



4TH QUARTER REPORT 2011 AND HEALTH UPDATE REPORT

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SUMATRAN RHINO SANCTUARY - YABI, WAY KAMBAS NP



IRF PROGRAMS:

THE 4TH QUARTER REPORT OF SUMATRAN RHINO SANCTUARY (SRS) - YABI WAY KAMBAS NATIONAL PARK OCTOBER - DECEMBER, 2011.

PROGRAM HIGHLIGHTS/ACCOMPLISHMENTS:

1. SUMATRAN RHINOS HEALTH CONDITION ON SRS

General conditions all Sumatran rhinos in SRS on October - December 2011 are in healthy conditions.

ANDALAS:

General Condition:

Andalas has a stable condition, he got several bruises in his head post courtships with Bina on early October, early November, early and end of December, intensive wound cares had been implemented and he completely healed. He usually has one time daily back to the stall for hand feeding and occasionally for two times in morning and afternoon.

A blood sampling collected on 18th November 2011 for routine health monitoring.

By the end of December he looked weak and tired post few pairing days with Rosa and Bina. To recover his condition multi vitamin was given and introduction was stopped for a week.

BINA:

General Condition:

Bina had been no changed, she is a healthy adult female despite her head wounds post courtships with Andalas in early October, November 25, and on early December.

A blood sample was collected in November 18th for routine health monitoring.

Bina got intermittent problems with ocular cloudiness on December. She also looked very weak and tired as Andalas after pairing for a few days in the central area.



Head Wounds post breeding program.

RATU:

General Condition:

On September - November, Ratu was very active in the forest enclosure and sometimes she's sleeping on the ground. She sometimes found close the stall, central area or inside forest. Not easy to find her in the forest and two keepers needed to intensively observe and monitoring.

In December, Ratu has a good condition with estimation of long wallowing for 4-5 hour (morning to afternoon). She often found sleeping on the ground in the morning, back to the stall always late (at noon) very rarely in the morning.

ROSA:

General Condition:

In October, Rosa has better behavior since a change of husbandry method being implemented. She just one time back to the stall for observation and more activities in the forest especially at noon time.

In November, while Bina doesn't have any vollicle, Rosa had been focused for introduction program with Andalas. Wallowing behaviour was changed during introduction program, while she has a longer wallowing post introduction activity in the central area.

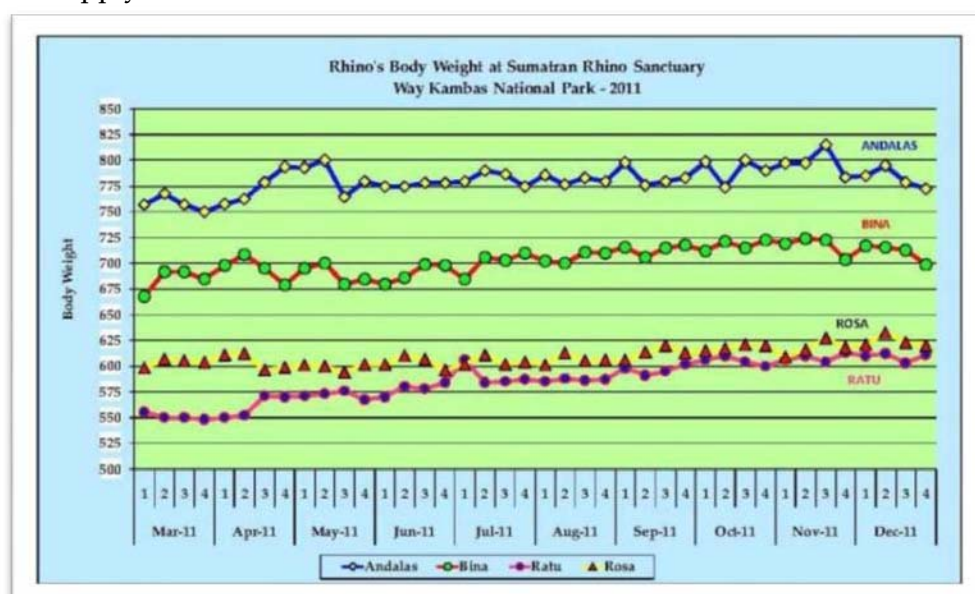
Blood sample collections were done in November 18 and December 18 for routine health monitoring, the result showed a bit low of haematology out of the December 18.

On December 21 she was moved to location B (easier to introduction with Andalas). As the other rhinos she looked tired post paired with the male in the central area and wallowed longer than usual.

OTHER RHINOS HEALTH INFORMATION:

❖ SUMATRAN RHINOS BODY WEIGHT IN OCTOBER - DECEMBER 2011:

All sumatran rhino's body weight has showed stable, just Bina and Andalas decreased because they were spending more time in the central area for introduction program where natural food supply also declined over there.



