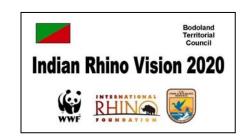
# AN

# ACCOUNT OF THE RELEASED RHINOS



# IN MANAS NATIONAL PARK, ASSAM [OCTOBER 2008 – MARCH 2009]



B.S. Bonal, Amit Sharma, Deba K. Dutta,A. Swargowari and C.R. Bhobora

## TRANSLOCATION CORE COMMITTEE,

INDIAN RHINO VISION (IRV) 2020 PROGRAM







### Introduction:

Indian Rhino Vision (IRV) 2020 a program for the long term conservation of the one horned rhinoceros in Assam is developed and implemented by the Forest Department, Government of Assam with the support of WWF and IRF. The program aims to increase rhino population in new / potential habitats all throughout the state of Assam by the year 2020 and is also supported by a number of organizations including USFWS and BTC. As a first step, the training-cum-translocation was completed in April 2008 wherein two male rhinos captured in Pobitora WLS was translocated and released in Manas NP. Manas NP which was till the early nineties home to a healthy rhino population was chosen as the first protected area to be developed and populated with rhinos from the wild through translocation from Pobitora WLS and Kaziranga NP. The immediate plan is to populate Manas NP with at least twenty rhinos from the wild by 2009.

The two rhinos has been tracked and observed in Manas by the monitoring team since the time of release and the present account is for the period from 1<sup>st</sup> October 2008 to 31<sup>st</sup> March 2009. The rhinos are fitted with radio collars and the tracking has been done currently using two sets of antennae and receiver systems. The monitoring team in Manas

monitors the rhinos all throughout with technical support from the WWF team and under the leadership of FDTP Manas, Mr. A. Swargowari. All the activities are conducted under the supervision of the Translocation Core Committee (TCC). In the earlier report for the first six months it was mentioned that by the second half of September 2008, both the male rhinos were inside the enclosure. Rhino1 broke the fence to get inside and Rhino2 was released inside the enclosure after being rescued back on 15<sup>th</sup> September 2008.

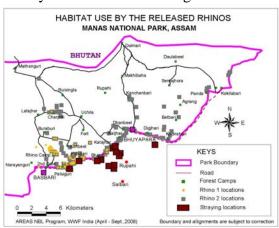


Fig. 1 – Habitat use pattern during the first six months

### Habitat Use and Ranging:

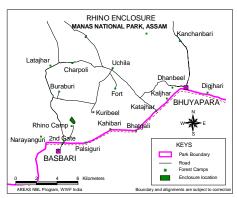


Fig.2 – Location of the enclosure

During this period the two males were inside the enclosure (electric fence) along with the three subadult females and one female calf under the rhino rehabilitation program. During the initial days when all the rhinos were inside the enclosure it was observed that the calf was usually alone in the 1<sup>st</sup> part of the enclosure (Fig.3). Rhino2 was usually alone and Rhino1 was normally occupying part 2 and 3 of the enclosure and was also observed to be wallowing with the sub-adult females normally in the 2<sup>nd</sup> part near the watch tower no.4.







It was quite difficult to physically monitor the rhinos inside the enclosure due to visibility constraints. Till first part of October 2008, the two males were recorded to be in close vicinity involved in grazing in three instances only. It was observed that the females were quite at ease with human presence and did not have problems staying close to the edge of the fences but the males moved inside rapidly from the edges if they could sense of any human in the nearby areas.

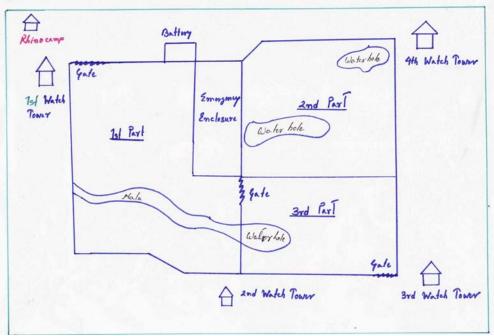


Fig.3 - Sketch of the enclosure

In the mid part of October 2008, an untoward incident caught all unawares. The female calf normally occupying the 1<sup>st</sup> part could not be located since 14<sup>th</sup> October and on investigating the source of a foul smell the carcass of the calf was detected on 18<sup>th</sup> October 2008 and the reason of the death could not be confirmed as post-mortem could not be conducted on the carcass. This incident was quite surprising as no tense moments or fights were observed among the rhinos during that period. Even after the death of the calf, no tension was observed among the other rhinos occupying the enclosure.

