

CENSUSES OF JAVAN RHINOS IN CAT LOC NATURE RESERVE (LAM DONG PROVINCE, SOUTH VIETNAM)

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Javan Rhino (*Rhinoceros sondaicus*) is one of the most threatened animals in the world. They remain only in 2 small populations. One of about 60 Rhinos is in Ujung kulon NP. another is in Cat Loc Nature Reserve. So that, Cat Loc Nature Reserve is the land of the last few Javan Rhinos in the world. Conservation of Cat Loc Javan Rhinos is greatly interested not only by Vietnam Government but also various overseas conservation agencies. Two censuses of Javan Rhinos in Cat Loc NR have been done to provide basic information for development of their conservation activities.

I. RHINO CENSUS IN 1993

The first census of Javan Rhinos in Cat Loc NR was conducted in April 1993 by Dr. Jito Sugarjito (WWF - USA), Mr Moh. Haryono (Ujung Kulon NP - Indonesia), Mr Pham Mong Giao (Forest Protection Department), Mr Vu Dung (Forest Inventory and Planning Institute), Mr Nguyen Xuan Dang (Institute of Ecology and Biological Resources) and Mr. Bui Thanh Phong (Forest Protection Department of Lam Dong Province) . This census was funded by WWF - Vietnam. For the census was used method "concentrated track count" which includes pre-census done by rangers and local people who are familiar to the area and able to identify Rhino foot prints to get the general description about the distribution of the Rhino in Cat Loc NR, then, official census conducted by experts and concentrated in an area of Rhino concentration. The collected data includes direct observation, measuring foot prints and other observation of Rhino signs such as dung, food plants, wallows, etc.

The results of this census indicate that

- The population of Javan Rhino in Cat Loc NR is of 7 - 9 Rhinos which concentrated in south - west part, surrounding Dadim Bo and Da Thai streams.

- The population consists of young upto adult individuals that gives hope for maintaining their existances, if it is supported by effective management

After the census conservation measures were taken place such as establishment of reserve management authority, construction of 2 guardposts and a number of notice- boards about Rhino and forest protection, educational meetings for rising public awareness on Rhino protection etc. However, situation of the Rhino in Cat Loc NR remains critical, requiring more effective measures.

II. RHINO CENSUS IN 1998

The second census of Javan Rhino in Cat Loc NR was conducted in April - May 1998 to provide update information about situation of the Rhino population and for improvement of their protection.

This census was funded by Rhinoceros and Tiger Conservation Fund of U-S. Fish and Wildlife Service and International Rhinoceros Foundation (IRF) and implemented by scientists from IEBR and Vietnam FPD in cooperation with local authorities. Technical supervisor of the census is Dr. Nico Van Strien -Experienced expert on Rhino survey and conservation. The method used in this census is also "concentrated track count" method with some modification.

The census activities were divided into serveral stages :

- Training census teams on basic knowledge about Rhino population and techniques of Rhino survey
- Official Rhino census conducted at the same time in serveral parts of the reserve.
- Data analysis.

1. Training

The training was held in Cat Tien District and Cat Loc NR from 1 - 10 April 1998, including 4 days for theoretical learning and 5 days for practical skill development.

The principle instructor is Dr. Nico Van Strien (IRF Expert) and other instructors are :

- Prof. Dr Dang Huy Huynh IEBR
- Dr. Nguyen Xuan Dang IEBR
- Dr. Le Xuan Canh IEBR
- Dr. Pham Trong Anh IEBR
- Dr. Pham Mong Giao FPD

Attended the training were 23 participants selected from : Cat Tien NP (4 persons), Cat Loc NR (4 persons), Institute of Tropical Biology of Ho Chi Minh City (1 person), Lam Dong provincial FPD (1 person), CatTien District FPU (2 persons) Cat Tien District sectors (5 persons, and villagers of Cat Loc NR (5 persons)

The training curriculum includes

- General information about present status of 5 Rhino species in the world and their conservation efforts.
- Brief biological, ecological features of Sumatran and Javan Rhinos.
- Techniques of detecting, identification and measuring Rhino footprints.
- Techniques of making plastercasts of Rhino footprints.
- Techniques of surveying other Rhino signs : dungs, wallows, saltlick, foodplants, Rhino body rubbing signs etc.
- Techniques of recording and assessment of human impact on Rhino population and Rhino habitat.
- Using field equipment for Rhino survey (GPS, maps etc.)

During field practice in Cat Loc NR every participant had a chance to practice his survey skills.

In the opening ceremony of the Training section attended not only 23 trainees but also 14 delegates from related organizations from Lam Dong

province, Cat Tien district, Cat Tien NP, and Journalists from Central and local T.V, and radio studios that makes contribution to increase of public awareness about Rhino conservation in Vietnam.

After training period all 23 participants have learn the techniques of Rhino survey and were awarded a Certificate of Completion.

2. Rhino census

Out of 23 participants, 13 best participants were selected for conducting Rhino census during 13 to 30 April 1998 in Cat Loc NR. These 13 participants together with 2 instructors (Dr. Nguyen Xuan Dang, and Dr. Pham Trong Anh) were divided into 3 survey teams : A,B,C. Each team consists of 5 persons. At the same time , all 3 teams conduct census in 3 parts of the Reserve. The surveyed sites were selected based on pre-census Rhino distribution information provided by the reserve rangers and local residents. The survey, firstly, concentrated in the most active Rhino areas then expanded to other areas.

The data collecting activities include :

- Searching and measuring clear Rhino footprints
- Making plastercasts of good footprints
- Searching and taking record of Rhino dungs, wallow, saltlick, foodplants, plants broken or rubbed by Rhinos.
- Take note of human impact and habitat quality.

After almost a month of intensive survey the following data were obtained:

- Measurement of 86 clear Rhino footprints
- 40 foot print plastercasts
- 4 Rhino dungs (one very new)
- 5 Rhino wallow sites (2 new)
- 2 saltlicks : samples of water and mud of 1 saltlick were taken for chemical analysis
- 7 swamps with Rhino footprints

- Update information about Rhino habitat and human impact
- One 180-minutes video tape of and large number of photo films about the survey activities and data.

After finishing the census in 12 May 1998 a workshop was held in Cat Tien district to inform the preliminary results of census and discuss about urgent measures for safeguarding the last Rhino in Cat Loc NR. 50 delegates were attended the workshop.

3. Data analysis

All obtained data were analyzed by experienced experts using both manual methods and computer programmes. Detailed results of the census will be discussed in reports of Dr. Nico Van Strien and Dr Pham Trong Anh. Here, I would like to announce that small population of 5 - 7 Javan Rhinos is surviving in Cat Loc NR. This population is of high genepool conservation significance but requires great effort of Vietnam Government and overseas agencies to continue their survival and development in future.

III. CONCLUSION

Two censuses of Javan Rhino in Cat Loc NR conducted for period of 6 years (1993 - 1998) have confirmed the number of Rhino is about 7 - 9 or 4 - 7 individuals. This is critical population that need urgent and strong conservation measures for survival and development.

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