



**IRF PROGRAMS
1st QUARTER REPORT
1 January – 31 March 2015**



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SUMATRAN RHINO SANCTUARY – YABI, WAY KAMBAS NP



SRS Program targets and result of January 2015:

- 1. Rhino health (continue regular monitoring and inspections)** – All Rhino are in good condition, no major health problem observed.
- 2. Reproduction Program** – Rhino Breeding Program is still ongoing

Sumatran Rhino Health Update

Within this month there is no major health problem occurred. Only Andalas and Ratu has minor wounds due to interaction during breeding process. Regular health monitoring, daily physical check, monthly blood check and weekly fecal check were conducted. All rhino has good condition and normal activities. Body temperature is ranged from 36.5° C – 37.4° C.

Specific Information on Each Rhino

Andalas (Male, 13 Years Old)

In this month, generally Andalas has a good health condition, only minor wounds that he suffered from last breeding attempts with Ratu on last December 2014. Application of antibiotic skin ointment was used to treat these wounds, and he was cured within few days later. a calm temperament. He is routinely come to the stall every morning for daily care. His blood test result shows normal range. His activities and body condition was good. His bodyweight was measured every week and the results are shown on the table below. His body temperature was ranged between 36, 8 – 37, 1 °C.

Andalas Body Weight Measurement			
08 January 2015	15 January 2015	22 January 2015	31 January 2015
771 - 774 kg	779 – 782,5 kg	785 -787,5 kg	770 – 775 kg



Picture. Andalas

Bina (Female, 32 Years Old)

Bina has unpredictable behavior, she tends to be calm inside the paddock, but could turn aggressive without warning, especially while in the forest. Her eyes are hypersensitive to prolonged sunlight exposure, and will start to develop keratinized cornea. Her condition and activities is good in January 2015, blood test result shows normal range. Body temperature ranged between 36,7 – 37,0 °C, and bodyweight shown in table below.

Bina Body Weight Measurement			
08 January 2015	15 January 2015	22 January 2015	31 January 2015
735 - 740 kg	741 – 744,5 kg	733 -734 kg	740 kg



Picture. Bina receiving daily treatment in her stall.

Ratu (Female, 14 Years Old)

Ratu's character is sensitive and shy. She could be easily disturbed and shocked by sudden movement and sound. Presence of new persons near her also could make her uncomfortable. In the early days of January 2015 she has few minor wounds that come from interaction during breeding process with Andalas. After few days treatment with skin ointment these wounds were healed. Her skin on digital pad also has peeled off due to exposure of hot surface during last dry season, then soaked with abundance of water during rainy season. The new skin underneath is healthy, and skin ointment was applied to prevent to wounds and other unwanted condition. Her body weight shown in the table below, and her temperature ranged from 36,6 – 37,3 °C.

Ratu Body Weight Measurement			
08 January 2015	15 January 2015	22 January 2015	31 January 2015
552- 555 kg	560 – 561 kg	557,5 -559 kg	546 - 550 kg



Picture. Ratu foot pad problem.



Picture. Ratu receiving treatment



Picture. Rosa

Rosa (Female, 13 Years Old)

Rosa has no health problem in this month. Her body temperature ranged from 36,7 to 37,4 °C. Her body weight was shown on the table below. She is very close to human present, but feels uncomfortable whenever other rhino is around, and started to run whenever Andalas approach during breeding processes. At the last days of January 2015, she started to change to become receptive to Andalas presence. This change gives hope that she could breeds naturally with Andalas.

Rosa Body Weight Measurement			
08 January 2015	15 January 2015	22 January 2015	31 January 2015
620- 622 kg	619 – 621 kg	599 -602 kg	621 - 625 kg

Andatu (2 Years, 7 Months)

After weaned few months ago, Andatu is started to be independent in his enclosure. He is actively exploring and foraging in his enclosure. He is also enjoying wallowing in it. He has no health problem in this month, and still need to be encouraged to come to his stall every

morning. His body condition is good and his body temperature ranged from 36,6 °C to 37,3 °C, and his body weight was shown on the table below.