November 2008 was quite dry and the visibility within the enclosure increased marginally, even the water holes were drying up gradually. In this period of scarcity, the two males were seen to wallow together in the daytime (noon hours) in the waterhole close to the watch tower no.2. During the daytime the two younger females took rest together and the elder one was usually alone. In the late afternoons and evenings, the females and Rhino1 was seen to graze in close vicinity and Rhino2 always maintained a distance from the rest. The sub-adult females were released from the enclosure in the last week of the month on the 26<sup>th</sup> and 27<sup>th</sup> of November 2008.

After the release of the females, during the initial few days it was observed that the males and females were communicating in some form or the other specially using some sounds.







The females preferred three to four locations near the enclosure for urinating and defecating and the males also used the adjoining area inside the enclosure for urinating as well as defecation leading to dung piles.

During the month of December 2008, after the release of the females from the enclosure not much change was recorded in the males who were still inside the enclosure. The males were friendly to each other and were recorded to be feeding close to each other and even had company in the form of visiting deer and pigs. The male rhino also did not react even at the presence of herds of wild elephants very near to the enclosure (within 200mts. of the boma). The only significant change that was observed was the aggressive nature of Rhino1 towards human beings. On sensing the presence of human beings close to the enclosure (normally patrolling and monitoring team members) the Rhino1 use to come charging even from deep inside the grasses and stop at the edge of the enclosure never touching it. Rhino2 on the contrary was never aggressive but always tried to warn the humans by making some type of a sound whenever Rhino1 charged.



Plate2 - Rhino1 in aggression

The rhinos were under severe stress by the month of January 2009 due to almost negligible rains and extreme dry conditions. Grasses were drying up in most of the areas inside the boma and even water in most of the areas dried up. To cope up with the situation artificial supply of water was arranged by pumping in water from the nearby Kasimdoha river. Only the 3<sup>rd</sup> part of the enclosure had some good grass for the rhinos to survive upon. An inflammation was observed on the dorsal side of the neck of Rhino1 as well as a sore portion on the base part of the neck as well during this month. The veterinary doctor after observation stated that it

should not be something major and advised release of the rhinos from the enclosure and supply of adequate fresh water every day.

In February 2009, the weather and habitat conditions remained almost same and the dry period continued. A change in the behavior of the male rhinos towards each other was observed during the month. The two rhinos now stayed separately, Rhino1 normally occupying 1<sup>st</sup> part of the enclosure and Rhino2 occupied the 3<sup>rd</sup> part of the enclosure for grazing. Water sources were scarce and both of them were seen to wallow together in the same waterhole. There were at times occasional fights between the two; normally Rhino2 was observed to be more aggressive and charged towards Rhino1. It was observed that normally the fights lasted only for a few minutes and thereafter both of them calms down and feeds within close vicinity quite normally again.

The dry period extended up to March 09 and the whole area was experiencing a drought like situation. The entire area including the waterholes inside the enclosure dried except some portions of grassland in the 3<sup>rd</sup> part; regular pumping was done from the nearby Kasimdoha river to maintain the supply of water inside the enclosure. The daytime was







quite dry and hot and both the rhinos were seen to be inside the water together during this period. The rhinos were seen to be feeding separately in the early morning hours and in the late evenings. The aggressive nature of the rhinos towards each other developed during February was seen to continue and there were fights between the two normally lasting for about 2 to 3 minutes after every two – three days. The fights never continued for a long duration and no prominent physical injury was observed in either of the individuals.

