

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

WEEKLY REPORT

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BY

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&

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WEEKLY REPORT (11/6/00 – 24/6/00)

Introduction

The bleeding procedures as well as the daily introduction was still carry out throughout the week. Blood collection was collected twice weekly on all females except for Seputeh. The daily introduction of Shah and Panjang was done smoothly. Apart from that, vaginal cytology was started on 13/6/00 concurrently with the bleeding procedure. The blood results for progesterone analysis as well as for complete blood count (CBC) has been received from UPM.

Blood Collection Procedure

The bleeding was done after the daily introduction twice weekly. Usually, it was done on Monday and Thursday but from 12/6 to 17/6, it was done on Tuesday and Friday. However, the procedure was carried out on Monday and Thursday for 19/6 to 24/6 period. The sample could only be collected from four females except for Seputeh. She did not tolerate with the procedure especially when touching her tail or legs. The method used as well as the response from each female was summarized in Table 1.

Daily Introduction

From 12/6 to 23/6 period, Shah was mixed with Panjang daily around 8.30 a.m., No positive response was observed from both rhinos throughout the period. If the fruits is not enough, the procedure will be done after the food supply arrived around 9.00 a.m. The observation of the introduction is summarized on Table 2.

Vaginal cytology

The procedure started on the 13-6-00. The sample collection was done twice weekly concurrently with the bleeding procedure.

Recommendations / Suggestions

- 1) Daily introduction
 - a) Consider to start introduce Mas Merah with Shah daily as soon as possible. Should be expecting some fights in the beginning.
 - b) The introduction of Shah and Panjang could be continued daily. This should be done after the daily introduction of Mas Merah and Shah. However, if fights occurred during the introduction of Mas Merah and Shah, Panjang should not be mixed with Shah that day.
- 2) Blood result (attached)
 - a) The results showed that;
 - i) Seputeh might be pregnant
 - ii) Panjang and Minah is not cycling (anestrus)
 - iii) Rima is cycling but her progesterone level is quite high
 - iv) Mas Merah is cycling very well
 - b) Based on the results;
 - i) Seputeh should be left alone to avoid any stress. If possible, she should be conditioned for bleeding from the ears only with

- minimal handling. If not, fecal result should be used to confirm her pregnancy.
- ii) Panjang and Minah should be evaluated to determine the cause of her status. Both females should be mixed with males until they start cycling again. Blood samples should be used to monitor their estrus state.
 - iii) Rima should be mixed with Ara. However, this should be done prior to her estrus cycle.
 - iv) Start to introduce Mas Merah with Shah soon before her next estrus cycle.
- c) Consider sending the blood results to the members of other facilities for their comments and suggestions.
- 3) Vaginal cytology procedure
- a) Should be evaluated based on the rhinos' response: either to stop or continue. However, the blood procedure should be carried out first before doing cytology.
 - b) According to Steve Romo, Dr. Zainal has sent the protocol of the procedure to Dr. Terry Roth and she has discussed about it with Dr. Mark Campbell. They do not agree with the protocol and decided not to carry it out on their rhinos. However, they will do it if cotton swab was used for sample collection.
- 4) UPM
- a) It is advisable to include Dr Abd. Wahid Haron from UPM in the SRCC Committee to give his comments and suggestions especially on blood and fecal analysis result. Dr. Wahid could be invited to attend the meeting if necessary.
 - b) Extra budget is needed to do the maintenance of the SRCC's equipment in UPM hormone lab. Mr. Yap will be preparing the budget soon.
 - c) UPM will be starting to run the fecal analysis soon. However, they should be given all the necessary things to run out the fecal and blood analysis using EIA.
- 5) Night stall and paddocks
- a) Chief had agreed to fix the breeding paddock first and this will cost about RM 11,000. However, Dr. Zainal needs the confirmation letter before proceed with the decision.
 - b) The night stall doors and gates will be fixed later if the budget is enough.
 - c) The right side of the chute needs to be fixed for bleeding from the right ear.
- 6) Rhinos management
- a) Steve Romo suggested that all rhinos should be left in the paddock up to 7.00 p.m. and a keeper is assigned to lock them up after that period.
- 7) Agreement of the SRCC Committee Meeting
- a) All the decision made during the meeting should be in written form and a copy should be sent to all involving personnel especially the Center Supervisor.
 - b) Any recommendation or comment should be sent to the committee and they will decide about it.