Picture. Andatu

Andatu Body Weight Measurement			
08 January 2015	15 January 2015	22 January 2015	31 January 2015
525- 528 kg	517 – 522,5 kg	527 -530 kg	522 kg

Fecal Examination

No helminth's eggs or larvae were found during routine fecal examination and only normal commensal protozoa were observed. Fecal examination routinely checked every week.

Reproduction Program

Ratu

After last breeding process on December 2014, Ratu's follicle was ovulates. And new follicle detected growing on her right ovary. She was introduced to Andalas since 21st of January 2015, and on 22nd of January 2015 this follicle reach 18mmx24mm dimension. The

24 x 18 mm follicle detected on 22nd of January



Rosa

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The response is good and Andalas has chance to mounts Rosa on 15th and 16th of January 2015 for 4 minutes, but failed to do intromission. On 17th of January the response was not good, and they were separated earlier.



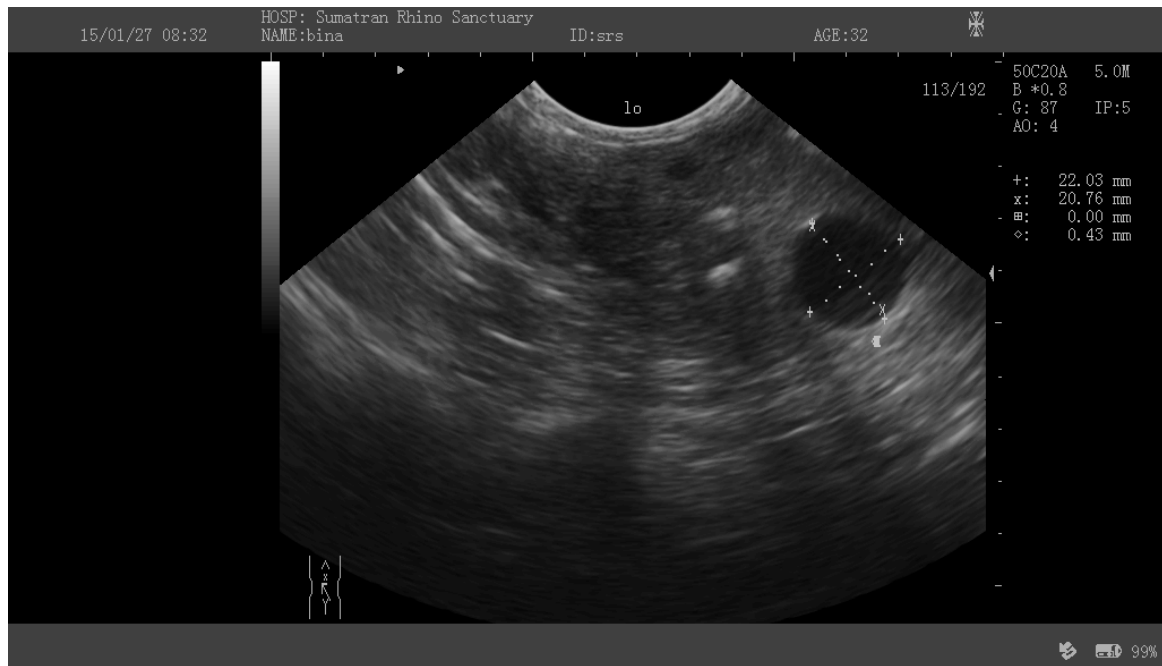
Picture. Rosa follicle on 14th of January 2015 shows 18mm diameter



Picture. Andalas mounts Rosa on 15 of January 2015

Bina

Bina was detected to have 22x20 mm follicle on 27th of January 2015 and introduced to Andalas, but the responses are not good, both rhinos show aggressiveness towards each other at first sight, then they were separated early.



Picture. Bina's Follicle on 27th of January 2015, the size is 22x20 mm.



Picture. Bina and Andalas introduction on 27th of January 2015

OTHER

Students Visits and Short Internship

Conservation Student Group from IPB

Three students from Bogor Agricultural University (IPB), Nalia Putri, Ambi Setyarini from Veterinary Medicine Faculty and Grace Natalia from Nutrition major, visit doing short internship in SRS from 15th to 22nd of January 2015. They following the work of Keepers and Veterinarian.