❖ **WALLOWING:**

Rhino wallowing times had changed again in October, because it was end of dry season and beginning rainy season and they were wallowing better and longer if compared with last month.

❖ **BROWSE:**

All rhinos were active in the forest for browse or foraging, in December many trees inside the paddock were fruiting (Nangkan, Kecapi, Manggisan, Bendo, Sempu, etc). Ratu likes very much the sempu fruits and she will stay for a long time under the Sempu trees.

❖ **BLOOD COLLECTIONS:**

Bood collections were applied for Andalas, Bina and Rosa as part of routine health monitoring. Andalas has a normal result showing that he has been healthy in being almost everyday introduced with female rhino in central area.

❖ **PARASITES (*Helminthiasis*) PROBLEM:**

On November:

Post de-worming of the previous month trematode egg in the rhino's fecal were still found. The Paramphistomum, Fasciola fluke eggs and Schistosoma were observed in all rhinos but they are not causing apparent illness.

❖ **WEATHER:**

The weather has changed to rainy season starting in November so the Sumatran Rhino Sanctuary - Way Kambas National Park enjoyed this change.

2. SUMATRAN RHINO REPRODUCTIVE OCTOBER - DECEMBER 2011:

The reproductive program includes monitoring behavior, pregnancy status monitoring with ultrasound, introduction of Andalas with 3 females rhino (Ratu, Rosa and Bina) and pairing of rhinos. All the SRS breeding program of 2011 has been good including Ratu pregnancy.

❖ ANDALAS AND ROSA

October 13, 17, and 22:

Introduction of Andalas and Rosa in central stall were started after she has a big follicle in her right ovary. Bad response from Rosa after a few minutes of approaching Andalas, she walked away.

November 5 - 16:

Introduction with good response for both of them, but no pairing because Rosa still scared when keeper tried to open the gate.

December 20 - 28:

Introduction started after Rosa showed good follicle on Dec 20. On Dec 26, they were running a few times after 20 minutes they were met in central stall, Andalas pushed and attacked Rosa's body and she runed with loud scream. One time Andalas was able to approach Rosa and she looked very afraid, they were head to head with loud sounds for few minutes. This is for the time Rosa and Andalas touch directly in the forest not in the stall, good progress in breeding program, and Rosa had move ahead one step.



Although unclear cycle in December but Rosa's have one better follicle and good response during introduction with Andalas.

❖ ANDALAS AND BINA

October 1 - 4 and 17 - 27:

In early October Bina has a good clinical signs of estrus with a big follicle on her right ovary but they were still shown a bad response. On October 3, they has been paired without mounting on central area and a good response was shown. Bina's ovulation confirmed on October 4, and hope next cycle she will breed with Andalas.

On October 17, ultrasound examination showed that Bina has a small follicle and introduction with Andalas be continued on October 17 - 21 and on October 25 - 29.

November:

Bina does not have a follicle in this month, introduced to Andalas without pairing on November 1 - 4. Continuing to introduce on November 17 - 25 and paired both of them on November 25, separated them on afternoon.

December:

Bina was introduced to Andalas on December 9 - 19, ultrasound exam showed Bina's small follicle on December 20. Bina has a big follicle on right ovary 19 mm by ultrasound exam on December 20. Introduced Bina and Andalas on December 28, she showed a nice response with several times she turned, climbed the stall bars and Andalas also responded well with good courtship and no aggressive with a few times runs.

Bina's follicle continued growing up 26 mm, paired both of them on December 29. No mounting in this period and separated both of them on December 30, but they were three nights being together in central stall and this was the first time for Bina and Andalas.

Performed Bina's ultrasound examination and copulation confirmed without follicle on December 31. Bina's next cycle is predicted to be in January 20 - 25, 2012.



❖ RATU'S THIRD PREGNANCY:

CHORONOLOGY:

1. On March 11th and 12th successful introduction and pairing program of Ratu with Andalas in the central area with successful mating.
2. Andalas had mounted 10 times with two full intromissions and the last intromission was the best one that happened in the early morning.
3. A day post breeding Ratu ovulation confirmed.
4. Ratu, a female Sumatran rhino from Way Kambas National Park origin, is pregnant again. We found signs of a good pregnancy in early of April 2011 – it was not easy to see vesicles embryo or foetus with ultrasound. SRS Veterinarians and Ratu keepers were cooperated for regular ultrasound examination, monitoring and daily care. Ratu has been given "Regumate" supplement because we have found signs of pregnancy. She is pregnant for the third time since the breeding programs with Andalas is focused the first time in 2010.
5. In December 2011, Ratu has 9 months and 19 days pregnancy and her pregnancy has been good in signs. Veterinarian routinely performed an ultrasound examination.

3. OTHERS PROGRAM IN SRS - YABI ON OCTOBER - DECEMBER 2011:

❖ SRS PATROL PROGRAM:

To anticipate the security and illegal activities surrounding SRS location, keepers together with the Way Kambas National Park Ranger made routine patrol once or twice a month to securing sanctuary area.