The females after release, normally stayed close to the enclosure maintaining a communication with the males till the mid of March09. Since the second half of March the females began to move and explore areas of the park covering a distance of about 2kms. from the enclosure. The elder female normally stayed away from the other two females who stayed together. The elder female stayed and fed in the company of two wild elephants and moved up to the area close to Kureebeel and Buraburi camp and usually returned close to the enclosure after about three to four days normally in the early morning or evening hours. The two younger females normally stayed close to the enclosure feeding actively during the day at times taking shelter in the nearby woodlands and took rest near the Rhino Camp in the evenings and night. It was observed that the females were no way disturbed by the presence of human beings even at the very close range and carried out the daily activities normally; it was observed that they also preferred to feed on the kitchen wastes of the camps.

### **Behavior and Feeding**

The rhinos and their daily behavior has been monitored closely by the team and recorded at regular intervals even though it was quite difficult to physically see the rhinos for a significant number of times. More than 1000 observation were attempted during the six months of which about direct observation were not possible for 32% of the time. During these six months, from observations it can be stated that the individuals are showing similar nature to what was found in the first six months of the release. From analysis of the recorded data it was found that a healthy portion of the time was devoted to feeding (42%). Wallowing and resting was recorded to be quite low and this can be attributed to the reason that due to the habitat condition a large number of times the rhino could not be physically observed even though signals were received by the receivers from the dense and tall grasslands.



Plate3 – Feeding on young bombyx leaves

During these six months, the rhinos were feeding inside the enclosure with limited options of grasses and plants. From continued observation during the period, species not used for feeding could be confidently segregated from the ones upon which the rhinos fed as a few species were not touched even during the period of scarcity; however the aquatic varieties used as food could not be much identified due to constraints in observation when the rhinos were







inside the enclosure. The male rhinos were observed to eat the soft leaves of trees like Simul (bombyx cieba), Palas (butea monosperma) and Oxy (dillenia pentagyna). Bihlangani (amphineuron opulentum) and Dhekia (diplazium esculentum) are the preferred herbs, and among the grass species the favored are Kahi (saccharum spontaneum), Ulu (imperata cylindrical), Nal (phragmites karka) and Dubori (cynodon dactylon). Among the shrubs, Phutkala (melastoma malabatricum), Tora (alpinia allughus), Jharmaniban (eupatorium odoratum) were commonly eaten. In addition to the above a number of unidentified herbs, shrubs, ferns, creepers and aquatic plants were also seen to be eaten by the rhinos.



Plate4 – Enclosure maintenance



Plate5 – Night patrolling & monitoring



Plate6 – In an aggressive mood



Plate7 – Enjoying the waters

### Acknowledgement

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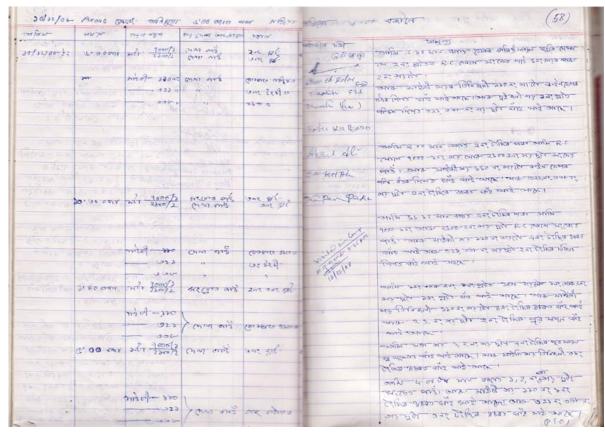
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A sample of the data register maintained by the Field Monitoring Team at Manas

### About the Authors –

- 1. Bishan Singh Bonal Chief Operations Officer, Translocation Core Committee cum Chief Conservator of Forests (M&E), Assam
- 2. Amit Sharma Deputy Chief Operations Officer, Translocation Core Committee (WWF-India, Assam)
- 3. Deba Kr. Dutta Member, Manas Monitoring Team (WWF-India, Assam)
- 4. A. Swargowari Leader, Manas Monitoring Team cum Field Director, Manas TP
- 5. C.R. Bhobora Deputy Leader, Manas Monitoring Team cum Deputy Field Director, Manas TP