Picture. Students from IPB

Students from Forestry Technical Highschool

A group of students from Forestry Technical Highschool “Bhakti Rimba – Bogor” visit SRS on 10th of January 2015 to learn about Sumatran Rhino Conservation.



Picture. Students from Forestry Technical Highschool “Bhankti Rimba – Bogor”

SRS Program targets and result of February 2015:

- 1. Rhino health (continue regular monitoring and inspections)** – All Rhino are in good condition, no health problem observed.
- 2. Reproduction Program** – Rosa mounted by Andalas, Ratu and Bina breeding program still ongoing.

Sumatran Rhino Health Update

Routine regular health monitoring procedures were conducted during this month. Daily routine check, monthly blood check and weekly fecal sample check for parasites conducted. All rhinos in the facility are in good condition, no health problem occurred. Their daily activities such as browsing, walking, foraging and wallowing are normal. Body temperature is ranged from 36.5° C – 37.4° C.

Specific Information on Each Rhino

Andalas (Male, 13 Years Old)



Picture. Andalas posture in front of his stall

Andalas has a calm temperament. He is routinely come to the stall every morning for daily care. His activities and body condition was good and blood test result is shown normal

range. Bodyweight was measured every week and the results are shown on the table below. Her activity is normal and her body temperature was ranged between 36, 6 – 37, 2 °C. Blood test result shows normal range.

Andalas Body Weight Measurement	
08 February 2015	15 February 2015
781 - 786 kg	765 – 768 kg

Bina (Female, 31 Years Old)

Bina has eye hypersensitivity to sunlight exposures, and will start to develop keratinized cornea. Eye treatment with thin ZnSo4 spray on the affected eye is part of her daily routine care whenever noticed that eye sensitivity started developed. She is in good condition in this month. Her activity is normal and her body temperature was ranged between 36,6 – 37,1 °C. Blood test result shows normal range and her body weight is shown on table below.

Bina Body Weight Measurement	
08 February 2015	15 February 2015
737 kg	719 – 721 kg



Picture. Bina foraging

Ratu (Female, 14 Years Old)

Ratu is sensitive rhino and not comfortable with new person or too many people around her. Strange sound also affects her alert. Behavior like ramming on person behind bars also observed occasionally whenever she started to be uncomfortable in the stall. In this month, she has no health problem and her temperature ranged from 36,7 – 37,4 °C, her body weight shown in the table below.

Ratu Body Weight Measurement	
08 February 2015	15 February 2015
578 - 579 kg	554 - 555 kg



Picture. Ratu receiveing daily treatment from keeper in her stall

She was actively forages and eats in the forest in paddock 2, and also enjoying to wallows there.

Rosa (Female, 13 Years Old)

Rosa is a tame Rhino, but also sometimes has unpredictable temperament. In this month, she was observed to shows better behavior during introduction with Andalas. She started to feel comfortable whenever Andalas approach during first minutes they were together.

This behavior indicates that, she could breeds naturally with Andalas . Her body temperature ranged from 36,7 to 37,4 °C. Her body weight was shown on the table below.

Rosa Body Weight Measurement	
08 February 2015	15 February 2015
595 kg	615 - 617 kg



Picture. Rosa

Andatu (2 Years, 8 Months)

Andatu is in good condition in this month. He is actively foraging, wallowing and browsing in his enclosure. Every morning he always still in the forest, foraging, walking or eating and tends to not interested to come to the stall if he is not encouraged to. He still receives his daily routine husbandry inside the stall. And he has no health problem.

His body condition is good and his body temperature ranged from 36,7 °C to 37,1 °C, and his body weight was shown on the table below.

Andatu Body Weight Measurement	
08 February 2015	15 February 2015
527 - 528 kg	517 - 518 kg



Picture. Andatu in his enclosure

Fecal Examination

Fecal examination for parasites performed once or twice a week, and during examination in this month no worm's eggs and larvae and just found normal protozoa in small number.

Reproduction Program

Ultrasound examination on Rosa and Bina still performed to monitor their follicles development. Ultrasound on Ratu was also performed to monitor her.