SRS Patrol Program on October and December 2011.

❖ SRS VETERINARIAN VOLUNTEER PROGRAM:

In November, SRS has two veterinarians for Volunteer programs (Ms. Astri and Ms. Melani).

❖ SRS ENRICHMENT PLANT WITH (NURSERY AND RE-PLANTING):

Rhino food supply is one problem of SRS husbandry management with limited space in the sanctuary. About 100 ha for 4-5 rhino is not enough. SRS staff tried to make nursery and planting activity beside their main job at the SRS as keeper or facilities.



4. NEW PARTNERSHIPS/COLLABORATION & FUNDING OPPORTUNITIES:

VISITING GUESTS/TOURIST/ETC:

- ❖ On October 1, 2011: Staff of Forestry Department.
- ❖ On October 13 - 16, 2011: Disney Wildlife Conservation Fund (DWCS) and Nico van Strien's Family. The purpose of the visit was to see the activities undertaken by SRS and RPU to gain a further understanding of the rhino conservation program.
 - Presentation SRS and RPU program on visitor centre.
 - SRS tour facility.



Disney Wildlife Conservation Fund (DWCS).



Nico's Family Tour: Mrs. Tineke, Mrs. Martine Reijgersberg , Mrs. Annie Heezen, Mrs. Anni von Vaupel Klein.

- ❖ On October 23, 2011: Widodo S. Ramono - YABI and Sectionov - IRF Liaison.
- ❖ On November 13, 2011: 40 Students from University of Lampung (UNILA), Fieldtrip.



- ❖ On December 17, 2011: National Staff and guess bird watching.
- ❖ On December 22, 2011: Local Community from Braja Asri Way Jepara, discussed about community outreach, community forestry and biodiversity conservation.



COLLABORATIONS:

- ❖ On October 24 - 27, 2011: Dedi Candra, dvm., as an Indonesian region for Sumatran rhino studbook keeper participating a Studbook and Population Management Training Workshop in Royal Safari Garden - Bogor. This event had been participated by 16 Studbook Keepers for Indonesian regions and 2 Studbook Keepers International.



- ❖ On November 2nd- 4th, 2011: Widodo S. Ramono and Indonesian Tv Channel (TV-One).



- ❖ On November 20, 2011: PT. Jamsostek Insurance and Dadan D. Subrata from YABI.
- ❖ On November 22 - 24, 2011: Participated The Joint Seminar of the 5th Conference and Congress of *Asian Society of Veterinary Pathology (ASVP) 2011* and the 10th Scientific Symposium of *Indonesia Society of Veterinary Pathology (ISVP) 2011*



Paper Publication of the Sumatran Rhino on ASVP & ISVP 2011:

1. Gross Pathology report of a wild born captive Sumatran rhino (*Dicerorhinus sumatrensis*), Torgamba by. Dewi Ratih Agungpriyono, Mawar Subangkit, Sri Estuningsih, Dedi Candra and Andriansyah.
2. Pulmonary lesions of an Aged Sumatran rhinoceros (*Dicerorhinus sumatrensis*) by. Wiwin Winarsih, Vetnizah Junianto, Dewi Ratih Agungpriyono and Dadan D. Subrata.
3. Widespread Fibrosis Due to Uremia in an Aged Sumatran rhinoceros (*Dicerorhinus sumatrensis*) by. Vetnizah Junianto, Agus Setiono, Bambang Pontjo Priosoeryanto and Andriansyah.
4. The Liver morphologic Alterations in old Sumatran rhinoceros (*Dicerorhinus sumatrensis*) with polycystic kidneys by. Hernomoadi Huminto, Bambang Pontjo Priosoeryanto, Vetnizah Junianto and Dedi Candra.
5. Metastatic calcification on digestive system of Sumatran rhino (*Dicerorhinus sumatrensis*) "Torgamba" with Polycystic kidney Disease by. Eva Herlina, Hernomoadi Huminto, E. Handharyani and Widodo Ramono
6. Cardiovascular lesions Aging Sumatran rhinoceros (*Dicerorhinus sumatrensis*) "Torgamba" by. Sri Estuningsih, Mawar Subangkit, Dewi Ratih Agungpriyono and Andriansyah
7. Polycystic Kidneys syndrome in Sumatran rhinoceros (*Dicerorhinus sumatrensis*) "Torgamba" by. Mawar Subangkit, Sri Estuningsih, Wiwin Winarsih and Dedi Candra

Sumatran rhino's paper number (1, 4 and 5) is the three best paper from all 46 paper poster was displayed in this event.

5. PROBLEMS:

There has been no big problem in this Quarter except that the breeding of Andalus and Bina as well as with Rosa that has not yet been successful and has to be tried again the coming month(s), helminths that could not be totally eradicated, and the stock of Regumate that will last for one month.