Table 1: Blood collection from 11/6/00 to 24/6/00

Date	Rhino ID	Area taken	Remarks
13/6/00	Rima Panjang Minah Mas Merah Seputih	Tail Tail Tail Tail	Blood was collected from 4 females from the tip area of the tail using butterfly catheter size 23G. Animal seems relax. Vaginal cytology was done from the same females. Seputih did not enter the chute when baited with fruits. Stopped after a few attempts.
15/6/00	Seputih	Ear & Tail	Cannot get blood from both methods. She moves a lot especially when taking from the tail. She was upset when touching her legs.
16/6/00	Minah Mas Merah Panjang Rima	Leg Ear Ear Ear & Tail	Samples were collected from three females. Did not get samples from Rima. She seems restless and uncooperative after a few attempts. Did not try on Seputih since not enough fruits.
19/6/00	Rima Minah Mas Merah Panjang	Tail Leg Ear Ear & Tail	Get some blood from three females. Cannot get samples from Panjang after trying both methods. Animal seems uncooperative after a few attempts. Vaginal cytology samples were collected from four females. Fruits were not enough for Seputih.
20/6/00	Panjang Seputih	Tail Tail & Ear	Get some from Panjang. Tried on Seputih but she was very upset when touching her ears. Got some samples for vaginal cytology from Seputih.
22/6/00	Rima Minah Mas Merah Panjang Seputih	Tail & Ear Leg Ear Ear	Get samples from all females. Get some blood from the tail on Rima after trying from the ears. She moves her head up and down. Other rhinos tolerate very well. Seputih was left alone

Table 2: Daily Introduction of Shah and Panjang (11/6/00 – 24/6/00)

Date	Remarks
12/6/00	Released Panjang from night stall 1. She went straight to feeding area where Shah was busy eating. Both ignored each other when they were side by side (5 feet apart). Both were busy eating.
13/6/00	Panjang was released from night stall 1 and she went straight to feeding area. Shah was eating when approached by Panjang. No response from Shah. Both rhinos busy eating. During separation, Panjang reluctant to go upon calling by keeper. She went to look for fruits at Shah's area and Shah looked annoyed. Managed to call her away before fights occurred.
14/6/00	Panjang went to the feeding area when released from night stall 1 to paddock 1. Shah was busy eating when Panjang approached him. Panjang rubbed her head against Shah's head and no further response from both rhinos. They were eating side by side ignoring each other.
15/6/00	Panjang was released from night stall 1 into paddock 1 and she went straight to feeding area. Shah was busy eating and ignored Panjang when he saw her. Panjang blows upon seeing Shah but no response from the male. Both rhinos were side by side eating. Panjang then went to one of the keeper for food and ignored Shah. She wandered a lot and then went to wallow. No response from Shah. Panjang went straight to the gate upon calling and go into paddock 2 easily.
16/6/00	Shah was eating when Panjang entered paddock 1. Panjang went straight to the feeding area where Shah was. No response from Shah although both rhinos were side by side. He was busy eating. Shah sniffed Panjang but continue to eat.
17/6/00	Panjang went to the feeding area when released from night stall 1 to paddock 1. Shah was busy eating when Panjang approached him. Panjang rubbed her head against Shah's head and no further response from both rhinos. They were eating side by side ignoring each other.
19/6/00	Panjang went to the feeding area when released into paddock 1. No response from Shah when approached by her. Shah kept eating while Panjang went for the food and ignored Shah. Both rhinos were eating side by side.
20/6/00	Panjang went straight to feeding area while Shah was eating. No response from both rhinos when met. Shah sniffed Panjang but no further response. Both rhinos were eating facing each other for a few minutes. Panjang tried to push Shah but no response from Shah. She tried to get some fruits from the keeper and then went to wallow for a while. After that, she went straight to the gate and get into paddock 2 without calling.

Date	Remarks
21/6/00	Panjang went to the feeding area when released into paddock 1. No response from Shah when approached by her. Shah kept eating while Panjang went for the food and ignored Shah. Both rhinos were eating side by side.
22/6/00	Shah was busy eating when approached by Panjang. Both rhinos were facing each other but no response. Panjang was observed very active and she moves a lot seeking for fruits. When she could not find any, she went straight to the gate and entered paddock 2 by her own without calling.
23/6/00	Panjang was released from night stall 1 and she went straight to feeding area. Shah was eating when approached by Panjang. Both rhinos were eating side by side and sometimes facing each other. Panjang blew near Shah and he looked irritated and his ears are erected. However, he went back to eat and Panjang was baited away by the keeper.
24/6/00	Shah was eating when Panjang was released into the paddock. Panjang went straight to Shah and started to eat near him. No response from the male and he continued to eat. Shah was observed sniffed Panjang but no further response. Both rhinos were eating facing each other. Panjang went to wallow and the keeper then baited her into the night stall.

SRCC CONDITIONING PROGRAM FOR BLOOD COLLECTION

DATE / DAY	RHINO ID	CONDITIONING TIME	FECAL COLLECTION	REMARKS
21/4/00 FRIDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	
22/4/00 SATURDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	
23/4/00 SUNDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	
24/4/00 MONDAY	SEPUTEH MAS MERAH RIMA MINAH * MIX PANJANG WITH SHAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM EARLY AM	AM	
25/4/00 TUESDAY	SEPUTEH MAS MERAH RIMA MINAH * MIX PANJANG WITH SHAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM EARLY AM	AM	
26/4/00 WEDNESDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	
27/4/00 THURSDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	
28/4/00 FRIDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	

DATE / DAY	RHINO ID	CONDITIONING TIME	FECAL COLLECTION	REMARKS
29/4/00 SATURDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	
30/4/00 SUNDAY	SEPUTEH MAS MERAH RIMA PANJANG MINAH	8.00-8.30 AM 8.30-9.00 AM 9.00-9.30 AM 9.30-10.00 AM 10.00-10.30 AM	AM	