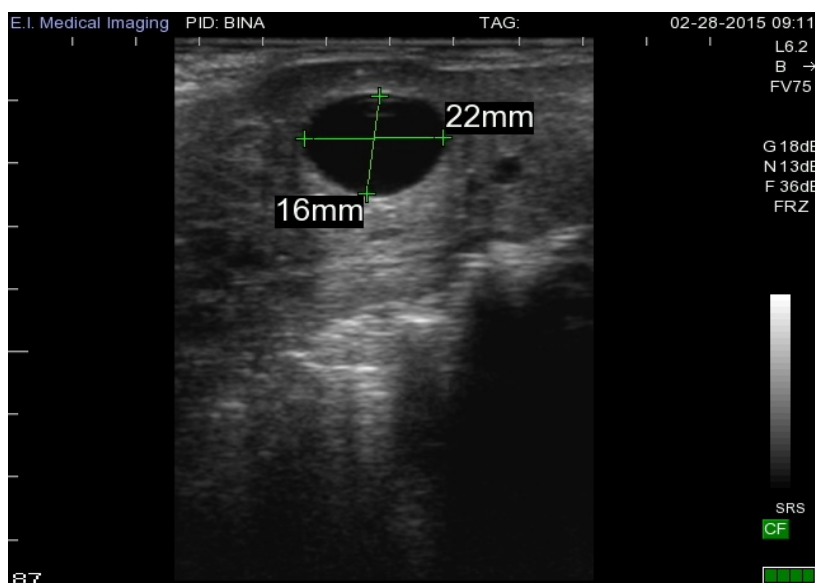
Rosa was introduced to Andalas on 6th, 7th and 8th of February, and she was mounted by Andalas on 8th of February 2015. No copulation has happened. Her follicle on 6th of February was 17 mm.



Picture. Andalus mounts Rosa on 8th of February 2015

On 24th of February 2015 another follicle monitored to reach size of 19 mm. And Rosa was introduced again with Andalus until 28th of February, but no intromission or mounting happened.

Bina was detected has follicle with size 22mm on 28th of February 2015, she was not introduced to Andalus, since Rosa is on the process of introduction with Andalus.



Picture. Bina Follicle on 28th of February 2015

SUMATRAN RHINO POPULATION VIABILITY ANALYSIS (PVA) MEETING

Veterinarians from SRS was invited and joining Sumatran Rhino Population Viability Analysis Meeting that held in Taman Safari Indonesia, Bogor on 16th to 18th February 2015.

This meeting was discussing and analyzing Sumatran Rhino Population Viability for each of Sumatran Rhino Site, including SRS and attended by many stake holders from NGOs, Local and International experts, Government agencies, etc.



Picture. Opening Speech from Bapak Widodo S. Ramono, Executive Director of Yayasan Badak Indonesia.



Picture. Photo session.



Picture. Group discussion



Picture. Presentation

SRS Program targets and result of March 2015:

- 1. Rhino health (continue regular monitoring and inspections)** – All Rhino are in good condition. Bina infested by Strongyle parasites.
- 2. Reproduction Program**
 - a. Rosa started to receptive to Andalas and allow him to mounts her, but no full intromission was happened.
 - b. Natural Breeding attempts on Ratu and Bina still not ongoing.

Sumatran Rhino Health Update

Regular health monitoring protocols were conducted in March 2015. Daily routine check, monthly blood check and weekly fecal sample check for parasites conducted. All rhinos in the facility are in good condition, no health problem occurred. Only Bina that infested with endoparasitic worm (strongyle) were observed and treated with Ivermectin. Minor wounds on Andalas and Bina's skin were occurred after interaction during breeding attempts. Their daily activities such as browsing, walking, foraging and wallowing are normal. Body temperature is ranged from 36.6° C – 37.3° C.

Specific Information on Each Rhino

Andalas (Male, 13 Years Old)

Andalas body condition is good and shows normal activities. Bodyweight was measured every week and the results are shown on the table below. His body temperature was ranged between 36, 6 – 37, 0 °C. Blood test result shows normal range. Andalas has some minor wounds around his horns that come from interactions with Bina during breeding attempts. Treatment with Betadine spray and antibiotic skin ointment was applied and after few days the wound was completely healed. His bodyweight is shown on table below.

