinarian to collect the blood from all females.

The rhinos

The rhinos were let out first before cleaning the night stalls. After cleaning, the browses were put in the feed trough and the rhinos were let in for their morning meal. The drinking water was changed daily and stress vet (multi-mineral powder) was mixed inside it. Daily observation was made and recorded in the workbook for each rhino. The rhinos were fed twice daily: 9.00 a.m. and 3.00 p.m.

ii) Ten acres enclosure

Daily Work

Mohd Noor inspects the electric fencing every morning. The fencing was cleaned from any foreign objects such as spider web, dried leaves or creepers to avoid short circuit. Voltmeter was used to ensure that the voltage of the fencing is about 7.0 kV. They will also inspect the fencing for any damages.

During the inspection, the ranger will look for the rhino inside the enclosure and call the rhino for their morning meal. The rhino was confined in the quarter acre first before putting their browse in the feeding trough. The amount given was about 100kg for each rhino per day.

B) Breeding Program

i) Breeding Introduction

Seputeh was bred on 08/11/01 and she was expected to come into estrus on 29/11/01. However, the blood result revealed that she had a high progesterone level i.e. 3.53ng/ml and the level was still high throughout the first week of December. Blood samples were sent again to UPM and it revealed that her cycle could be missed since she had a low level about 0.18ng/ml on 10/12/01 but it rose up to 1.77ng/ml on 13/12/01.

As for Rima, she should be in estrus on 4/12/01 and was mixed with the male on 3/12/01 and 4/12/01 without any breeding. Based on the progesterone result, she also had a high level between 1.15ng/ml to 1.17ng/ml during the period. However, the blood result on 13/12/01 revealed that she had a low level of P4 about 0.14ng/ml and she was mixed with the male but no breeding occurred. Instead, the pair has to be separated when aggression occurred.

Mas Merah was bred on 24/11/01 and was expected to come into estrus on 15/12/01 but the P4 result on 13/12/01 showed that she had a high level about 1.49ng/ml and the level was still high on 20/12/01 i.e. 1.11ng/ml. Therefore she was not mixed with the male.

ii) Bleeding Program

a) Blood Collection

The bleeding was still carried out twice weekly. As for the bred females, the blood was collected once a week. The blood procedure was summarized in Table 1.

b) Progesterone Hormone Profile

The latest blood result was attached below.

B) HEALTH STATUS

Generally, all rhinos are in the good condition. Minah still recovering from the weight loss and she was monitored closely. Mas Merah suffered two big wounds as a result from mixing her with the male, Ara. The first wound was located at the left fore limb and the second one was at the right fore limb folds. The wound was treated daily with hydrogen peroxide, iodine and gusanex spray.

C) FEEDING

No changes were made for the feeding program. A contractor will supplied th browses, which deliver them around 9.00 a.m. daily. The feed was checked to ensure their quantity and quality upon receiving them. They were cleaned and weighed before giving to the rhinos. The rhinos were given about 40 kg of browses, 3 kg of concentrates and 7 kg of fruits daily.

Table 1: Blood Collection from the Rhinos, December 2001

Date	Rhino ID	Area taken	Remarks
03/12/01	Minah Mas Merah Panjang Rima Seputeh Ara Shah	Tail Tail Tail Tail Tail Tail Tail	Samples were taken from these females for P4 analysis. Blood was taken from the males for testosterone analysis.
05/12/01	Rima	Tail	
07/12/01	Rima Panjang Mas Merah Ara Shah	Tail Tail Tail Tail Tail	Samples were taken from the females for P4 analysis. Blood was taken from the males for testosterone analysis.
10/12/01	Rima Seputeh Minah Mas Merah Panjang Ara Shah	Tail Tail Tail Tail Tail Tail Tail	Blood was taken for the P4 and testosterone analysis
13/12/01	Minah Rima Seputeh Panjang Mas Merah Ara Shah	Tail Tail Tail Tail Tail Tail Tail	Samples were taken from all rhinos for P4 and testosterone analysis.
20/12/01	Rima Mas Merah Panjang Minah Seputeh Ara Shah	Tail Tail Tail Tail Tail Tail Tail	Get samples via tail from all females except Seputeh.
24/12/01	Minah Mas Merah Panjang Rima Seputeh Ara Shah	Tail Tail Tail Tail Tail Tail Tail	Blood was taken for the P4 and testosterone analysis

Date	Rhino ID	Area taken	Remarks
27/12/01	Minah Seputeh Panjang Ara Shah	Tail Tail Tail Tail Tail	Samples were taken from these females for P4 analysis. Blood was taken from the males for testosterone analysis.
29/12/01	Seputeh	Tail	
31/12/01	Seputeh Rima Mas Merah	Tail Tail Tail	Get blood samples from all females. The rhinos seem very cooperative. Blood was taken from the males for testosterone analysis