Andalas Body Weight Measurement			
01 March 2015	16 March 2015	23 March 2015	30 March 2015
770 - 776 kg	794 – 795,5 kg	770 - 773 kg	768,5 – 771,5 kg



Picture. Andalas taking shower in the morning

Bina (Female, 33 Years Old)

Bina condition is good and her activities also still normal. She suffered minor wounds around the horns that is come from interactions with Andalas on breeding attempts. The wounds were treated with topical betadine spray and antibiotics skin ointment, and healed few days later. On March 11th she was found to have a watery diarrhea in the morning, and

after diagnostic microscopy fecal sample check, infestation with strongyle endoparasite were observed, and treatment was given with Ivermectin orally. Close observation was applied, and in the next morning her droppings were found to be normal again, and on post-treatment microscopy fecal check, were found that she was cleared. Her activity is normal and her body temperature was ranged between 36,7 – 37,2 °C. Blood test result shows normal range and her body weight is shown on table below.

Bina Body Weight Measurement			
01 March 2015	16 March 2015	23 March 2015	30 March 2015
734 - 737 kg	737 – 740 kg	721 - 723 kg	738 – 741,5 kg



Picture. Bina resting after morning treatment, with few minor wounds around her horns.



Picture. Endoparasite larva that found on Bina fecal sample after she suffers a watery diarrhea on March 11th 2015.



Picture. Bina receiving treatment with Ivermectin orally from veterinarian.

Ratu (Female, 14 Years Old)

Ratu is sensitive rhino and not comfortable with new person or too many people around her, sometimes she is aggressive towards new people. She always shows alert behavior inside her stall, and observed to be not comfortable inside it. In this month, she has no health problem and her temperature ranged from 36,8 – 37,1 °C, her body weight shown in the table below.

Ratu Body Weight Measurement			
01 March 2015	16 March 2015	23 March 2015	30 March 2015
564 - 563 kg	557 - 559 kg	563 kg	563 - 564 kg



Picture. Ratu in her stall for morning check

Rosa (Female, 13 Years Old)

In this month, Rosa was observed to shows normal activities and has no health problem. Her calm and tame behavior sometimes could turn into unpredictable if she were shocked by sudden movement or strange sounds. Her body temperature ranged from 36,8 to 37,4 °C. Her body weight was shown on the table below.

Rosa Body Weight Measurement			
01 March 2015	16 March 2015	23 March 2015	30 March 2015
600 - 597 kg	598 - 600 kg	608 - 610 kg	602 -605 kg



Picture. Rosa urinating spray.

Andatu (2 Years, 9 Months)

Andatu has no health problem in this month. His activities was normal, he actively forages and walking exploring his enclosure. Attempts to make him laying down for blood collection from base of the ear is still on process, he only could laying down voluntarily for 2 – 4 minutes, without attempting to access the vein. His body condition is good and his body temperature ranged from 36,7 °C to 37,2 °C, and his body weight was shown on the table below.

Andatu Body Weight Measurement			
01 March 2015	16 March 2015	23 March 2015	30 March 2015
522 kg	532 kg	522 - 523 kg	525 - 527 kg



Picture. Andatu in his enclosure

Fecal Examination

Routine fecal examination for parasites performed once or twice a week, and during examination in this month no worm's eggs and larvae and just found normal protozoa in small number.

On March 11th 2015 Bina was observed to have watery diarrhea, and on diagnostic microscopy fecal examination, larvae of strongyle parasite found with no eggs.

Reproduction Program

Ultrasound examination on Ratu, Rosa and Bina still performed to monitor their follicles development.

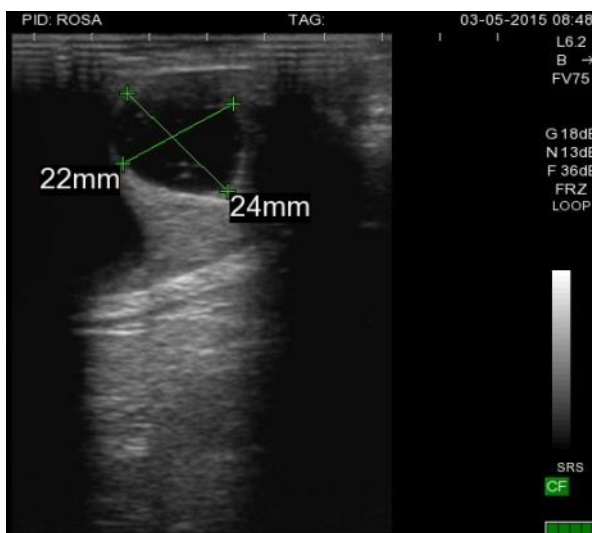
Rosa

Rosa was introduced to Andalus on 2nd to 5th of March 2015. On 2nd of March she was mounted by Andalus 2 times. And on 3rd of March 2015, she was mounted by Andalus 8 times, with definitely 3 times of intromission, but Andalus could not have full penetration, only could reach about 15 cm penetration. No ejaculation has happened. On 4th of March, she was mounted 1 time by Andalus, then keep avoiding him afterward. No intromission has happened.

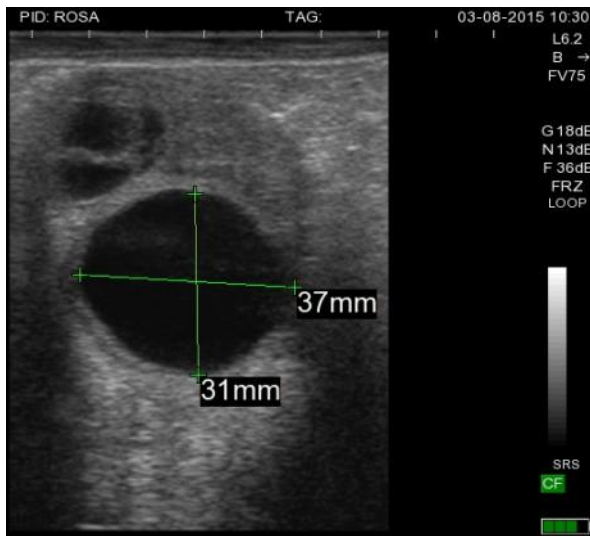


Picture. Andalas has intromission on Rosa on 3rd of March 2015 with SRS staffs ready to assist.

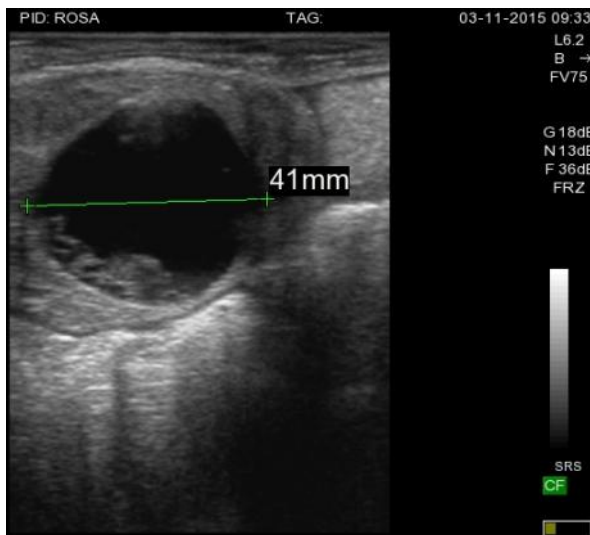
On ultrasound examinations after the breeding attempts, it was shown that the follicle did not ovulate and keep growing larger.



Rosa follicle on 5th of March 2015 shows 22mm x 24mm dimension



Rosa follicle on 8th of March 2015 shows
31mm x 37mm dimension



Rosa follicle on 11th of March 2015 shows
41mm diameter

On 24th to 27th of March 2015 Rosa was introduced again to Andalas, and only 1 mounting has happened with no intromission.



Picture. Andalas and Rosa mating on 25th of March 2015 with no intromission.

Bina

On 28th to 30th of March 2015, Bina was introduced to Andalas, but no successful breeding has happened, it turns to aggressiveness towards each other at the end of the process.



Pictures. Bina and Andalas fighting each other during breeding attempt.